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Preliminary Ecological Appraisal

March 2026

Project Reference: PR-26-0054

Knolton Farmhouse Cheese
Overton Road
Wrexham
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National Grid Reference: SJ 3655 4082



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Tyrer Ecological Consultants Ltd will however consider forwarding data that is collected as part of its reports to the relevant wildlife records centre.

As per CIEEM Guidelines, in most cases ecological surveys are likely to be valid for 12 – 18 months. Beyond this, an updated site visit, desk study and/or report are likely to be required.

Executive Summary

As part of an ongoing planning application (Application Reference: P/2026/0087) with Cyngor Bwrdeistref Sirol Wrecsam / Wrexham County Borough Council concerning a development at Knolton Farmhouse Cheese, Tyrer Ecological Consultants carried out a Preliminary Ecological Appraisal (PEA) in March 2026.

The PEA was commissioned by Knights Construction; proposals are understood to involve the erection of new office space and staff welfare building within the site.

Extensive findings, conclusions and recommendations are presented throughout the report; however, the reader should be aware of the following further surveys and key recommendations.

Key recommendations:

Designated Sites

The site is positioned in proximity to the River Dee SSSI, and previous planning applications have consulted NRW in relation to discharge and groundwater, with the site being located above a principal bedrock aquifer within a designated Source Protection Zone.

It is recommended that NRW are consulted in relation to discharge to ensure that appropriate measures are put in place to prevent impacts upon nearby designated sites and / or groundwater areas.

Bats

A single tree on site (T017), is determined to pertain a bat roost suitability of '**FAR**' in accordance with Bat Conservation Trust – Bat Surveys for Professional Ecologists: Good Practice Guidelines, 4th ed. (2023).

Table 4.2. Guidelines for assessing the suitability of trees on proposed development sites for bats, to be applied using professional judgement.

Suitability	Description
NONE	Either no PRFs in the tree or highly unlikely to be any
FAR	Further assessment required to establish if PRFs are present in the tree
PRF	A tree with at least one PRF present

Analysis of the plans indicates that T017 is being retained during the works and will be protected from impacts by protective fencing and working measures as indicated in the site-associated arboricultural reports. Given no impacts are applicable, no further surveys are recommended at this time.

Birds

In relation to other breeding birds, the individual trees and small block of woodland present are considered to offer a viable nesting platform for breeding birds during the nesting season of March – August inclusive, as indicated by the single historic nest within one of the trees.

In order to prevent impacting upon these potential nesting sites, it is recommended that any vegetation clearance is undertaken outside of the nesting bird season of March – August inclusive. If works are proposed during this period, then a pre-commencement check should be carried out by a competent and professional Ecologist for signs of nesting behaviour within 48 hours or less prior to works commencing.

Other Terrestrial Mammals

Whilst no direct evidence of badger or hedgehog was located within the site boundary, there are no barriers around the site which would prevent access by these species, and thus their presence on the site is considered possible.

*It is therefore recommended that Reasonable Avoidance Measures (RAMs) are enacted at the site to avoid any impacts to either of these species. See **Section 7.0** for details.*

Herpetofauna

The presence of common amphibians is considered possible based on the site-specific and site-surrounding habitats.

Any works on site should therefore have due regard to local wildlife as discussed, and the RAMs detailed previous for terrestrial mammals should be extended to cover common amphibians.

Green Infrastructure

The proposals will result in the removal of seven trees at the site.

To compensate for this, it is recommended that an additional 14 fruiting species are planted within the wider site to achieve a 2:1 ratio of replanting. It is also recommended that two integrated bat boxes, and two nesting bird boxes are installed at the site; it is considered that the impact of the erection of the new office building will have been suitably compensated for in accordance with the DECCA framework.

Table of Contents

1.0 Introduction & Scope

2.0 Legislation & Policy

3.0 Methodology

4.0 Limitations

5.0 Desk Study Results

6.0 Field Study Results

- **6.1** Habitat Survey
- **6.2** Vegetation
- **6.3** Bats
- **6.4** Birds
- **6.5** Other Terrestrial Mammals
- **6.6** Herpetofauna
- **6.7** Invertebrates

7.0 Conclusions & Recommendations

8.0 Bibliography

Appendix I: Site Photographs

Appendix II: Botanical Species List

Appendix III: Biodiversity Enhancement: General Recommendations

Appendix IV: UK Habitats Map

1.0 Introduction & Scope

1.1 As part of an ongoing planning application (Application Reference: P/2026/0087[1]) with Cyngor Bwrdeistref Sirol Wrecsam / Wrexham County Borough Council concerning a development at Knolton Farmhouse Cheese, Tyrer Ecological Consultants carried out a Preliminary Ecological Appraisal (PEA) in March 2026.

1.2 The PEA was commissioned by Knights Construction; proposals are understood to involve the erection of new office space and staff welfare building within the site. See **Figure 1.1** for a proposed site plan.



Figure 1.1 – *Proposed site plan (Ty/1692/PL10 © Tŷ Architecture)*

1.3 As part of Local Planning Authorities' (LPAs) planning policies and obligations to the Planning Framework, ecological surveys are generally required prior to planning permission being granted, particularly where protected / priority habitats or species are, or may be, present, and where the proposals for which the applicant seeks consent have the potential to impact these species.

1.4 The PEA was carried out in accordance with the 'Guidelines for Preliminary Ecological Appraisal, 2nd Edition' (CIEEM, 2017) and all associated 'CIEEM Competencies for Species Survey (CSS)', whilst this report has been presented in accordance with the British Standard 42020:2013 Biodiversity – Code of Practice for Planning and Development.

[1] See: https://register.wrexham.gov.uk/pr/s/detail/a0lSq000001rS41IAE?language=en_GB&c__r=Arcus_BE_Public_Register

Aims & Objectives

1.5 The appraisal aims to ascertain the baseline nature of the site and, where possible, obtain information on any priority wildlife habitats, or species, that may be present and if so determine if they will be affected by the proposals. The survey, therefore, includes the following objectives:

- Gather and present baseline ecological information on site / off site (as necessary) within a suitable report,
- Identify, measure and map habitats using UK Habitat Classification – Habitat Definitions Version 2.0 (2023) habitats,
- Identify any likely ecological constraints associated with the proposals for the site (i.e. the presence of protected / priority habitats or species that exist within the confines of the application boundary, or zone of influence (ZOI),
- Identify measures likely to be required in line with the mitigation hierarchy (i.e. impact avoidance > minimisation > mitigation > compensation),
- Identify any additional survey requirements,
- Identify general enhancement opportunities for biodiversity in line with national and local planning policy,
- Set out any requirements for post-development monitoring, management, or other commitments, and how they can be secured, where required.

1.6 As a functioning component of this specific ecological appraisal:

- Habitats on site were identified, measured and mapped using the UK Habitat Classification – Habitat Definitions Version 2.0 (2023),
- Trees were subject to preliminary roost assessment (PRA) for bats and scored against the bat roost suitability parameters defined in the Bat Conservation Trust – Bat Surveys for Professional Ecologists: Good Practice Guidelines, 4th ed. (2023),
- In accordance with Welsh planning policy, opportunities were identified for the site to achieve Net Biodiversity Benefit (NBB), and to provide information to satisfy the requirements of a green infrastructure statement.

1.7 This report therefore provides important baseline information as derived from the diurnal appraisal process outlined above and recommends any necessary additional surveys, or work, where applicable, to provide a conclusive ecological impact assessment.

1.8 The Applicant should be aware then that if during the appraisal:

- The application site/area was found to be suitable for any European Protected Species (EPS), otherwise protected, or priority habitats / communities / species, or,
- Signs of use by particular protected species were found, or suspected, or,
- Seasonal constraints significantly limit the gathering of ecological information to arrive at an accurate conclusion upon which the planning application can proceed;

Then more detailed surveys may be recommended where necessary, to allow the ecologist to arrive at a conclusive impact assessment.

1.9 If protected species were subsequently found either during appraisal or during detailed further surveys and / or may be affected by the development proposals, then a European Protected

Species (EPS) licence from Natural Resources Wales (NRW) may be required to proceed with the development.

1.10 Where more detailed surveys are recommended by the Ecologist, following ecological appraisal, then LPAs, on the advice of their ecological advisors, may not grant permission until such time that all relevant material information is gathered in accordance with their obligations to the legislature.

1.11 Protected / priority species omitted from this report have been discounted due to negating factors including obvious absence / isolation of suitable habitats, and / or distributional aspects negating the necessity to survey for them, and / or the proposed works were not considered to impact the species or encroach on areas where the species may be present.

2.0 Legislation & Policy

2.1 The legislature considered for the purposes of this report includes the following:

- BS 42020:2013 Biodiversity – Code of Practice for Planning and Development (2013),
- Conservation of Habitats and Species Regulations (2017) (as amended),
- Countryside Rights of Way (CRoW) Act (2000),
- Natural Environment and Rural Communities (NERC) Act (2006),
- National Planning Policy Framework (2023) (as last revised),
- Protection of Badgers Act (1992),
- The Environment (Wales) Act (2016),
- The Hedgerow Regulations (1997),
- The Invasive Alien Species (Enforcement and Permitting) Order 2019,
- Town and Country Planning Act (1990),
- Wild Mammals Protection Act (1996),
- Wildlife and Countryside Act (1981) (as amended).

2.2 These acts entail relevance to both protected and invasive species. The degree of protection offered to taxa provided within existing UK and EU legislature often varies depending on species / group, for example, some species may purely be protected during one of its life stages (e.g. common species of breeding bird whilst nesting / with eggs / young); some species may receive full protection within the EU, whereas others may be protected solely on a national basis (e.g. grass snake).

2.3 **Table 2.1** contains appropriate legislature to each species / group specifically respective to the site and provides the relevance of said legislation.

Table 2.1 – Relevant legislation

Species Group / Species	Relevant Legislature	Level of Protection
Badger	Protection of Badgers Act (1992), Wildlife and Countryside Act (1981) (as amended)	Illegal to: Wilfully kill, injure or take a badger (or attempt to do so), cruelly ill-eradicate a badger, dig for a badger, Intentionally or recklessly damage or destroy a badger sett or obstruct access to it, cause a dog to enter a badger sett, disturb a badger when it is occupying a sett.
Bats	CRoW Act (2000) Conservation of Habitats and Species Regulations (2019) (EU Exit) Wildlife and Countryside Act (1981) (as amended) Environment (Wales) Act (2016)	All British bats and their roosts are afforded full protection from damage/destruction and bats may not be injured/killed/taken at any life stage. Once identified, roosts are protected whether the bat is in occupation or not.

