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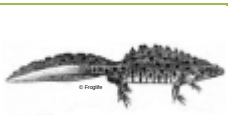
Inspection & Assessment in relation to Bats & Breeding Birds

March 2024

Oakdale

Minshalls Croft
King Street
Cefn Mawr
LL14 3RB

National Grid Ref: SJ 27890 42396



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Executive Summary

As part of a proposed planning application concerning Oakdale, Cefn Mawr, Tyrer Ecological Consultants Ltd carried out a daytime preliminary roost assessment in relation to bats with an inclusive inspection for breeding birds in March 2024.

The survey was commissioned by Blueprint Architectural Services; the proposals are understood to entail the demolition of the existing conservatory and the erection of a two-storey extension and the construction of a single, detached garage.

Detailed methods, findings, conclusions and recommendations are presented throughout the report; however, the reader should be aware of the following **Key** points:

Bats:

Based upon the findings of the survey, covered through sections 5.0 – 6.0 of the report and supported by **Appendix I, Oakdale** (termed 'B1' in the report) is duly categorised as pertaining to '**Negligible**' bat roost suitability, in accordance with Bat Conservation Trust – Bat Surveys for Professional Ecologists: Good Practice Guidelines, 4th ed. (2023).

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.

^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).

*No further surveys in the form of dusk/dawn emergence / re-entry surveys are recommended at this time. Bats are transient species and buildings can deteriorate over time. In the highly unlikely event that bat(s), or evidence of bat(s), are found during proposed works unsupervised by the ECoW, then as a legal requirement the work at the site should immediately cease and an Ecologist be contacted for further advice. If bat(s) or their roost(s) will be affected, then an EPSML may be required to legally commence with the works. See **Figure 7.2** for indicative evidence of bats.*

Breeding Birds:

In relation to more common bird species, no direct evidence of breeding birds was located in relation to **Oakdale (B1)**, however, the dry stone walls and shrubby vegetation on the site provide a variety of bird species with suitable nesting platforms, particularly during the breeding bird season. A second building (**B2**) on site, which is not within the scope of the works and understood to be retained, also provides suitable nesting platforms for a variety of bird species, though no evidence of nesting was found.

In the interests of potential impact avoidance, it is therefore recommended that any works to built structures or shrubby vegetation should be undertaken outside of the nesting bird season. The nesting bird season is weather dependent but generally extends between March and September inclusive (peak period March – August). For works within the breeding bird season, any areas that can support nesting birds should be checked by a professional Ecologist for nesting birds within 48 hours or less prior to works commencing.

Green infrastructure:

In accordance with the step-wise approach to be adopted by authorities in Wales, it is considered that the scheme has **avoided** impacting the key green infrastructure on site, notably the dry stone walls and broadleaved woodland.

It is therefore considered that the scheme will not have an adverse impact on the diversity, extent, condition, connectivity or the adaptability of the green infrastructure on site.

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1.0 Introduction & Reasons for Survey

- 1.1 As part of a proposed planning application concerning Oakdale, Cefn Mawr (termed 'B1' in this report), Tyrer Ecological Consultants Ltd carried out a daytime preliminary roost assessment in relation to bats with an inclusive inspection for breeding birds in March 2024.
- 1.2 The survey was commissioned by Blueprint Architectural Services; the proposals are understood to entail the construction of a single, detached garage, as well as alterations to the main dwelling to include the demolition of the existing conservatory and the erection of a two-story extension over the conservatory footprint. See **Figure 1.1** for an annotated existing site plan.