Species Group / Species	Relevant Legislature	Level of Protection
Birds	CRoW Act (2000) Wildlife and Countryside Act (1981) (as amended) Environment (Wales) Act (2016)	All wild birds (with only minor exceptions) and their nests whilst being built or containing eggs or dependant young are protected. Birds listed on Schedule 1 Wildlife & Countryside Act (1981) (as amended) are afforded a greater level of protection.
Great Crested Newt (GCN)	CRoW Act (2000) Conservation of Habitats and Species Regulations (2019) (EU Exit) Wildlife and Countryside Act (1981) (as amended) Environment (Wales) Act (2016)	Great Crested Newts (GCN's) are fully protected from disturbance, killing, injuring or possession at any life stage. Confirmed breeding ponds and resting places are afforded the same protection.
Invasive Plant Species	Wildlife and Countryside Act (1981) (as amended) The Invasive Alien Species (Enforcement and Permitting) Order 2019	Species listed within Schedule 9/Schedule 2 as invasive, including Japanese knotweed (*Reynoutria japonica*) and Himalayan balsam (*Impatiens glandulifera*), for example, carry notoriety regarding development. The Acts make it an offence for any person to grow or cause to grow in the wild any plants listed as invasive.
Reptiles	Conservation of Habitats and Species Regulations (2019) (EU Exit) – SL/SS Wildlife and Countryside Act (1981) (as amended) CRoW Act (2000)	All native reptile species have some degree of protection in the UK, through section 8(1) and (5) (specified in Schedule 5) of the Wildlife and Countryside Act 1981 (as amended). Sand lizard and smooth snake are species of principal importance however with greater protection.
Terrestrial Invertebrates	CRoW Act (2000) Conservation of Habitats and Species Regulations (2019) (EU Exit) Wildlife and Countryside Act (1981) (as amended)	Only certain terrestrial invertebrates (e.g. some butterflies, beetles, and spiders) are protected under Schedule 5 of the Wildlife and Countryside Act or the Habitats Regulations. These species are protected from killing, injuring, taking or selling, and in some cases, from disturbance or habitat destruction.

2.4 The Environment (Wales) Act 2016 ("the Act") – requires local planning authorities to have regard to area statements in the development of Local Development Plans. The Act introduced an enhanced biodiversity and resilience of ecosystems duty (Section 6 Duty). This duty applies to public authorities in the exercise of their functions in relation to Wales and will help maximise contributions to achieving the well-being goals. The Nature Recovery Action Plan supports this legislative requirement to reverse the decline in biodiversity, address the underlying causes of biodiversity loss by putting nature at the heart of decision-making and increasing the resilience of ecosystems by taking specific action focused around objectives for habitats and species.

2.5 Part 1 of the Act promotes sustainable management of natural resources, and in Part 1 section 6 states:

"A public authority must seek to maintain and enhance biodiversity in the exercise of functions in relation to Wales, and in so doing promote the resilience of ecosystems, so far as consistent with the proper exercise of those functions."

2.6 Section 7 of the Act places a duty on Welsh Ministers to publish, review and revise lists of types of habitats and species in Wales which they consider are of key significance to sustain and improve biodiversity. The Welsh Ministers must also take all reasonable steps to maintain and enhance the habitats published in these lists and encourage others to take such steps. Section 7 of the Act provides the statutory list of species and habitats of principal importance for the purpose of maintaining and enhancing biodiversity in Wales. While the UK Biodiversity Action Plan (UKBAP) informed early priorities, these have since been devolved, and the Section 7 list replaces the earlier UKBAP and s.41 lists in the Welsh context.

2.7 Planning Policy Wales (PPW) 12th Edition (2024) sets out the land use planning policies of the Welsh Government. It is supplemented by a series of Technical Advice Notes (TANs), Welsh Government Circulars, and policy clarification letters, which together with PPW provide the national planning policy framework for Wales. PPW, the TANs, MTANs and policy clarification letters comprise national planning policy.

2.8 PPW 12th Edition (2024) states:

"The presence of a species protected under European[2] or UK legislation, or under Section 7 of the Environment (Wales) Act 2016 is a material consideration when a planning authority is considering a development proposal which, if carried out, would be likely to result in disturbance or harm to the species or its habitat and to ensure that the range and population of the species is sustained. Planning authorities should advise anyone submitting a planning application that they must conform with any statutory species protection provisions affecting the site, and potentially the surrounding area, concerned. An ecological survey to confirm whether a protected species is present and an assessment of the likely impact of the development on a protected species may be required in order to inform the development management process. It is considered best practice that screening to determine the presence of protected species should be carried out by a competent ecologist on the basis of data provided by the relevant Local Environmental Record Centre."

2.9 PPW and the National Development Framework (published as Future Wales – the National Plan 2040) set out how the planning system at a national, regional and local level can assist in delivering these requirements through Strategic Development Plans (SDPs) and Local Development Plans (LDPs).

2.10 PPW also requires developments to achieve a Net Benefit for Biodiversity (NBB):

"Planning authorities must seek to maintain and enhance biodiversity in the exercise of their functions. This means development should not cause any significant loss of habitats or populations of species (not including non native invasive species), locally or nationally and must work alongside nature and it must provide a net benefit for biodiversity and improve, or enable the improvement, of the resilience of ecosystems. A net benefit for biodiversity is the concept that development should leave biodiversity and the resilience of ecosystems in a significantly better state than before, through securing immediate and long-term, measurable and demonstrable benefit, primarily on or immediately adjacent to the site. The step-wise approach outlined below is the means of demonstrating the steps which have been taken

[2] References to *European legislation* in PPW refer to retained EU law, primarily implemented in Wales through the Conservation of Habitats and Species Regulations 2017 (as amended) following Brexit.

towards securing a net benefit for biodiversity. In doing so, planning authorities must also take account of and promote the resilience of ecosystems, in particular the following attributes, known as the DECCA Framework:

- *diversity between and within ecosystems;*
- *the extent or scale of ecosystems;*
- *the condition of ecosystems including their structure and functioning;*
- *the connections between and within ecosystems; and*
- *adaptability of ecosystems including their ability to adapt to, resist and recover from a range of pressures likely to be placed on them through climate change for example.*

2.11 As well as consider Green Infrastructure (GI), at both a local and landscape scale:

"The Environment (Wales) Act 2016, provides a context for the delivery of multi-functional green infrastructure. Its protection and provision can make a significant contribution to the sustainable management of natural resources, and in particular to protecting, maintaining and enhancing biodiversity and the resilience of ecosystems in terms of the diversity within and connections between ecosystems and the extent and condition of these ecosystems, so that they are better able to resist, recover from and adapt to pressures. This means that the development of green infrastructure is an important way for local authorities to deliver their Section 6 duty."

2.12 There are several plans, strategies and national, sub-regional and local policy statements which provide a framework for development in the Plan area. The Planning and Compulsory Purchase Act (2004) makes it a requirement for local planning authorities in Wales to prepare a Local Development Plan (LDP) for their areas.

2.13 Following a legal review, the Wrexham County Borough Council LDP 2013-2028 has been withdrawn; as such, the development planning policy for the area is comprised of the Future Wales: The National Plan 2040[3] and the Wrexham Unitary Development Plan 1996-2011[4]. The following policies are considered relevant to the scheme:

Table 2.2 – Relevant policies

Title	Summary
Wrexham UPD	
Policy PS11 Biodiversity	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 EC6 Biodiversity Conservation	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.

[3] See: https://www.gov.wales/sites/default/files/publications/2021-02/future-wales-the-national-plan-2040.pdf
[4] See: https://www.wrexham.gov.uk/sites/default/files/2023-04/udp-statement.pdf

Title	Summary
Future Wales: The National Plan 204	
Policy 9 Resilient Ecological Networks and Green Infrastructure	Planning authorities should include existing and potentially important areas for biodiversity in the development plans, to promote and safeguard the functions and opportunities they provide. In all cases, action towards securing the maintenance and enhancement of biodiversity (to provide a net benefit), the resilience of ecosystems and green infrastructure assets must be demonstrated as part of development proposals through innovative, nature-based approaches to site planning and the design of the built environment.

Priority Habitats & Species

2.14 In Wales, legal protection and policy recognition are afforded to certain habitats and species due to their ecological importance, conservation status, or declining populations. These are referred to as priority habitats and species, and are identified under several legislative and strategic frameworks, including the Environment (Wales) Act 2016 – Section 7 (s.7) list, which replaces the UK Biodiversity Action Plan (UKBAP) for devolved Welsh governance. Additional guidance may also be drawn from Local Biodiversity Action Plans (LBAPs) and national conservation priorities set out by Natural Resources Wales (NRW).

3.0 Methodology

3.1 As part of the ecological appraisal report, a desk-top and field-based study is conducted. Methods for both components of the appraisal are given below.

Desktop Study

3.2 Prior to a site visit, a desktop study was conducted using online resources to obtain information pertaining to any sites afforded statutory (e.g. SSSI) and non-statutory (e.g. LWS) designations within 2.0 kilometres of the site boundary. To do so, the Multi Agency Geographic Information for the Countryside (MAGiC – provided by DEFRA) and DataMapWales[5] were all accessed to gather such information. These mapping services were also utilised to locate any priority habitats or publicly viewable protected species records, to help further form conclusions in the context of the study site and the proposed development.

3.3 Additionally, the Natural Resources Wales (NRW) and Joint Nature Conservation Committee (JNCC) websites were accessed to provide citation details for statutory designated sites as well as habitat information in proximity to the site.

3.4 Historic satellite imagery was reviewed using sources such as Google Earth (© 2025/26) to help establish past use of the land and determine the nature of adjoining and extending habitats; such information aids in the understanding of how the site might interact with its surroundings ecologically and its value in that context, and how the development may impact at a wider scale.

3.5 In addition, the Cyngor Bwrdeistref Sirol Wrecsam / Wrexham County Borough Council 'Search planning applications' online function was utilised to help inform the desktop study by analysis of existing publicly accessible ecological survey results that have been carried out locally within the previous five years.

3.6 A commercial data request to the Local Environmental Records Centre (LERC) serving the area, in this case Cofnod – North Wales Environmental Information Service, has not been sourced at this time, with the combination of online EPSML data, extensive company records and the daytime survey data available to the ecologist considered to contain enough information in relation to the protected species likely to be present on site. **If, however, a data search is considered to be necessary by the Local Authority or advisory body to better inform the appraisal, a proportionate data search should be commissioned with results interpreted into the conclusions and recommendations of a re-issued / updated report.**

1) The Guidelines for Accessing, Using and Sharing Biodiversity Data in the UK (CIEEM, 2020) states data searches in:

"*Situations where the data search would be extremely unlikely to provide information needed to inform the assessment, due to the scale and location of the proposed development. The appropriateness of excluding a data search will need to be judged on a case-by-case basis as, in most situations, it will be essential to carry out such a search even if the development is very small or is likely to have a low impact."*

Field Survey

3.7 A daytime preliminary ecological appraisal (PEA) was conducted on 11/03/2026 in dry, sunny conditions (10ºC), average wind 3/12 (Beaufort scale), average 20% cloud cover, by the following surveyor (see **Table 3.1** overleaf).

[5] See: https://datamap.gov.wales/maps/new#/

Table 3.1 – Site surveyor credentials

Name	Description of most relevant credentials
Mr J. Hark	• Consultant Ecologist with 7 years training and experience, including within habitat management and invasive species control, • BSc (Hons) Wildlife Conservation & Ecology, MSc Wildlife Conservation, • Accredited agent on the Natural Resources Wales Bat Licence of Mrs. K. Wilding (S093795-1), • Holder of a FISC Level 4 (2025) (Botanical competency), • Meets the requirements of CIEEM's Competency Framework Section S (surveying) to Capable or higher level.

Floristic assessment

Habitats

3.8 The survey followed the UK Habitat Classification Version 2.0 (UKHabs, 2023) methodology, which was introduced as the successor to the Joint Nature Conservation Committee (JNCC) Phase 1 Habitat Methodology standards (JNCC, 2010). Survey techniques were also carried out with reference to the Chartered Institute of Ecology and Environmental Management (CIEEM) Technical Guidance Series "Guidelines for Preliminary Ecological Appraisal, 2nd Edition" (CIEEM, 2017).