Figure 1.1 – Existing location plan

- 1.3 The aim of the survey was to ascertain if any structures are of value to bats whilst an assessment for birds was also carried out. If any potential roost features (PRFs) were found to be suitable for bats or signs of use were observed where suitable habitats and / or bats records exist in the locality, then more detailed surveys would be recommended i.e. dusk emergence surveys during the main active season of bats which is May – August (extending into September).
- 1.4 If additional surveys are required following the initial site visit, this report will outline the details of those further requirements, in accordance with Bat Conservation Trust – Bat Surveys for Professional Ecologists: Good Practice Guidelines, 4th ed. (2023).
- 1.5 If it was determined that bat(s) or their roost / place of rest / shelter will be subsequently impacted by the works then a European Protected Species (EPS) licence would be legally required to proceed with the development.
- 1.6 If evidence indicated breeding birds may be impacted by proposals, tailored recommendations would be made accordingly, species pending.

- 1.7 As part of the local authority's planning policies and obligations to the Planning Framework, ecological surveys are generally required prior to planning permission being granted where protected / priority habitats and species are, or may be present, that could be affected by the proposals for which the application seeks consent. Where more detailed surveys are recommended by the ecologist, following an initial daytime investigation, then Local Planning Authorities (LPA), on the advice of their ecological advisors, will not grant permission until such time that all relevant information is gathered.
- 1.8 In accordance with Welsh planning policy the site visit also aims to identify opportunities for net biodiversity benefit, and to provide information to satisfy the requirements of a green infrastructure statement.

2.0 Protected Species & Their Requirements

Bats

- 2.1 All British bats and their **roosts are afforded full protection under the Wildlife & Countryside Act (1981) (as amended) and are listed in Schedule 2 of the Conservation of Habitats and Species Regulations (2017) (as amended). When dealing with cases where an EPS (all UK bats) may be affected, a planning authority is a competent authority within the meaning of Regulation 7 of the Regulations, and therefore has a statutory duty, as the local authority, to have due regard to the provisions of the Regulations in the exercise of its functions.
- 2.2 Uses of Buildings by Bats
- a) Summer breeding roost (May – August)
 - b) Hibernation roost (October – March)
 - c) Transitional or temporary roost (other months)
- 2.3 Roost selection is often closely correlated to suitable foraging habitat within a reasonable commuting distance from the roost and different sites are used depending upon insect densities and abundance; climatic conditions can also affect their ability to successfully forage. All British bats are insectivorous.

*** The term roost is generically referred to as a place that bat/s use for the any of the above reasons, however it should be noted that under the Conservation of Habitats and Species Regulations (2017) (as amended) (Regulation 43 (d) the term roost is not used but refers to “a breeding site or resting place of such an animal” and is afforded legal protection. The roost, breeding site or resting place of bats, which ever terminology is used is legally protected whether or not bats are in occupation.*

- 2.4 Up to twelve bat species have been recorded in Wrexham, many of which use built structures for roosting. A variety of building types and features are utilised by bat species at different times of year ranging from occupied residential dwellings to disused barns and bridges. The most frequently encountered species is the common pipistrelle bat (*Pipistrellus pipistrellus*); its abundant status in Denbighshire is mirrored throughout the UK.

Breeding birds

- 2.5 All wild birds, no matter how common, their eggs, young and nests, whilst being built or occupied, are protected under both the Wildlife and Countryside Act (WCA 1981) and Natural Environment and Rural Communities Act (NERC Act 2006).
- 2.6 Any work that would damage an occupied nest, eggs or young of breeding birds, regardless of priority status, must be avoided; any damage to nests that may occur as a result of the development should be outside of the main breeding bird season (March – August). On occasions nests can become unoccupied during the breeding season but the status of the nest(s) should be determined by a suitably experienced ecologist / ornithologist.
- 2.7 Barn owl (*Tyto alba*) are a distinctive, widespread species of raptor protected under Schedule 1 of the Wildlife and Countryside Act 1981 (as amended); they are distributed throughout the UK and will use tussock-forming grasslands, rough field margins, ditches and roadside edges for hunting purposes, they typically use barns / abandoned buildings and tree hollows for nesting or roosting use. In rare instances occupied dwellings can support owls. Additional to protection from nest destruction, Schedule 1 listed species nest sites are also protected from disturbance.