Vegetation

3.9 During the survey walkover, botanical assemblages were assessed, and the land was inspected for the presence of red-listed (Stroh et al., 2014; Hodgetts, 2011), s.7 and LBAP listed species alongside specially protected species as listed under Schedule 8 of the Wildlife and Countryside Act (WCA) (1981) (as amended) and / or Schedule 5 The Conservation of Habitats and Species Regulations (2019) (EU Exit). Species nomenclature follows Stace, C. (2019) – definitive English names.

3.10 In addition to attributing ecological value to red-listed / BAP species, in accordance with existing CIEEM guidance, a geographic frame of reference is also adopted. Plant species and habitats may be recognised for their ecological value on a geographical scale which is adopted on a site-to-site basis (*International – National – Regional – County/Vice-County – Local*). For botanical species list compiled in full, see **Appendix II**.

3.11 In combination with assessing the area in relation to flora and habitats of conservation importance, the land was also assessed in relation to the presence of invasive non-native species (INNS) as listed under Schedule 9 (Part II) of the Wildlife and Countryside Act (1981) (as amended) and Schedule 2 of The Invasive Alien Species (Enforcement and Permitting) Order 2019 (IASO).

Faunal assessment

3.12 During site walkover, direct presence and / or evidence of priority fauna encountered was documented, whilst in tandem the area was assessed for the potential to support the priority species discussed in **Section 6.0**. The walkover also aimed to identify any ephemeral pools or unmapped waterbodies.

Bats

3.13 Criteria for preliminary bat roost assessment are based upon the determinants given in the Bat Conservation Trust – Bat Surveys for Professional Ecologists: Good Practice Guidelines, 4th ed. (2023) (see **Figures 3.1 – 3.4**).

3.14 The site was assessed for bats; a daytime bat walkover (DBW) was undertaken to observe, assess and record any habitats or features suitable for usage by bats, either as commuting, foraging or roosting provision. Wider connectivity to other habitats was also considered during the DBW.

3.15 Buildings and other permanent / semi-permanent structures (where present) were subject to a preliminary roost assessment (PRA), to identify potential areas which may be of value to bats and to determine evidence of use. This typically involves a systematic search of the external aspects of any structure(s), comprising an investigation of features known to be used by bats (for example roofing material, soffits, fascia, lead flashing hanging tiles) using a high-powered torch and close-focus binoculars, where necessary. Where possible, an internal assessment of any structures was also carried out, with the aid of a high-powered torch and endoscope, where necessary, to identify any evidence of bat use of a structure. Field signs of bats typically comprise bat droppings, urine splashing, fur-oil staining, incidental animal presence, dead specimens and / or the presence of prey items, such as moth wings.

3.16 This assessment also included an assessment of any structures relative to their potential to offer winter roosting suitability for bats, with environmental conditions noted, including temperature, relative humidity, and a systematic inspection of any cracks, crevices and voids for bats undertaken. The information recorded was assessed relative to the non-classic hibernation site criteria contained within the BCT guidelines, and derived from 'Assessing Sites for Hibernation Potential. A Practical Approach, including a Proposed Method & Supporting Notes.' (*Middleton, 2019)*.

3.17 Trees (where present) would be subject to a ground level tree assessment (GLTA) using equipment such as close-focus binoculars and a high powered-torch. Potential roost features (PRFs) can include woodpecker holes, rot holes, hazard beams, other vertical or horizontal cracks or splits in stems and branches, partially decayed lifted bark, knot holes, man-made holes, tear-outs, cankers in which cavities have developed, other hollows or cavities, including butt-rots, double-leaders forming compression forks with included bark, gaps between overlapping stems or branches, partially detached climbing species with stem diameters in excess of 50mm or pre-existing bat / bird boxes. These PRFs can then be determined as PRF-I or PRF-M, dependent on their suitability for individual / low numbers of bats or their capability to host multiple bats.

3.18 Factors considered during the preliminary roost assessment include:

- Practical experience of the surveyor,
- Knowledge of bat species relevant to the site location and geographical range,
- Nature of the immediate / surrounding habitat in relation to foraging opportunities,
- Presence / absence of roost potential,
- Value and types of roost potential, if present (i.e. – maternity, hibernation, transitional).

Table 4.1. Guidelines for assessing the potential suitability of proposed development sites for bats, based on the presence of habitat features within the landscape, to be applied using professional judgement.

Potential suitability	Description	
	Roosting habitats in structures	**Potential flight-paths and foraging habitats**
None	No habitat features on site likely to be used by any roosting bats at any time of the year (i.e. a complete absence of crevices/suitable shelter at all ground/underground levels).	No habitat features on site likely to be used by any commuting or foraging bats at any time of the year (i.e. no habitats that provide continuous lines of shade/protection for flight-lines, or generate/shelter insect populations available to foraging bats).
Negligible[a]	No obvious habitat features on site likely to be used by roosting bats; however, a small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion.	No obvious habitat features on site likely to be used as flight-paths or by foraging bats; however, a small element of uncertainty remains in order to account for non-standard bat behaviour.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of the year. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions[b] and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity and not a classic cool/stable hibernation site, but could be used by individual hibernating bats[c]).	Habitat that could be used by small numbers of bats as flight-paths such as a gappy hedgerow or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.
Moderate	A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions[b] and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only, such as maternity and hibernation – the categorisation described in this table is made irrespective of species conservation status, which is established after presence is confirmed).	Continuous habitat connected to the wider landscape that could be used by bats for flight-paths such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
High	A structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions[b] and surrounding habitat. These structures have the potential to support high conservation status roosts, e.g. maternity or classic cool/stable hibernation site.	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by bats for flight-paths such as river valleys, streams, hedgerows, lines of trees and woodland edge. High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland. Site is close to and connected to known roosts.

a Negligible is defined as 'so small or unimportant as to be not worth considering, insignificant'. This category may be used where there are places that a bat could roost or forage (due to one attribute) but it is unlikely that they actually would (due to another attribute).

b For example, in terms of temperature, humidity, height above ground level, light levels or levels of disturbance.

c Evidence from the Netherlands shows mass swarming events of common pipistrelle bats in the autumn followed by mass hibernation in a diverse range of building types in urban environments (Korsten *et al.*, 2016 and Jansen *et al.*, 2022). Common pipistrelle swarming has been observed in the UK (Bell, 2022 and Tomlinson, 2020) and winter hibernation of numbers of this species has been detected at Seaton Delaval Hall in Northumberland (National Trust, 2018). This phenomenon requires some research in the UK, but ecologists should be aware of the potential for larger numbers of this species to be present during the autumn and winter in prominent buildings in the landscape, urban or otherwise.

Figure 3.1 – *BCT guidelines extract*

Table 4.2. Guidelines for assessing the suitability of trees on proposed development sites for bats, to be applied using professional judgement.

Suitability	Description
NONE	Either no PRFs in the tree or highly unlikely to be any
FAR	Further assessment required to establish if PRFs are present in the tree
PRF	A tree with at least one PRF present

Figure 3.2 – *BCT extract on tree roost suitability criteria*

Table 6.2. Guidelines for categorising the potential suitability of PRFs on a proposed development site for bats, to be applied using professional judgement.

Suitability	Description
PRF-I	PRF is only suitable for individual bats or very small numbers of bats either due to size or lack of suitable surrounding habitats.
PRF-M	PRF is suitable for multiple bats and may therefore be used by a maternity colony.

Figure 3.3 – *BCT extract on tree roost categorisation criteria*

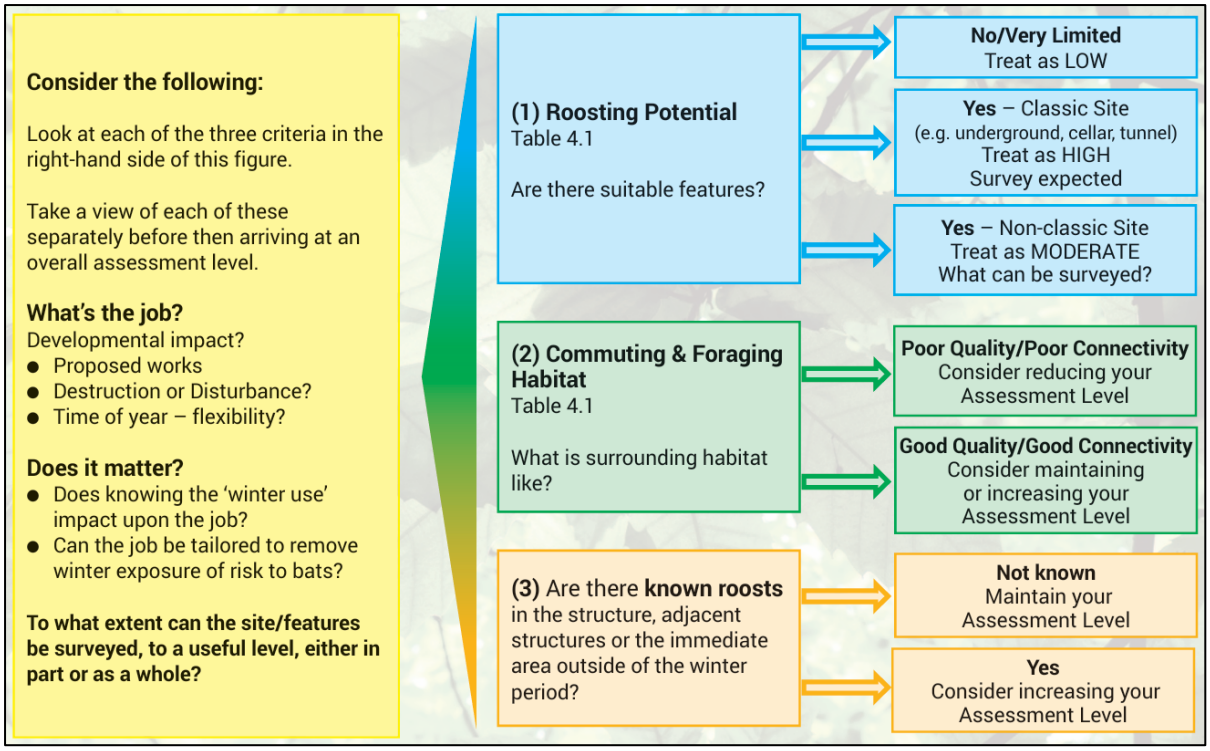


Figure 3.4 – *BCT extract on hibernation roost categorisation criteria*

Birds

3.19 The site was inspected for evidence of nesting and suitability for relevant species. Bird species observed and heard were recorded on site, and a search was made for nest material, or areas suitable for nesting – this can take the form of searching structures, woody vegetation, semi-aquatic vegetation such as reeds and / or ground flora. Elevations of any buildings or structures on site were inspected for evidence of birds that show a high dependency upon

built structures, many of which are in a state of decline. These might include the following species for example (list non-extensive):

- House martin (*Delichon urbica*): Birds of Conservation Concern (BoCC) red status,
- House sparrow (*Passer domesticus*): BoCC red status,
- Starling (*Sturnus vulgaris*): BoCC red status,
- Swift (*Apus apus*): BoCC red status.

3.20 Additional to the site's capacity to support generally common species for breeding, the area was also subject to an assessment for wider capacity to support species with extra protection under Schedule 1 of the Wildlife & Countryside Act (1981) (as amended) and other priority species.

3.21 Where relevant, the application site and surrounding area were assessed in relation to their value to overwintering bird species, including consideration to the presence of sites designated for their wintering bird assemblages and populations, or functionally linked land (FLL) around such sites.

Other Terrestrial Mammals

3.22 The walkover included an assessment for the presence / suitability of badger (*Meles meles*), which includes signs of activity such as prints, hairs, digging, setts, 'runs' leading to and from a sett and the existence of latrines or 'snuffle' holes where badgers have foraged in the ground.

3.23 The site was also assessed for the presence / suitability of European hedgehog (*Erinaceus europaeus*) and other priority mammals such as brown hares (*Lepus europaeus*).

Herpetofauna

3.24 In order to quantify risks to GCN in a PEA, a range of factors need to be considered (see below and **Table 3.2** below):

- Presence of ponds on site, and impacts to those ponds,
- Site proximity to any additional ponds within 250 – 500m,
- Pond quality (suitable for breeding, or not),
- Nature, extent, and connectivity of available terrestrial habitat around the pond(s), considering core, intermediate and distant ranges, to be affected by works,
- Presence of significant barriers between ponds and site,
- Area of site habitat loss and permanence of that loss.

Table 3.2 – Factors that can increase/decrease risk of committing an offence

Increases risk to GCN	Decreases risk to GCN
Large population size	Small population size
High local pond density	Low local pond density
Good terrestrial habitat	Poor terrestrial habitat
Low pre-existing habitat fragmentation	Substantial pre-existing dispersal barriers
Large development footprint	Small development footprint
Long construction period	Short construction period

3.25 During desktop assessment, a 250 metres radial search was undertaken from a site central grid reference in relation to the presence of ponds, ditches or other water bodies that may support great crested newt (GCN). The information gathered would then be used to aid in establishing if more detailed surveys are required.

NB: *English Nature's (now Natural England) Great Crested Newt Mitigation Guidelines (2001) states ponds within 500m of a proposed development site should be considered for their potential to support GCN, however, in some instances this distance may be reduced to 250m due to the presence of physical barriers and obstructions or based on the likely magnitude of impacts arising from the proposed development.*

3.26 Following current best practice, a proportionate assessment of the water bodies range within 250m from site has been applied. Where a development is anticipated to affect GCN the search can be extended up to 500m or more.

3.27 The site and surrounding habitats were also assessed relative to their potential to offer suitability for wider, generalist amphibians, in addition to GCN, for example common toad (*Bufo bufo*) and common frog (*Rana temporaria*).

3.28 The site and its surroundings were assessed for suitability for use by reptiles, with particular attention paid to features that could be used as basking areas (*e.g.* south-facing slopes), hibernation sites (*e.g.* banks, walls, leaf litter, piles of hardcore) and opportunities for foraging (*e.g.* rough grassland and scrub). Beebee & Griffiths (2000) state specific habitat preferences of common UK reptiles:

- Common lizard (*Zootoca vivipara*) use a variety of habitats from woodland glades to heaths, walls and pastures, as well as brownfield sites,
- Grass snake (*Natrix helvetica*) have broadly similar habitat requirements to the above species, but with an increased reliance on wetland habitats where they prey on amphibian species,
- Slow-worms (*Anguis fragilis*) use similar habitats to common lizards, and are often found in rank grassland, gardens and derelict land under refugia.

3.29 In assessment of a site for reptiles several important habitat characteristics are considered, outlined in **Table 3.3** below, as derived from the Reptile Habitat Management Handbook (Edgar, 2010).

Table 3.3 – Important habitat characteristics for reptiles

1. Location (in respect of species range)	7. Connectivity to good quality habitat
2. Vegetation structure	8. Prey abundance
3. Insolation	9. Refuge opportunity
4. Aspect	10. Hibernation habitat potential
5. Topography	11. Disturbance regime
6. Surface geology	12. Egg-laying site potential

Invertebrates

3.30 The site was assessed for the presence of features that should be considered of high value to other invertebrates. Several important features were considered, based on the assemblage descriptions provided within the Research Report "Surveying terrestrial and freshwater invertebrates for conservation evaluation" (NERR005, 2007), including but not limited to:

- Wood decay,
- Early successional mosaic habitat,
- Shaded ground layer,
- Still and flowing water.

Quality Assurance (QA)

3.31 The results, conclusions and recommendations of this report are based on a number of factors i.e.

- Skills and experience of the surveyor,
- Knowledge of flora and fauna relevant to the site location and geographical range,
- Nature of the immediate and surrounding habitat in relation to shelter, foraging and commuting opportunities.

3.32 The results, conclusions and recommendations of this report have been assessed by Mrs. K. Wilding, Director of Tyrer Ecological Consultants Ltd, and her assessment concurs with the findings and recommendations of the surveyor Mr. J. Hark and author Mr. B. Richards ACIEEM.

4.0 Limitations

4.1 This report does not contain a comprehensive list entailing the totality of botanical taxa on site. Species listed within **Appendix II** are recorded from a combination of the seasonal timing that the survey took place and botanical identification skills of the surveyor. Many plant species are only evident at certain times of the year; consequently, it is possible that some plant species may have gone undetected.

4.2 The optimal time of the year to carry out a preliminary ecological appraisal / UK Habitats survey is April to October; the survey was undertaken outside of the optimum period. However, based upon the disturbed nature of the habitats identified at the application site, it is considered unlikely that any habitats or species of conservation concern would be missed due to seasonal timing. Survey timing is therefore not considered a limitation.

4.3 The survey took place outside of the bat active season (broadly acknowledged to be May – September), therefore, there was a lower probability of encountering direct evidence of bats, such as through droppings. However, potential roost features and suitability of potential roost features can still be judged as effectively and conclusively as within the active season of bats. Therefore, whilst suboptimal, survey timing is not considered a limitation in this instance.

4.4 The survey was conducted within the breeding bird season, when evidence of nesting and other breeding behaviours can be most readily identified. Survey timing is not considered as a constraint in this instance.

4.5 In considering all potential survey constraints, no significant limitations were experienced that might adversely influence the results, conclusions, and recommendations of this report.

5.0 Desk Study Results

5.1 The site of the proposed works (referred to in-part as "the application site" and "the site") is located within the wider Knolton Farmhouse Cheese complex, to the north of the B5069 and approximately 9.5km south-east of Wrexham city centre. The wider site comprises an active agricultural / industrial facility, though the application site red line boundary is formed of a highly modified grassland with scattered trees, some of which are clustered. See **Figure 5.1** below for location of the site within the surrounding landscape.



Figure 5.1 – *Location of red line boundary within surrounding landscape*

5.2 The surrounding environment is rural in nature, with land to the east and south formed of large, open agricultural fields, including both arable and pastoral use, with some of the latter present to the north in the form of coastal and floodplain grazing marsh, interspersed with hedgerows and tree lines. A large area of woodland, which is designated as ancient semi-natural woodland (ASNW), is present immediately adjacent to the north of the site, named as Whooter's Hall Wood, which links the site to areas of ASNW extending to the north and west, as well as to the River Dee at a distance of 0.5km to the north-west. See **Figure 5.2** overleaf for a visual aid.

Relevant Planning History

5.3 A number of previous planning applications have been made at the wider site, notably for the installation of a replacement milking parlour (Application Reference: P/2023/0877[6]), for which an ecological report was produced by Marches Ecology, as well as an application for the installation of a 1 mw solar photovoltaic (pv) farm and ancillary infrastructure (Application Reference: P/2015/0249[7]), with an ecological report produced by Michael Woods Associates.

[6] See: https://register.wrexham.gov.uk/pr/s/detail/a0lJ7000000TursIAC?tabset-ff68f=1
[7] See: https://register.wrexham.gov.uk/pr/s/detail/a0lJ7000000TxGYIA0?tabset-ff68f=1

5.4 Similarly, a variety of applications have been made in proximity to the site, including at Knolton Hall, where a Bat Survey Report was produced by BiOME Consulting in 2021 in support of an application to demolish a stable block and erect a replacement stable block (Application Reference: P/2020/0522[8]).

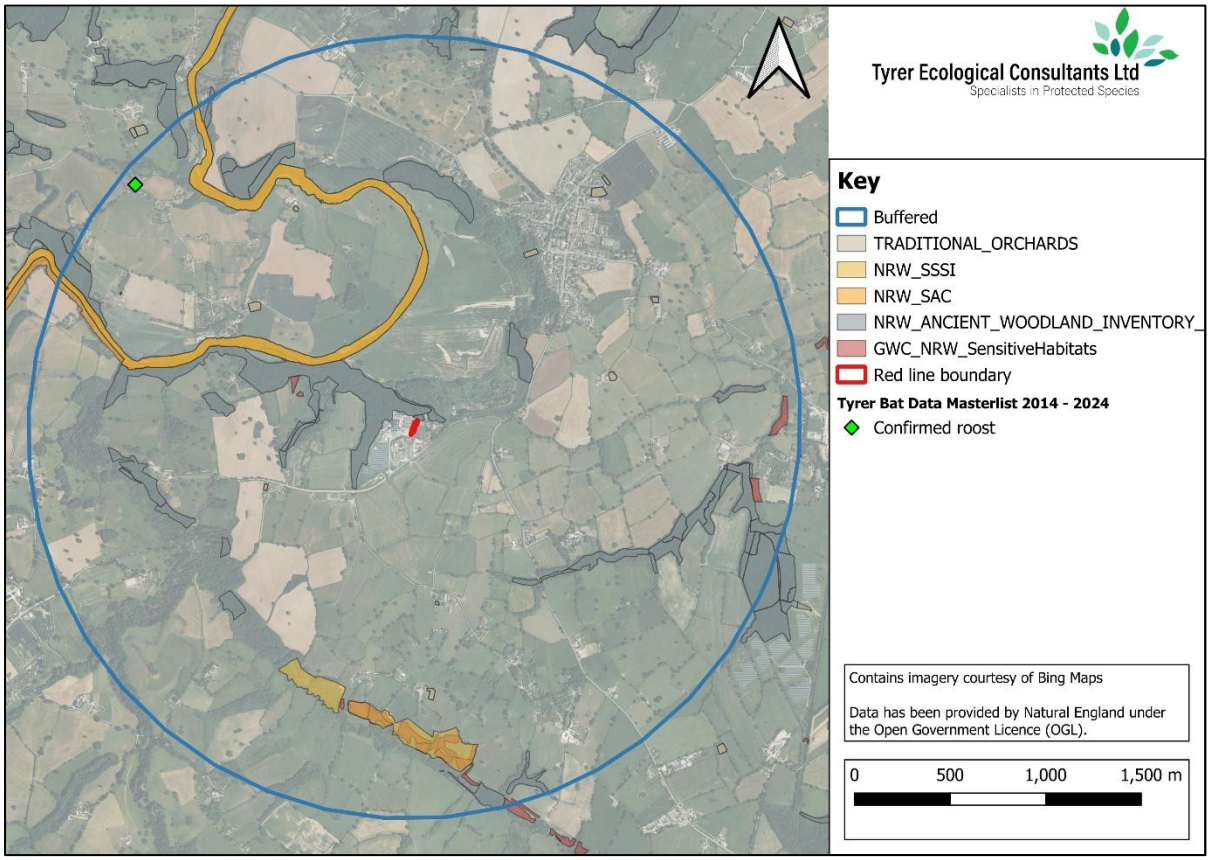


Figure 5.2 – *Priority habitat, designated site and protected species data within 2.0km of application site*

Designated Sites

5.5 Three statutory designated sites are present within 2.0km of the site (see **Table 5.1** below for details and **Figure 5.2** overleaf for a visual aid).