Policy

- 2.8 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.
- 2.9 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.”*
- 2.10 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’ alongside the UK Biodiversity Action Plan (UKBAP) provided a statutory basis for lists of habitats and species of national conservation importance - now transposed under section 41 (s.41) of the NERC Act.
- 2.11 Planning Policy Wales (PPW) 11th Edition (2021) 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.
- 2.12 PPW (2021) states:
- “The presence of a species protected under European 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.”*
- 2.13 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).
- 2.14 A ‘Dear Heads of Planning Letter’ was issued 18 October 2023 by the Minister for Climate Change – updating parts of Chapter 6 of PPW. The main changes included strengthened wording and new measures to address policy on green infrastructure, net benefit for biodiversity using the stepwise approach / Decca framework, strengthened approach to the

protection of Welsh SSSIs and improved measures to improve the planting of trees and woodlands.

- 2.15 Planning authorities must therefore follow a stepwise approach (see **Figure 2.1** below) to maintain and enhance biodiversity and build resilient ecological networks by ensuring that any adverse environmental effects are firstly avoided, or minimized, or mitigated, and as a last resort compensated for; enhancement must be secured wherever possible.

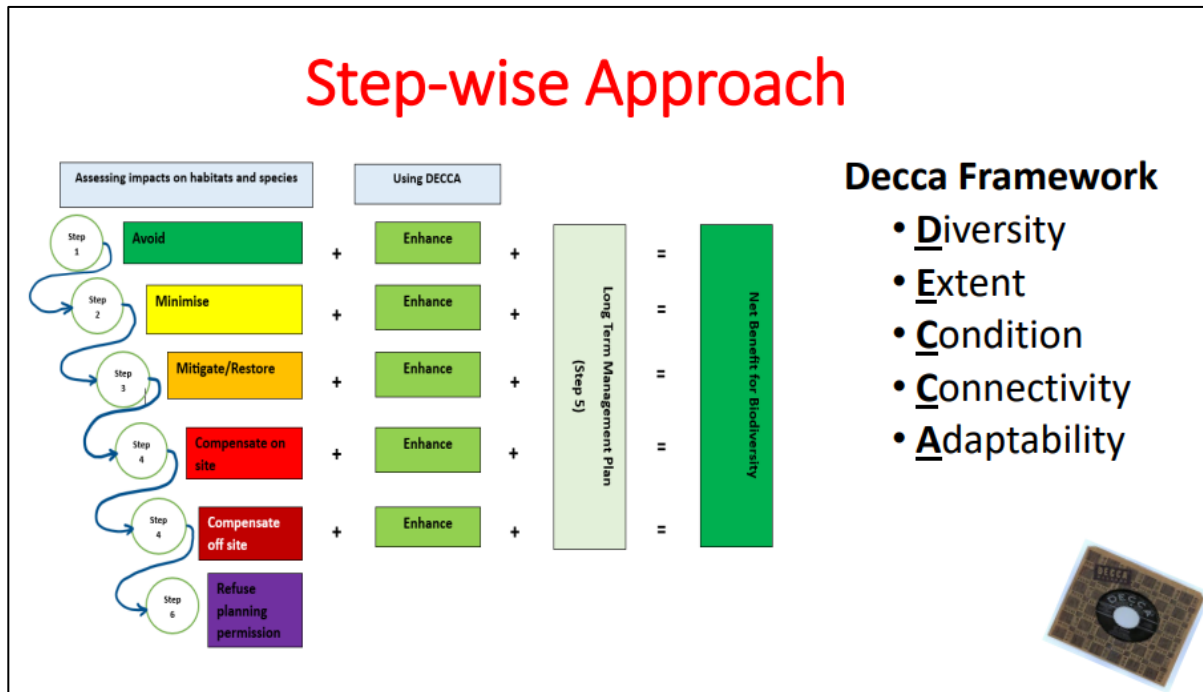


Figure 2.1 – The step-wise approach / DECCA framework to be adopted by authorities in Wales

- 2.16 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, locally or nationally and must provide a **net benefit for biodiversity**. In doing so planning authorities must also take account of and promote the resilience of ecosystems, in particular the follow aspects:*

- *diversity between and within ecosystems;*
- *the connections between and within ecosystems;*
- *the scale of ecosystems;*
- *the condition of ecosystems including their structure and functioning; and*
- *the adaptability of ecosystems.”*

- 2.17 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.