Table 5.1 – Statutory designation types and reasons for designation within 2.0km buffer

Site name	Designation type	Interest features
Afon Dyfrdwy (River Dee) (0.5km north-west)	Site of Special Scientific Interest (SSSI)	The NRW citation[9] states the following: "Afon Dyfrdwy (River Dee) is of special interest for its fluvial geomorphology, Carboniferous geology, range of river habitat types, saltmarsh transition habitats, populations of floating water plantain *Luronium natans*, slender hare's-ear *Bupleurum tenuissimum*, sea barley *Hordeum marinum*, hard-grass *Parapholis strigosa*, otter *Lutra lutra*, salmon *Salmo salar*, bullhead *Cottus gobio*, brook lamprey *Lampetra planeri*, river lamprey *Lampetra fluviatilis*, sea lamprey *Petromyzon marinus*,

[8] See: https://register.wrexham.gov.uk/pr/s/detail/a0lJ7000000TvgUIAS?tabset-ff68f=1
[9] See: https://cdn.cyfoethnaturiol.cymru/677391/sssi_2554_citation_en001.pdf

Site name	Designation type	Interest features
		club-tailed dragonfly *Gomphus vulgatissimus* and other aquatic invertebrates."
River Dee and Bala Lake / Afon Dyfrdwy a Llyn Tegid (Wales) (0.5km north-west)	Special Area of Conservation (SAC)	The NRW register entry[10] states that the site is designated for the following habitat types and/or species: Bullhead *Cottus gobio;* river lamprey *Lampetra fluviatilis,* brook lamprey *Lampetra planeri,* floating water plantain *Luronium natan,* otter *Lutra lutra,* sea lamprey *Petromyzon marinus*, Atlantic salmon *Salmo salar* & Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation.
Shell Brook Pastures (1.3km south)	SSSI	The NRW citation[11] states the following: "A series of unimproved calcareous clay pastures, largely developed on the steep valley side of the Shell Brook and representing a type of habitat that survives only as isolated fragments in the Maelor. The pastures are botanically rich, the variety of plants present being enhanced by the presence of springs in the valley side and areas of marsh adjacent to the Shell Brook, together with scrub and woodland edge communities. The pastures support a range of plants characteristic of this type of grassland including Quaking Grass *Briza media*, Timothy *Phleum pratense*, Meadow Fescue *Festuca pratensis*, Cowslip *Primula veris* and the uncommon Adder's Tongue Fern *Ophioglossum vulgatum*, Pepper Saxifrage *Silaum silaus*, Hoary Ragwort *Senecia erucifolius*, Dyer's Greenweed *Genista tinctoria* and Green-winged Orchid *Orchis morio*. Typical plants of the wet flushes associated with springs and in marshy ground in the valley bottom are Hairy Sedge *Carex hirta*, Sneezewort *Achillea ptarmica*, Ragged Robin *Lychnis flos-cuculi* and Fleabane *Pulicaria dysenterica*. One of the pastures includes the margin of an area of Alder carr (woodland) with a dense stand of Great Horsetail *Equisetum telmateia*."

5.6 The site is positioned in proximity to riverine designated sites, and previous planning applications have consulted NRW in relation to discharge and groundwater, with the site being located above a principal bedrock aquifer within a designated Source Protection Zone.

Bats

5.7 Tyrer Ecological Consultants Ltd have previous and ongoing projects involving bat roosts within the 2.0km area surrounding the site; as such, the following biological data (see **Table 5.2** overleaf) is readily available to the Ecologist from the company database. All data has been previously submitted to the LERC serving the area, which, in this case, is Cofnod.

[10] See: https://cdn.cyfoethnaturiol.cymru/631975/SAC_UK0030252_Register_Entry001.pdf
[11] See: https://cdn.cyfoethnaturiol.cymru/658120/SSSI_1047_Citation_EN00152c0.pdf

Table 5.2 – LERC submitted biological data records collected by Tyrer Ecological Consultants Ltd

Year	Distance from site	Context (where relevant)
2023	1.9km north-west	Soprano pipistrelle (*Pipistrellus pygmaeus*); day roost, 2 bats

5.8 The surrounding land provides high value commuting and foraging habitats for bats, with the ancient woodland located directly to the north of the site likely facilitating the movement of bats through the landscape as well as acting as a host to various invertebrate species and roosts, notably for species such as the brown long-eared bat (*Plecotus auritus*). In addition, the River Dee provides valuable open water space which is likely utilised by Daubenton's bats (*Myotis daubentonii*) for foraging purposes. Edge feeding species would also find favourable habitat along ecotones where the woodland meets agricultural land and rough coastal and floodplain grazing marsh, whilst the grazing land could support foraging lesser horseshoe bats (*Rhinolophus hipposideros*).

Birds

5.9 The open, rough grassland present across much of the immediate and wider landscape would provide valuable habitat for barn owl (*Tyto alba*), with a likely abundance of prey items present alongside agricultural structures which could facilitate both nesting and roosting behaviour.

5.10 The agricultural land surrounding the site provides generally low value nesting habitat for ground nesting species, with evidence of regular disturbance in the form of tramlines indicating that the fields are accessed by agricultural vehicles. Any land which is left out of rotation could, however, provide suitability and could support species such as curlew (*Numenius arquata*), lapwing (*Vanellus vanellus*), meadow pipit (*Anthus pratensis*) and skylark (*Alauda arvensis*). The nearby woodland could also support species more adapted to dense blocks of deciduous and ancient woodland, such as great spotted woodpecker (*Dendrocopos major*), nuthatch (*Sitta europaea*), jay (*Garrulus glandarius*) and pied flycatcher (*Ficedula hypoleuca*).

Other Terrestrial Mammals

5.11 The site is located in proximity to areas of extensive broadleaved woodland, including ancient woodland, with clear connectivity between these and the site in the form of the aforementioned hedgerows, tree lines and woodland blocks. Species such as badger and hedgehog would, therefore, find suitable habitat in the site-surrounding environs.

Herpetofauna

5.12 A detailed desktop assessment revealed an absence of any standing water bodies within 250m of the application site (see **Figure 5.3** overleaf). The site is also outside of any layers mapped within either the Potential Habitat for GCN or GCN Potential Habitat – Voluntary on DataMapWales.

5.13 Whilst the ancient woodland in proximity to the site could feasibly support GCN in their terrestrial phase, the absence of standing water bodies coupled with the fact that this species typically remains within a core zone of 50m surrounding their breeding ponds, indicates that the presence of GCN in the surrounding landscape is unlikely.

5.14 The absence of standing water bodies also indicates that the presence of more robust species such as common frog and common toad is unlikely, though given these species' ability to commute larger distances beyond pond networks, they feasibly could exist in the surrounding landscape.

5.15 Whilst there are a number of semi-natural habitats in proximity to the site, including the ancient woodland, which is a habitat known to support reptile species such as grass snake, adder (*Vipera berus*), slow-worm and common lizard, the surrounding habitats are dominated by homogenous agricultural land which provides minimal suitability for reptile species.

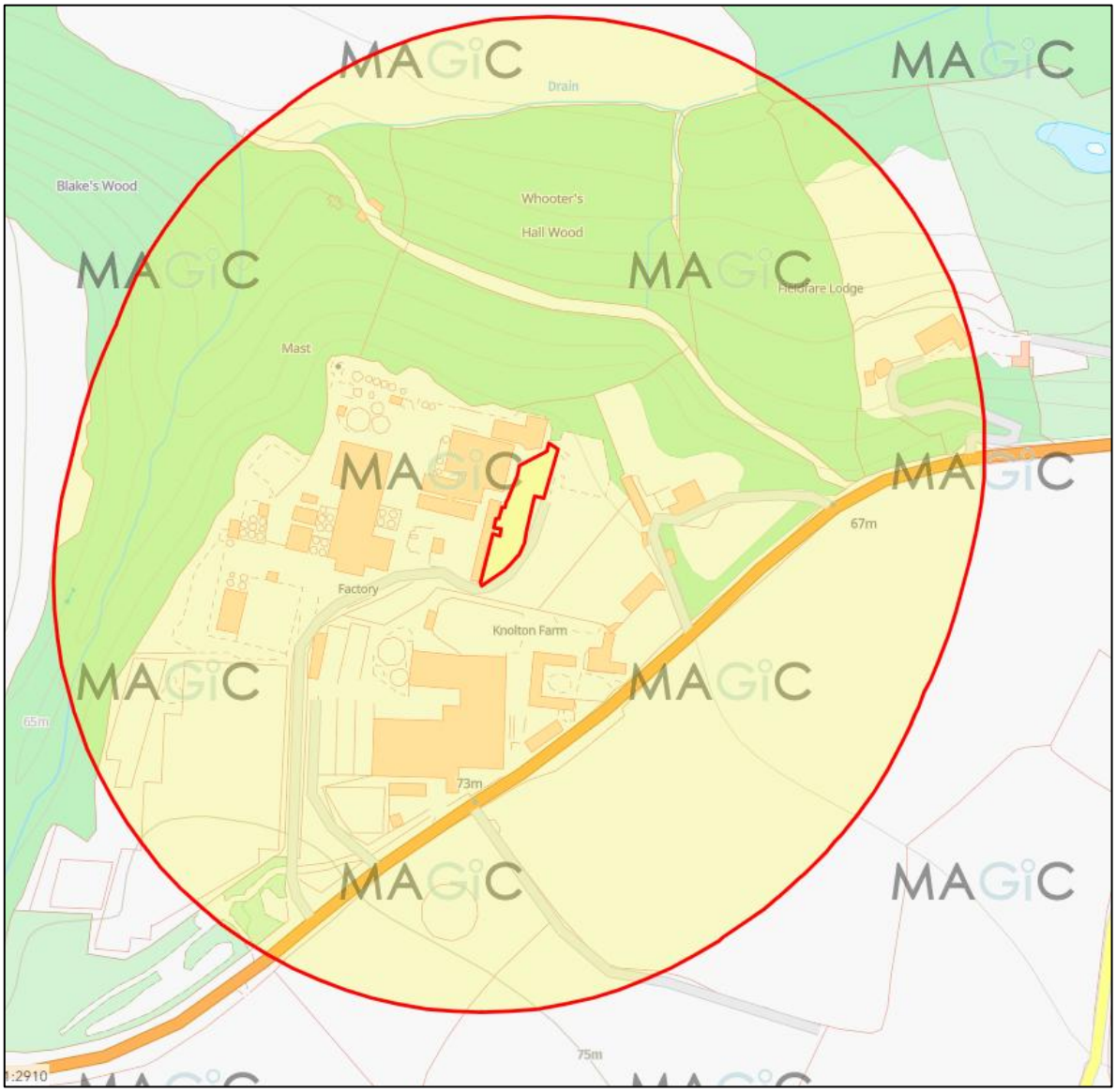


Figure 5.3 – *Absence of standing waterbodies within 250m of the site © MAGiC Maps 2026*

Invertebrates

5.16 The immediate surrounding environment features ancient woodland parcels which are likely to host locally notable invertebrate assemblages, though these are not within the site. Invertebrates are noted as a qualifying feature of the nearby River Dee SSSI, though the majority of the immediate surrounds are formed of agricultural land which is unlikely to support specially protected invertebrates.

6.0 Field Survey Results

6.1 Habitat Survey

6.1.1 See **Table 6.1.1** (below) for baseline information and habitat descriptions; refer to **Appendix I** for any supporting imagery; additional scientific names are given in **Appendix II**. Refer to **Appendix IV** – UK Habitats Maps for the location of described habitats & Target Notes.