- 2.18 Wrexham County Borough Council prepared a Local Development Plan which was formally adopted in December 2023 and covers between 2013 and 2028 and supersedes any previous development plans for the area.

- 2.19 Policy SP14 of the Wrexham County Borough Council Adopted Local Development Plan 2013 – 2028, titled ‘Natural Environment, states:

“Developers should consider the natural environment at the pre application stage and must seek to avoid impacting on wildlife features in line with the relevant statutory and non-statutory provisions, including maintaining or helping to achieve a protected species’ favourable conservation status. Developments should also seek to provide biodiversity enhancement, whatever the current level.”

3.0 Survey Methodology

- 3.1 As part of the Inspection & Assessment in relation to Bats & Breeding Birds 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), ‘Lle’ (A Geo-Portal for Wales) and DataMapWales (provided by Natural Resources Wales) 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 (© 2023/24) 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 Country 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 Environment Records Centre serving the area – in this case Cofnod – has not been sourced and is justified through application of the following recent guidance:

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

“It is generally expected that a desk study, including a data search, will be a key part of the ecological surveys or reports produced to inform a planning application. Freely available web-based sources of data and contextual information should always be used; in some cases, it may be acceptable to not undertake a data search with the LERC or other relevant NSS or local interest groups, for example:

*ii) 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. It can be very difficult to demonstrate that a data search would not have provided relevant information without obtaining and reviewing those data.*

*iii) In some cases for Preliminary Roost Assessments of buildings in **low impact / small-scale scenarios**, such as **an extension to a residential property**, loft conversions (full or partial), installation of Velux/dormer windows, single modern agricultural or similar building*

conversion or demolition; however, it should not be assumed that data searches are never required for such scenarios and this must be judged on a case by case basis and justified accordingly.

- 3.7 As exemptions as made **bold** above can be applied at the site, whilst following best practice, it is considered unnecessary to conduct a commercial data request following the desk study effort and daytime assessment at this time, which offers a proportionate level of survey effort. If, however, a data search is considered necessary by the Local Authority advisory body to inform the ecological impact assessment following any further surveys recommended in this report, a proportionate data search should be commissioned with results interpreted into the conclusions and recommendations of a re-issued / updated report.

Field Survey

- 3.8 In context with the above, a diurnal inspection and assessment of buildings and the immediate environment in relation to bats and breeding birds was conducted on 8th March 2024 in dry, overcast conditions (5°C), wind 1/12 (Beaufort scale), 70% cloud, by the following surveyors (see **Table 3.1**):

Table 3.1 – Site surveyor credentials

Name	Description of most relevant credentials
Mr. M. Pritchard ACIEEM (Senior Ecologist)	- Seven years professional experience & extensive training in cross habitat/species ecology; - Relevant degree: FdSc (Countryside, Conservation & Recreational Management); - FISC Level - 4 (2023) (Botanical); - Licenced for Great Crested Newts in England (2018-34062-CLS-CLS) & Wales: S089281/1. - Licenced in Bats: (2020-5039-CLS-CLS) (Class 1) in England - Licensed for Sand Lizard & Natterjack Toad (2023-66506-SCI-SCI) in England; - Competent in both UK Habs 2.0 & Extended Phase 1.
Mr. J Hark Qualifying CIEEM (Consultant Ecologist)	- Five years professional consultant experience and training in species ecology. - Relevant Degree: MSc Wildlife Conservation

- 3.9 Bat Conservation Trust (BCT) - Bat Surveys for Professional Ecologists: Good Practice Guidelines, 4th ed. (2023) states:

“The guidelines should be interpreted and adapted on a case-by-case basis according to site-specific factors and the professional judgement of an experienced ecologist. The question should not be whether the guidelines were followed, but whether the objectives of the survey met? Where examples are used in the guidelines, they are descriptive rather than prescriptive.”

- 3.10 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.

- 3.11 Buildings and other permanent / semi-permanent structures 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. An internal assessment of the structure(s) 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.
- 3.12 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.
- 3.13 Criteria for roost assessment are based upon the determinants given in the Bat Conservation Trust – Bat Surveys for Professional Ecologists: Good Practice Guidelines, 4th ed. (2023).
- 3.14 The site and any built structure(s) on site were 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):
- Starling (*Sturnus vulgaris*): Birds of Conservation Concern (BoCC) red status
 - House sparrow (*Passer domesticus*): BoCC red status
 - House martin (*Delichon urbica*): BoCC red status
 - Swift (*Apus apus*): BoCC red status
- 3.15 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), as well as Section 7: Living Organisms of Principal Importance in Wales under the Environment Act (Wales) or on a Local Biodiversity Action Plan (LBAP).
- 3.16 The results, conclusions and recommendations are based on a number of factors i.e.
- Practical experience of the surveyor,
 - Knowledge of bat / bird species relevant to the site location and geographical range,
 - Nature of the immediate / surrounding habitat in relation to foraging / commuting opportunities,
 - Presence / absence of roost potential,
 - Value and types of roost potential, if present (i.e. – maternity, hibernation, transitional).

- 3.17 The results, conclusions and recommendations of this report have been assessed by Mrs. K. Wilding, the Director of Tyrer Ecological Consultants Ltd, and her assessment is consistent with that of the surveyors Mr. M. Pritchard & Mr. J. Hark.

4.0 Limitations

- 4.1 The survey was conducted outside of the active season of bats, broadly considered as April-October, therefore there was a lower probability of encountering direct evidence of bats such as droppings. Potential roost features and suitability of potential roost features can, however, be adjudged as decisively as within the active season of bats, saving time and unnecessary delay to applicants allowing surveys all year round, thus frequently the assessment can be as conclusive as if it was carried out in the active season. Timing is not, therefore, considered a constraint in this instance.
- 4.2 The survey took place within the breeding bird season (typically March – September inclusive) at a time when evidence of breeding birds is most apparent however it was early in the season. Survey timing is again not considered a constraint in this instance.
- 4.3 No access constraints were encountered by the surveyor.
- 4.4 In considering all 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 situated within the town of Cefn Mawr, approximately 9.5 kilometres south-west of Wrexham city centre (see **Figure 5.1** below).



Figure 5.1 – Location of the application site (red boundary) within the landscape (© Google Earth Pro 2023/24)

- 5.2 Oakdale (**B1**) has been present since at least 2003, based on sales records and historical satellite imagery. The area surrounding the site has remained similar since this time, with no new large-scale developments visible on the satellite imagery in the immediate area. A large industrial site was present to the west of the site in 2006, which has since been abandoned and appears to have had the buildings demolished prior to 2012. The site lies within the Pontcysyllte Aqueduct and Canal World Heritage Site buffer zone.
- 5.3 A search on Cyngor Bwrdeistref Sirol Wrecsam / Wrexham County Borough Council planning portal revealed no previous planning applications for the site.
- 5.4 The immediate habitat is predominantly urban, with the village of Cefn Mawr surrounding the application site. The village is set within a hillside and the much of the built-on land has been terraced, including the application site. To the west of the application site lies a large brownfield site which consists of hard standing, regenerated scrub and scattered remnant buildings, with two waterbodies also present on the western extent of the site. Otherwise, the surrounding area is consistent with the site and consists of sub-urban housing with associated gardens, which gives way to agricultural land and woodland further out. Approximately 500m to the east

is a large tract of deciduous woodland which appears to be a mixture of semi-natural and plantation woodlands and is bordered by the Afon Dyfrdwy (River Dee) SSSI to the south.