Table 6.1.1 – UK Area Habitat types within the survey area

Area habitat	Sec. Codes	Description
g4 Modified grassland	**32** Scattered trees **108** Frequently mown **516** Active management **816** Commercial premises open space	The majority of the site boundary is formed of a species-poor, closely cropped grassland, which is clearly subject to frequent mowing with a robotic lawnmower present on the day of survey. Species present include dominant perennial rye-grass (*Lolium perenne*), alongside dandelion (*Taraxacum* agg.), creeping buttercup (*Ranunculus repens*), daisy (*Bellis perennis*), common chickweed (*Stellaria media*), common field-speedwell (*Veronica persica*) and lesser celandine (*Ficaria verna*); to the fringes some taller ruderal species are present, including common nettle (*Urtica dioica*), broad-leaved dock (*Rumex obtusifolius*) white dead-nettle (*Lamium album*), cow parsley (*Anthriscus sylvestris*), ground-ivy (*Glechoma hederacea*) and cleavers (*Galium aparine*). Some ornamental species such as daffodil (*Narcissus*) and garden tulip (*Tulipa gesneriana*) have been planted for amenity purposes. Some small patches of bare ground are present across the parcel, as are a number of scattered individual trees which are mentioned below.
w1g Other broadleaved woodland	**16** Tall forbs **202** Young trees – self-set	A small region of distinct habitat is present to the centre north of the site, which is identified as G013 within the site associated arboricultural reports. This parcel contains a mature ash (*Fraxinus excelsior*) and cherry (*Prunus sp.*) as the upper canopy, with a functional shrub layer comprising smaller cherry and ash specimens, hazel (*Corylus avellana*), butterfly-bush (*Buddleja davidii*) and elder (*Sambucus nigra*) and bramble (*Rubus fruticosus* agg.), with some Leyland cypress (*Cupressus x leylandii*) specimens also present. Ground flora is dominated by daffodil, but with other tall ruderals such as common nettle present alongside sweet violet (*Viola odorata*) and carpeting common & Atlantic ivy (*Hedera helix*). Whilst there are several mature, native species present in the parcel, given the clearly planted nature of a number of the other species present, it has not been deemed to meet the criteria for a semi-natural woodland parcel.
Individual trees Rural tree	**201** Young trees – planted **203** Mature tree	A large number of individual trees are present within the site boundary and in immediate proximity to the red line boundary of the site; trees have been labelled in accordance with the site-associated arboricultural reports: **T019** – A semi-mature cherry at the northern end of the site, with multiple Ganoderma fruiting bodies visible externally, DBH = 20cm. **T017** – A mature apple (*Malus x domestica*) with exposed heartwood on the northern face, containing a wound with internal decay, as well as fairy lights; DBH = 57.5cm.

Area habitat	Sec. Codes	Description
		T015 – An immature cherry along the eastern border of the site with multiple stems; DBH = 13.5cm. **T014** – An early mature cherry with multiple stems; DBH = 22.5cm. **T012** – A coppiced hazel with multiple stems; DBH = 13.5cm. **T011** – A mature apple with minor deadwood and a cavity in the base of the tree; DBH = 37.5cm. **T010** – A mature cherry to the centre west of the site, with ivy cover to the main stem; DBH = 52.6cm. **T009** – An immature cherry with minor deadwood in the lower crown; DBH = 12.5cm. **T008** – An immature cherry with minor deadwood in the lower crown; DBH = 4.5cm. **T007** – An immature cherry with minor deadwood in the lower crown; DBH = 15cm. **T006** – An immature cherry with minor deadwood; DBH = 14.1cm. **T005** – An immature cherry with stem failure; DBH = 12.5cm **T004** – A mature hawthorn (*Crataegus monogyna*) with multiple stems; DBH = 30cm.

6.1.2 None of the described habitats are listed as habitats of principal importance for the purpose of maintaining and enhancing biodiversity in relation to Wales, with no overlap between the on-site features and the s.7 list.

6.2 Vegetation

Notable species

6.2.1 No species of conservation importance were located anywhere within the site during the appraisal, and whilst the time of year may have acted as a constraint in this regard, based on the habitat types encountered there is a negligible risk of priority species having been missed.

Invasive non-native species (INNS)

6.2.2 No INNS listed under either Sch.2 of the IASO (2019) or Sch.9 of the WCA (1981) were identified on site by the surveyor.

6.3 Bats

Buildings

6.3.1 No buildings are present within the red line boundary of the site, and thus none were subject to a PRA and assessed relative to their suitability in relation to bats and bat roosts.

Trees

6.3.2 As above, a large number of trees are present within the site red line boundary and within immediate proximity. The majority of these were assessed through a GLTA which confirmed an absence of potential roosting features (PRFs), and as such the majority of trees on site pertain to a bat roost suitability of '**None**', in accordance with Bat Conservation Trust – Bat Surveys for Professional Ecologists: Good Practice Guidelines, 4th ed. (2023).

6.3.3 T017, a mature apple tree to the north of the site, was investigated and found to contain a wound to its northern face with some decay extending into the trunk, though the full extent of the feature could not be determined. Given this, T017 has been formally categorised as

pertaining to a bat roost suitability of '**Further Assessment Required (FAR)**', in accordance with BCT guidance.

Activity

6.3.4 From a habitat suitability assessment in relation to bat activity, the site provides '**Moderate**' value foraging and commuting habitat; whilst the grassland is extremely closely cropped, the scattered trees and woodland parcel to the centre of the site would facilitate the movement of bats through the landscape, with the fruiting trees supporting invertebrate prey items and increasing the foraging value of the site.

6.3.5 All trees should be considered of value to commuting and foraging bats, whereby they act as landmarks for navigation and foci around which invertebrate prey species gather.

6.4 Birds

6.4.1 In relation to WCA Schedule 1 specially protected bird species such as barn owl, the grassland on site is unlikely to support favoured prey items given its closely cropped nature, and whilst the surrounding agricultural land is likely to support this species, the site itself is of negligible value for nesting, roosting and hunting barn owl.

6.4.2 An historic nest attributable to a small passerine species was noted in T011, and the remainder of the individual trees and the woodland parcel would facilitate nesting by a variety of common garden bird species, some of which were identified on site, including blue tit (*Cyanistes caeruleus*), great tit (*Parus major*) and chaffinch (*Fringilla coelebs*).

6.4.3 The grassland is absent of features suitable for ground nesting species.

6.5 Other Terrestrial Mammals

Badger & hedgehog

6.5.1 No field signs of badger, such as latrines, pathways, hairs, footprints, or feeding signs, for example snuffle holes and scratched trees / logs, were located within the site boundary. The majority of the site provides minimal value for sett building, in that it is formed of open grassland with an absence of cover. Despite this, no barriers are present that would prevent this species from accessing the site from the nearby ancient woodland, though this would only be on an occasional foraging and / or commuting capacity. The presence of this species cannot, therefore, be ruled out.

6.5.2 Whilst no direct evidence of hedgehog was identified, the site habitats provide potentially suitable habitat for this species, with the open grassland suitable for foraging and the woodland providing suitable refuge areas. The presence of this species within the site is considered highly likely, though again only on an occasional basis.

6.6 Herpetofauna

Great crested newt (GCN)

6.6.1 Important elements to consider when assessing likely impacts against GCN includes:

- The scale, nature and magnitude of proposals,
- Site proximity to a potential breeding pond and to any additional ponds,
- Habitat linkage / barriers between potential breeding ponds and the site,
- Nature and extent of available terrestrial habitat around the pond,

- Area of site habitat loss,
- Nature of habitat to be lost and potential value to GCN,
- Most up to date Government guidance considering EPS.

6.6.2 As derived from the desktop assessment, no standing water bodies appear to be present within 250m of the site boundary.

6.6.3 The terrestrial habitat on site does provide suitability for the GCN, with woodland providing potential refuge habitat, although the majority of the site is formed of closely cropped modified grassland which provide negligible terrestrial value for individual GCN. This, coupled with the absence of water bodies, indicates that the presence of this species on site is highly unlikely.

Other amphibians

6.6.4 Based on the surrounding terrestrial habitat information, the presence of more widespread amphibians such as common frog and common toad is considered possible, though unlikely given the absence of standing water bodies.

Reptiles

6.6.5 The site is absent of suitable habitat features for reptiles, with an absence of ecotones, basking areas or a typical habitat mosaic which is favoured by this taxon. The site is located within an industrial / commercial complex with regular disturbance, and the presence of reptiles is considered highly unlikely.

6.7 Invertebrates

6.7.1 The site is absent of any habitats which are considered likely to support specially protected invertebrates, such as the ancient woodland present in the surrounding ecosystem. The mature trees and fruiting species likely support a moderately diverse assemblage of invertebrates; however the presence of specially protected species is considered unlikely.

7.0 Conclusions & Recommendations

Designated Sites

7.1 The site is positioned in proximity to riverine designated sites, and previous planning applications have consulted NRW in relation to discharge and groundwater, with the site being located above a principal bedrock aquifer within a designated Source Protection Zone.

7.2 Whilst the current application for the office building is likely to be less impactful than the proposal for the replacement milking parlour, it is recommended that NRW are consulted in relation to discharge to ensure that appropriate measures are put in place to prevent impacts upon nearby designated sites and / or groundwater areas.

Habitats

7.3 None of the habitats on site meet either national or local priority status, and are not listed under s.7.

Vegetation

7.4 No specially protected species were identified on site by the surveyors during the diurnal appraisal to warrant any specific intervention measures.

7.5 No INNS were identified on site to warrant any specific intervention measures.

7.6 Any landscaping or planting carried out during the works should consider local soil types and habitats, and as such should prioritise native species which will better tolerate the soil type present on site and provision for faunal species present in the immediacy.

Bats

Buildings

7.7 No structures are present within the red line boundary of the site, and thus no recommendations in relation to further emergence surveys are considered necessary.

Trees

7.8 A single tree on site (T017), is determined to pertain a bat roost suitability of '**FAR**' in accordance with Bat Conservation Trust – Bat Surveys for Professional Ecologists: Good Practice Guidelines, 4th ed. (2023). See **Figure 7.1** for a guidelines extract.

Table 4.2. Guidelines for assessing the suitability of trees on proposed development sites for bats, to be applied using professional judgement.

Suitability	Description
NONE	Either no PRFs in the tree or highly unlikely to be any
FAR	Further assessment required to establish if PRFs are present in the tree
PRF	A tree with at least one PRF present

Figure 7.1 – *BCT extract on FAR criteria*

7.9 Analysis of the plans indicates that T017 is being retained during the works, and will be protected from impacts by protective fencing and working measures as indicated in the site-associated arboricultural reports. Given no impacts are applicable, no further surveys are recommended at this time.

7.10 If, at any point, proposals are expanded to include impacts to T017, then an endoscopic assessment of the PRF must be carried out so that it can be formally categorised; further survey work may then be necessary.

Activity

7.11 The site does provide '**Moderate**' value commuting and foraging habitat for bats, though given the small size of the site and the generally low impact nature of the proposals, a nighttime bat walkover (NBW) is not deemed necessary. The majority of trees on site are being retained, and supplementary planting will be carried out to offset habitat loss in line with the green infrastructure goals at the site. The retention of the majority of trees will ensure that the site still retains value for commuting and foraging bats.

7.12 Nonetheless, installation of overly harsh artificial lighting as part of any development that exceeds current levels may have a negative impact upon foraging / commuting bats in the landscape, subject to their presence, particularly if increased light spillage occurs in areas that are currently free from illumination. A bat-sensitive lighting plan is therefore recommended in order to avoid potential impacts to bats. Several options to consider have been listed below, though the reader is referred to the Bat Conservation Trust's 'Bats and Artificial Lighting at Night' guidelines (August 2023) for further information.