- 5.5 The wider landscape is made up of agricultural land, predominantly pasture, with linear features including small waterways, lines of trees/woodland and hedgerows throughout the landscape. Further south-west, the agricultural pasture gives way to upland habitats, with evidence of controlled burning. To the south, the Afon Dyfrdwy (River Dee) and Pontcysyllte Aquaduct and Canal run east-west, bordered by deciduous woodland on either bank. To the east, the A483 runs north-south, through agricultural pasture and arable land, with belts of deciduous woodland.
- 5.6 As mentioned previously, linear features are prominent in the surrounding landscape, with a range of commuting pathways suitable for a number of protected species groups known to exist in proximity to the site, though it is considered that the pathways afford greatest suitability for airborne species. These include bats, with the species most likely to be present being the common pipistrelle, commonly associated with roosting in urban and sub-urban properties, and the brown long-eared bat (*Plecotus auritus*), with roosts of this species correlating with semi-natural habitat, particularly large woodland blocks where these bats will find favourable foraging habitat. A number of bird species adapted to nesting within built structures are also considered likely to be present, for example house sparrow.

NB: *Where quality habitat is present close to buildings then the percentage use of those buildings, by bats, increases given that roost opportunities are available and vice versa.*

Statutory designated sites

- 5.7 There is one statutory designated site within 2.0 kilometres of the application site (see **Table 5.1** for detailed information and **Figure 5.2** for a visual representation).

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

Site name	Designation type	Interest features
Afon Dyfrdwy (River Dee) (0.7km South)	Site of Special Scientific Interest (SSSI)	This site forms SSSIs in both Wales and England and is notified for its transition through a range of river types from mesotrophic to eutrophic and for the species it supports including club-tailed dragonfly (<i>Gomphus vulgatissimus</i>). The lower reaches of the River Dee support Britain's only known population of the stonefly (<i>Isogenus nubecula</i>). Between Llangollen and Bangor-on-Dee, sandstone, mudstone and hard limestone river type vegetation again predominates, this time with the unusual hybrid crowfoot (<i>Ranunculus x bachii</i>) occurring in large stands. This one of only two known UK localities for this hybrid. In this section the river shows signs of nutrient enrichment with the introduced Canadian waterweed (<i>Elodea canadensis</i>) becoming more prevalent.
River Dee and Bala Lake / Afon Dyfrdwy a Llyn Tegid (0.7km South)	Special Area of Conservation (SAC)	This SAC is designated for its river habitat with floating vegetation, often dominated by water-crowfoot (<i>Ranunculus aquatilis</i>), alongside the following fish, plant and mammal species; bullhead (<i>Cottus gobio</i>), river lamprey (<i>Lampetra fluviatilis</i>), brook lamprey (<i>Lampetra planeri</i>), floating water-plantain (<i>Luronium natans</i>), otter (<i>Lutra lutra</i>), sea lamprey (<i>Petromyzon marinus</i>) and Atlantic salmon (<i>Salmo salar</i>).

- 5.8 Due to the limited scope of the works and the distance between the application site and designated sites, it is considered highly unlikely that the proposals will impact upon the designated sites or the species within. In relation to Reg.63 of the Conservation of Habitats and Species Regulations and with all current information and recommendations taken into account, there is considered to be no pathway by which the proposals could have a significant impact on the designated site.
- 5.9 It is considered that the proposals should, however, implement standard pollution prevention measures to prevent any surface runoff from the proposals moving downhill, away from the application site.

Notable species records

- 5.10 A search of extensive company records held by Tyrer Ecological Consultants Ltd from 2014 – present, all of which have been submitted to the LERC serving the area, which in this case is Cofnod, revealed no records of bat roosts within the 2.0 kilometre area surrounding the application site. Whilst there is an absence of company records in this area, it is acknowledged that multiple bat species are present in the surrounding landscape, and that this absence of records does not necessarily indicate an absence of bats.

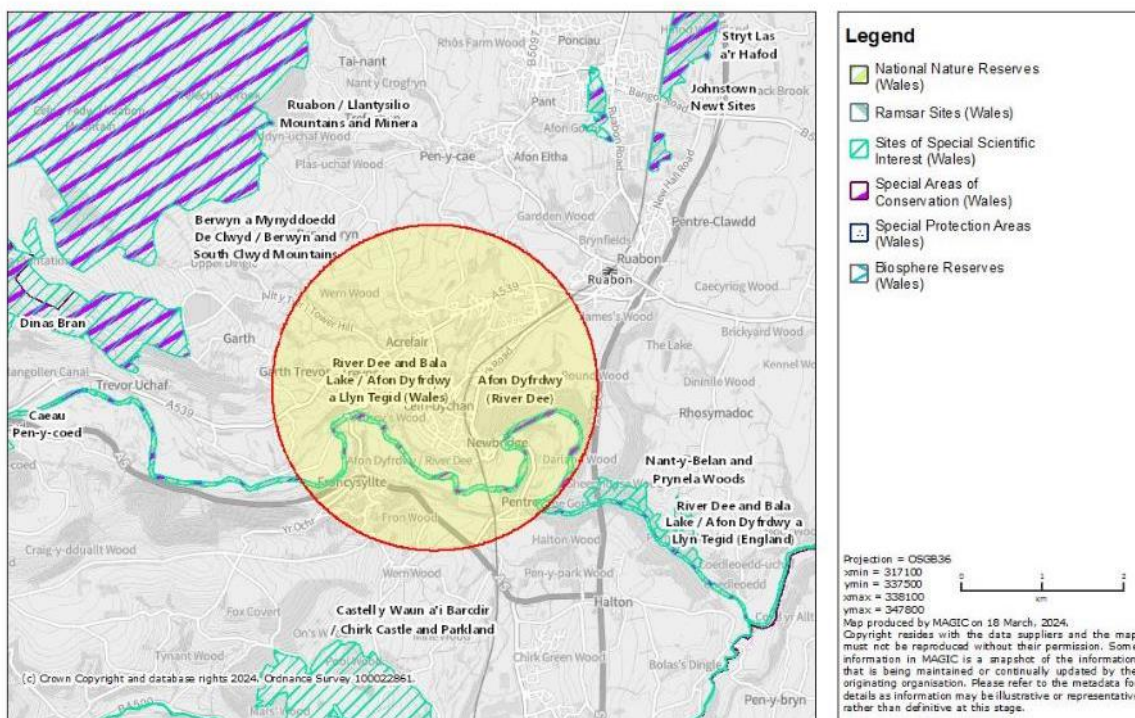


Figure 5.2 – Designated site data for the area within 2.0 kilometres of the application site (MAGiC Maps 2024)

6.0 Field Study Results

Bats

6.1 See **Figure 6.1** below for the locations of each building within the red line boundary; **Table 6.1** describes each building in relation to their suitability to offer roosting potential for bats (both externally and internally) and further information regarding evidence or lack of evidence of bats, where applicable.



Figure 6.1 – Locations of the buildings B1 and B2 within the red line boundary (Google Earth Pro 2024)