Appropriate luminaire specifications: Light sources, lamps, LEDs and their fittings come in a myriad of different specifications which a lighting professional can help to select. However, the following should be considered when choosing luminaires and their potential impact on Key Habitats and features:

- All luminaires should lack UV elements when manufactured. Metal halide, compact fluorescent sources should not be used.
- LED luminaires should be used where possible due to their sharp cut-off, lower intensity, good colour rendition and dimming capability.
- A warm white light source (2700Kelvin or lower) should be adopted to reduce blue light component.
- Light sources should feature peak wavelengths higher than 550nm to avoid the component of light most disturbing to bats (Stone, 2012).
- Internal luminaires can be recessed (as opposed to using a pendant fitting) where installed in proximity to windows to reduce glare and light spill.
- Waymarking inground markers (low output with cowls or similar to minimise upward light spill) to delineate path edges.
- Column heights should be carefully considered to minimise light spill and glare visibility. This should be balanced with the potential for increased numbers of columns and upward light reflectance as with bollards.
- Only luminaires with a negligible or zero Upward Light Ratio, and with good optical control, should be considered – See ILP GN01.
- Luminaires should always be mounted horizontally, with no light output above 90° and/or no upward tilt.
- Where appropriate, external security lighting should be set on motion-sensors and set to as short a possible a timer as the risk assessment will allow. For most general residential purposes, a 1 or 2 minute timer is likely to be appropriate.
- Use of a Central Management System (CMS) with additional web-enabled devices to light on demand.
- Use of motion sensors for local authority street lighting may not be feasible unless the authority has the potential for smart metering through a CMS.

- The use of bollard or low-level downward-directional luminaires is strongly discouraged. This is due to a considerable range of issues, such as unacceptable glare, poor illumination efficiency, unacceptable upward light output, increased upward light scatter from surfaces and poor facial recognition which makes them unsuitable for most sites. Therefore, they should only be considered in specific cases where the lighting professional and project manager are able to resolve these issues.
- Only if all other options have been explored, accessories such as baffles, hoods or louvres can be used to reduce light spill and direct it only to where it is needed. However, due to the lensing and fine cut-off control of the beam inherent in modern LED luminaires, the effect of cowls and baffles is often far less than anticipated and so should not be relied upon solely.

7.13 The scheme could include enhancement measures for bats to ensure that it meets wider biodiversity goals and complies with local and national policy. The installation of two integrated bat boxes is recommended, which could be secured via a suitably worded planning condition. Indicative options have been provided in **Appendix III**.

Birds

7.14 No evidence to suggest the presence of specially protected raptor species was found on site, with an absence of suitable nesting, roosting or hunting habitat. No further recommendations are therefore deemed necessary.

7.15 In relation to other breeding birds, the individual trees and small block of woodland present are considered to offer a viable nesting platform for breeding birds during the nesting season of March – August inclusive, as indicated by the single historic nest within one of the trees.

NB: *All wild birds (with only minor exceptions) and their nests whilst being built or containing eggs or dependant young are protected from destruction, damage and disturbance under the Wildlife & Countryside Act 1981 (as amended). It is a punishable offence to interfere in any way with an active nest.*

7.16 In order to prevent impacting upon these potential nesting sites, it is recommended that any vegetation clearance is undertaken outside of the nesting bird season of March – August inclusive. If works are proposed during this period, then a pre-commencement check should be carried out by a competent and professional Ecologist for signs of nesting behaviour within 48 hours or less prior to works commencing.

Point 3.24 of the British Standards Publication 42020:2013 defines a professional ecologist as: "*a person who has, through relevant education, training or experience, gained recognised qualifications and expertise in the field of ecology and environmental management.*"

7.17 Where / if active nests are / have been located by the Ecologist, then any works which may affect them would have to be delayed until the young have fledged and the nest has been abandoned naturally, this can be aided, for example, via implementation of appropriate buffer zone(s) around the nest site (typically 5 – 10 metres) in which no disturbance is permitted until the nest is no longer in use. This would have to be coordinated through the expert judgement of the professional ecologist and species pending.

7.18 The scheme could consider enhancement by way of erecting suitable nest boxes for the species present within the surrounding landscape, which could again help the scheme meet its green infrastructure and net benefit for biodiversity goals. A further two bird nest boxes are recommended to be installed, which could again be secured via a suitably worded planning condition. Relevant, indicative biodiversity enhancement measures can be found in **Appendix III**.

Other Terrestrial Mammals

Badger & hedgehog

7.19 Whilst no direct evidence of badger or hedgehog was located within the site boundary, both species are likely to exist in proximity to the site and no barriers are present to prevent occasional access.

7.20 It is therefore recommended that Reasonable Avoidance Measures (RAMs) are enacted at the site to avoid any impacts to either of these species. RAMs to minimise construction impacts and prevent harm or injury to badgers and hedgehog should include, as a minimum:

- All working hours should be limited to daylight (dawn – sunset, or dawn – 6pm in winter) to avoid disturbing any badger or hedgehog in vicinity of the development area.
- A pre-commencement check of the site, any stored materials and the immediate vicinity of development footprint will be carried out prior to any works each morning in order to check for the presence of badger or hedgehog.
- Materials that may cause entrapment such as plastic / metal fencing, as well as those which could be potentially harmful to terrestrial mammals such as chemicals, should not be left around the site following the cessation of daytime work.
- No bulky equipment / general construction aggregates should be left around the development area, instead leave them on bare ground away from the risk zone.
- Stock piling of spoil material MUST be left un-compacted and not allowed to grass over, as if grassed over and compacted, terrestrial mammals may be encouraged to excavate new areas for refuge.
- Fires must not be used as a means of the disposing of waste materials.
- Any trenches or excavations must either be covered at the end of each working day, or a low angle (no more than 45°) sloping board of approximately 300mm width should be provisioned within any uncovered excavations to provide a means of escape for any terrestrial mammals.
- Any temporarily exposed open pipe system MUST be capped in such a way as to prevent badgers gaining access, as may happen when contractors are off site.
- In the event an underground void / potential sett entrance is exposed during the works, work must cease immediately; and an Ecologist must be contacted to determine if the opening forms part of a previously undiscovered tunnel network of a badger sett. If this cannot be ruled out, works will cease, and Natural England consulted for further advice.

Herpetofauna

Great crested newt (GCN)

7.21 Regarding GCN, the combined results of the desktop and field study indicate that it is unlikely that this species is present within, or in close proximity to, the application boundary. No further recommendations are therefore deemed necessary.

Other amphibians

7.22 The presence of common amphibians is considered possible based on the site-specific and site-surrounding habitats. Any works on site should therefore have due regard to local wildlife as discussed, and the RAMs detailed previous for terrestrial mammals should be extended to cover common amphibians.

7.23 Should any frogs or toads be encountered within the works area, they should be handled with wet gloves to prevent impact / injury and moved to an area of like for like habitat outside of the works area away from potential harm. The applicant and all contractors would be aware that if at any stage newts are encountered during works, or at any other stage of the programme of works, such works would be required to immediately cease and the Ecologist / ECoW would be made aware as to provide further guidance, if an Ecologist is not already present.

Reptiles

7.24 The combined desktop and field study results indicate that the presence of reptiles within the site is unlikely; no further recommendations are considered necessary.

Invertebrates

7.25 Based on the combination of the desktop and field-based study, the presence of specially protected invertebrates is considered unlikely.

Green Infrastructure Statement

7.26 The proposals will result in the removal of seven trees at the site; to compensate for this, it is recommended that an additional 14 fruiting species are planted within the wider site to achieve a 2:1 ratio of replanting.

7.27 In tandem with the erection of two integrated bat boxes, and two nesting bird boxes, it is considered that the impact of the erection of the new office building will have been suitably compensated for in accordance with the DECCA framework. Indicative enhancement measures which are deemed suitable for the scheme have been provided in **Appendix III**.

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Appendix I: Site Photographs



Plate 1 – *Character of the modified grassland on site*



Plate 2 – *Parcel of woodland to centre north*

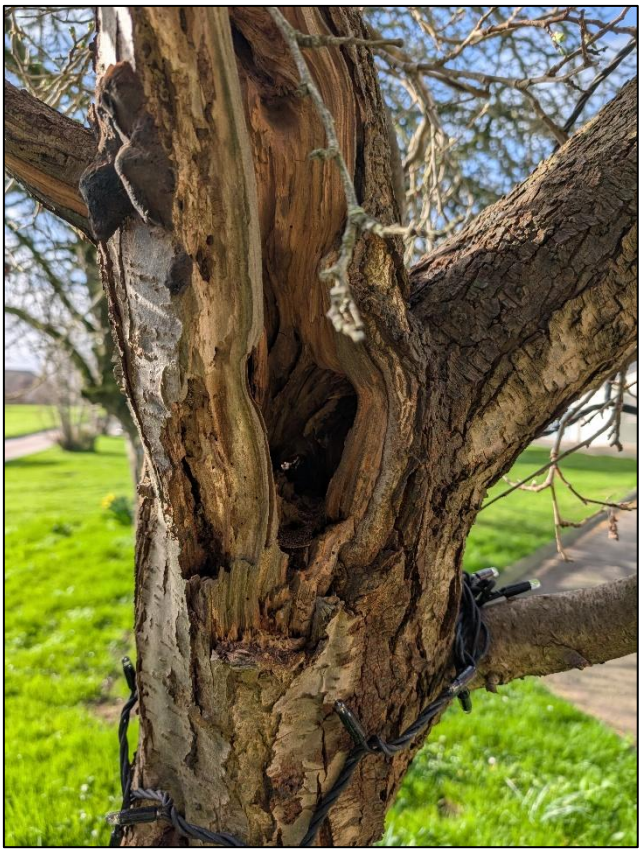


Plate 3 – *T017, note FAR feature*



Plate 4 – *Historic bird's nest*

Appendix II: Botanical Species List

Species nomenclature follows Stace, C (2019) – definitive English names; scientific names for given flora are presented below.

Any invasive non-native species are denoted by the acronym (**INNS**).

Division	Common Name	Scientific Name
Pinophyta	Leyland Cypress	*Cupressus x leylandii*
Angiosperm	Apple	*Malus x domestica*
	Ash	*Fraxinus excelsior*
	Bramble	*Rubus fruticosus*
	Broad-leaved Dock	*Rumex obtusifolius*
	Butterfly-bush	*Buddleja davidii*
	Cherry	*Prunus sp.*
	Common & Atlantic Ivy	*Hedera helix*
	Common Chickweed	*Stellaria media*
	Common Field-speedwell	*Veronica persica*
	Cow Parsley	*Anthriscus sylvestris*
	Elder	*Sambucus nigra*
	Garden Tulip	*Tulipa gesneriana*
	Hawthorn	*Crataegus monogyna*
	Hazel	*Corylus avellana*
	Sweet Violet	*Viola odorata*
	White Dead-nettle	*Lamium album*

Appendix III: Biodiversity Enhancement: General Recommendations

Bats

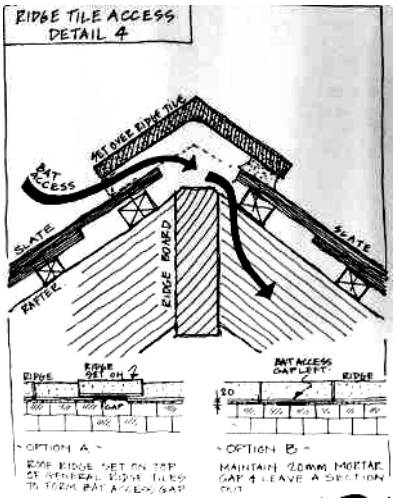
Integrated bat box

The Habibat Bat Box is a solid box made of insulating concrete with internal roosting space. The box blends seamlessly into brick-built properties and may be incorporated into the fabric of buildings, being best placed on gable elevations.



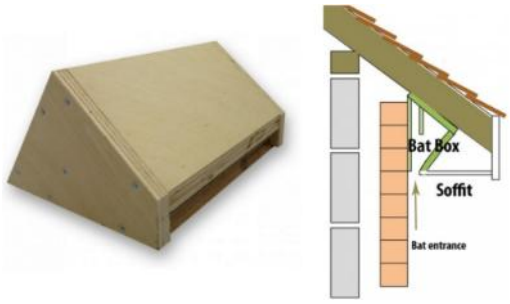
Ridge access

Where appropriated, ridge tile access should be made with the incorporation of traditional Bitumen 1F underfelt immediately beneath ridge tiles. Breathable BRM membrane can cause significant problems where bats are in contact with it, whereby their fine claws become entangled within the fibres of the membrane, entrapping and killing bats.



Soffit access

Where soffits are instated at gable elevations, roost provision may be instated in the form of a soffit bat box with internal roosting space.



Externally fitted boxes

A large number of externally fitted box models for bats exist for buildings and trees. Suitable models for both buildings and trees may include the Eco Kent Bat Box.



Breeding Birds

House Sparrow



The sparrow terrace has been designed to help redress the balance of falling house sparrow numbers. The current UK population is now half of what it previously was in 1980 and this is widely attributed to habitat destruction and lack of suitable nesting spaces. House sparrows are social birds and like to nest in company, therefore, this terrace provides ideal nesting opportunities for three families. The terrace can be fixed on to the surface of a suitable wall or incorporated into the wall. It is suitable for all types of buildings.

Other



This traditional design has proved to be highly effective in attracting robins, as well as other small species such as black redstart, spotted flycatcher and wren. It is designed to be installed on the walls of houses, barns, garden sheds or other buildings and should be hung so that the entrance is to one side (at an angle of 90° to the wall). The front panel can be easily removed for cleaning.

This type of box should not be made conspicuous on a tree or bush because small predators can enter through the unprotected opening. By hanging on a wall, predators won't be able to reach the box. Alternatively hide the box in Ivy, Honeysuckle or other climbing plants.

Invertebrates – Bee bricks



The Bee Brick can be used in place of a standard brick or block in construction to create habitat for solitary bees. Alternatively, it can be used as a standalone bee house in your garden or wild patch. It will provide much needed nesting space for solitary bee species such as red mason bees and leafcutter bees, both of which are non-aggressive.

Each Bee Brick contains cavities in which solitary bees can lay their eggs before sealing the entrance with mud and chewed-up vegetation. The offspring will emerge the following spring and the cycle will begin again. Each cavity goes part way into the brick, which is solid at the back. Bee Bricks should be placed in a warm sunny spot on a south-facing wall at a minimum height of 1m, with no vegetation obstructing the holes. It is highly recommended that bee-friendly plants should be located nearby so that the bees using the bricks have food, otherwise it is unlikely that the brick will be used.

Available in a choice of four colours: white grey, dark grey, yellow and red.

Specification:

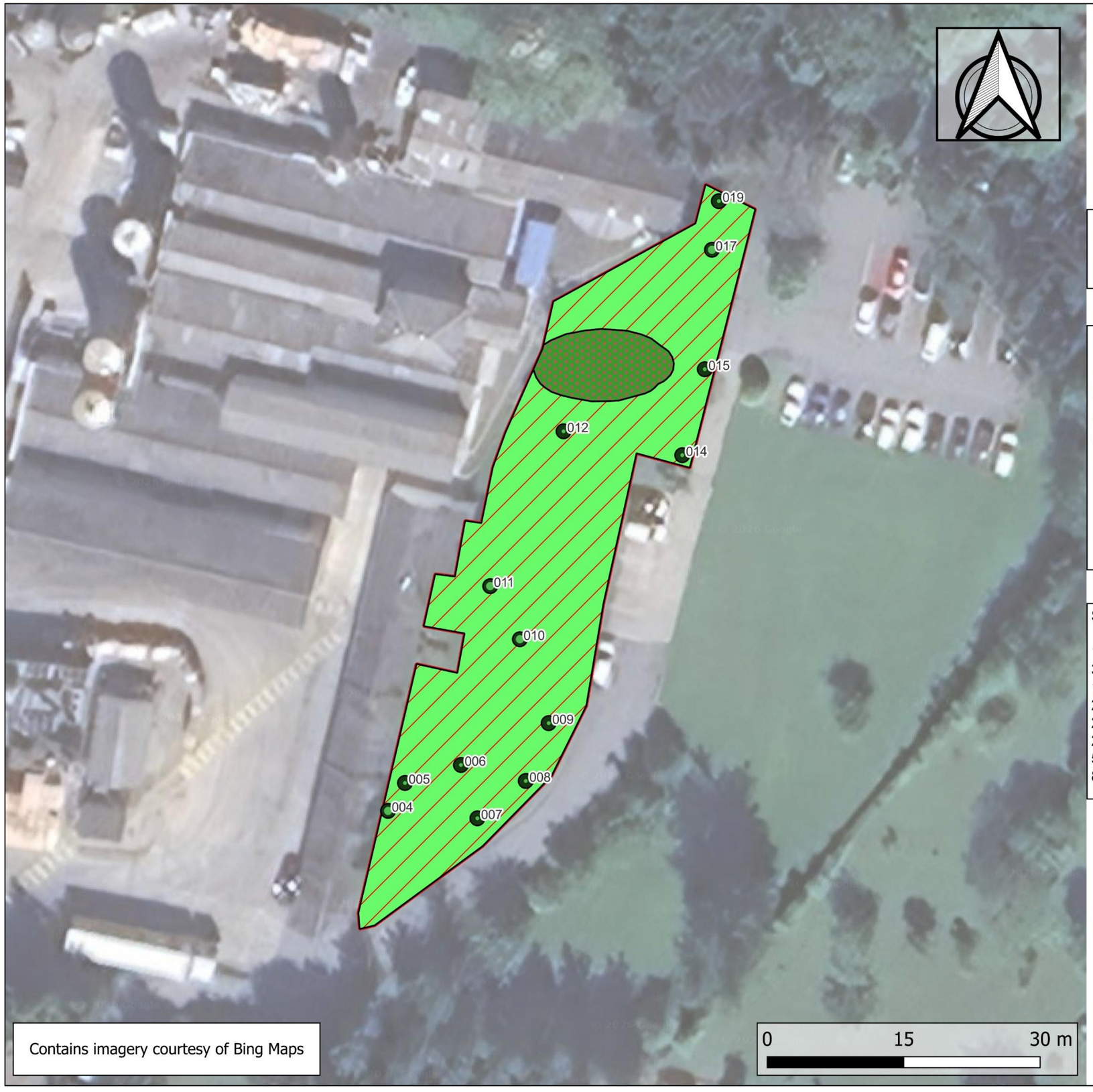
* Material: Concrete
* Origin: Cornwall, UK
* Dimensions: W 215mm x D 105mm x H 65mm
* Weight: 2.9kg
* Colours: White grey, yellow, dark grey and red

Native Planting and/or Landscaping

The below species have been assessed against the local soil and habitat types and are deemed suitable for the site. All plant material should comply with the minimum requirements in BS 3936-1: 1992 Specification for trees and shrubs and BS 3936-4: 2007 Specification for forest trees and BS 8545: 2014 Trees from Nursery to Independence in the Landscape. Any plant material, which in the opinion of the appointed Landscape Architect, does not meet the requirements of the Specification, or is unsuitable, or defective in any other way, will be rejected. The minimum specified sizes in the plant schedule will be strictly enforced. The contractor should replace all plants rejected at own cost. New hedgerows should be primarily comprised of blackthorn, hawthorn, hazel, and holly, whilst climbers/creepers such as hops and honeysuckle can be planted at the base of boundary features such as fences and walls, and new tree planting should include species such as pedunculate oak, wild cherry, and alder buckthorn.

	Common Name	Scientific Name	Planting Preference
Ferns	Male Fern	*Dryopteris filix-mas*	Semi-shade or shaded
	Soft Shield-fern	*Polystichum setiferum*	Semi-shade or shaded
	Maidenhair Fern	*Adiantum capillus-veneris*	Suitable for rockeries / walled gardens
	Royal Fern	*Osmunda regalis*	Full sun in moist-damp areas
Herbaceous plants	Bloody Crane's-bill	*Geranium sanguineum*	Dry soils - suitable for rockeries
	Columbine	*Aquilegia vulgaris*	Semi-shade or open areas
	English Bluebell	*Hyacinthoides non-scripta*	Moist soils in semi-shade or open areas
	Giant Bellflower	*Campanula latifolia*	Semi-shade or open areas
	Greater Knapweed	*Centaurea scabiosa*	Dry-moist soils. Suitable for borders
	Greater Woodrush	*Luzula sylvatica*	Moist soils in semi-shade or open areas
	Meadow Crane's-bill	*Geranium pratense*	Humid-moist soils. Suitable for borders
	Musk Mallow	*Malva moschata*	Dry-moist soils. Suitable for borders and rockeries
	Sea Campion	*Silene uniflora*	Dry soils - suitable for rockeries
	Stinking Hellebore	*Helleborus foetidus*	Semi-shade or open areas
Climbers	Honeysuckle	*Lonicera periclymenum*	Dry-moist soils
	Hops	*Humulus lupulus*	Dry-moist soils
	Ivy	*Hedera helix*	Dry-moist soils
	Sweet-briar	*Rosa rubiginosa*	Dry-moist soils
Woody Shrubs	Dogwood	*Cornus sanguinea*	-
	Guelder Rose	*Viburnum opulus*	-
	Hawthorn	*Crataegus monogyna*	-
	Hazel	*Corylus avellana*	-
	Holly	*Ilex aquifolium*	-
Trees	Alder Buckthorn	*Frangula alnus*	-
	Osier	*Salix viminalis*	-
	Pedunculate Oak	*Quercus robur*	-
	Purple Willow	*Salix purpurea*	-
	Rowan	*Sorbus aucuparia*	-
	Silver Birch	*Betula pendula*	-
	Wild Cherry	*Prunus avium*	-
	Wych Elm	*Ulmus glabra*	-

Appendix IV: UK Habitats Map



Tyrer Ecological Consultants Ltd
Specialists in Protected Species

Knolton Farmhouse Cheese

UK Habitats Key

- g4 - Modified grassland (32, 108, 516, 816)
- w1g - Other broadleaved woodland (16, 202)
- Rural tree - deciduous, medium (203)
- Rural tree - deciduous, small (201)

Secondary Codes:

16 - Tall forbs
32 - Scattered trees
108 - Frequently mown
201 - Young trees - planted
202 - Young trees - self-set
203 - Mature tree
516 - Active management
816 - Commercial premises open space

Survey Date: 11/03/2026
Drawn: Mr. B. Richards
Date Drawn: 30/03/2026
Checked & Approved: Mrs. K. Wilding
Scale: 1:400

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