Table 6.1 – Building descriptions at the application site

B1
B1 is a detached, two-storey dwelling with a pitched slate roof and single-story extensions on both gables, having approximate maximum dimensions of 10 metres x 10 metres x 8 metres (length x width x height). The building features components such as part brick (80%), part sandstone (20%) walls, UPVC doors, windows & sills and soffits, a timber and glass conservatory on the southern gable, a single-story brick extension with a mono-pitched slate roof on the northern gable, a brick outhouse attached to the eastern aspect and lead flashing around a chimney stack above the southern gable. In respect of its condition, the surveyor is not qualified to assess structural state, however the aesthetic condition of the building was adjudged to be good, with most areas of the building being free of degradation, no gaps being present between bricks and the roof slates being tight appearing to have potentially been replaced within recent history. Internally, a loft space is present above the entire footprint of the structure, with an apex height of approximately 2m and a purlin construction style. The space is dry, warm, non-draughty and dark

with minimal light ingress, being slightly cobwebbed in part. The space has not been boarded and a 'DANGER' sign is stabled to one of the purlins. The fibreglass insulation on the floor appears to have been ripped up and piled in one corner of the space. Rat droppings are present throughout the loft space. A bird protection comb was visible between the wall plate and the eaves of the roof.

With the above in mind, it is considered that the structure has the potential to support a breeding roost of loft-dwelling species such as the brown long-eared bat, with the required stable, high temperature and spatial characteristics present in the space. No evidence was located which would indicate the presence of a maternity colony, although this does not rule out the presence of singular / low level numbers of these bats which would find favourable foraging environs in close proximity to the site in the form of woodland blocks.

The roof is lined with a breathable roofing membrane (BRM); where present, traditional bitumen 1F underfelt (or similar) can improve a building's value to bats notably for crevice-dwelling bats of the *Pipistrellus* genus, whereby the bats roost between linings and the roof cover material provided external access opportunities exist. Whilst BRM can provide similar crevice opportunities, it can lead to injury or death in bats when its fine fibres entangle their claws. No evidence of crevice-dwelling bat species was located on the day of the survey; however, this is often the case with such species due to their crevice-dwelling nature.

NB: *The breeding roosts of Pipistrelle bats are proportionally higher in occupied residential dwellings where the warm, dry conditions favour the requirements of a maternity colony but other structures are also used, especially for hibernation or by male bats which do not need the same conditions as a maternity colony.*

The building has no visible potential roosting features (PRFs) and the presence of the bird protection comb made access into the loft space unviable for bats, no potential access into the loft space was observed during the survey. Externally, the roof slates are tightly fitting, the pointing on the brick and sandstone areas and on the gable verges is in good condition and the soffit boards and lead flashing is tightly fitted.

With the lack of PRFs located on the building and the lack of suitable access into the loft space, B1 is duly categorised as pertaining to '**Negligible**' bat roost suitability in accordance with Bat Conservation Trust – Bat Surveys for Professional Ecologists: Good Practice Guidelines, 4th ed. (2023).

B2

B2 is a standalone sandstone structure to the west of B1, on the roadside boundary of the land parcel. The building has estimated maximum dimensions of 5m x 4m x 3.5m. A timber window void with remnants of smashed glass faces west, onto Minshalls Croft, and timber door, which was open at the time of the survey, faces south into a walkway which leads onto Minshalls Croft. The eastern wall of the building has been built into the hillside, which come approximately half-way up the building. The building is of a sandstone block construction and has a flat roof with decorative pillars on each corner. Whilst the surveyor is not qualified to assess the structural integrity of the building, it was noted to be in poor aesthetic condition at the time of survey.

Internally, a single space is present with a mostly-plastered ceiling of approximately 2.5m height. Some of the walls are plastered, whilst some are timber clad, and some are bare sandstone. The ceiling has been plastered but has long voids which stretch the width of the building and enter sit atop the walls on either side. The temperature within the structure is entirely ambient and damp is obvious within the lower portions of the walls, a draught is ever present within the building due to the smashed window. The building is currently used to store a small amount of building materials. No underfelt was present beneath the roof.

Numerous PRF's are present within the building which have suitability for roosts crevice dwelling bats of the *Pipistrellus* genus. There are numerous areas of missing mortar from between the sandstone blocks both within the building and on the exterior walls. A horizontal gap is present behind the sandstone lintel of the window, which appears to lead to a significant crevice. Within the building, voids across the ceiling lead into voids in the thick sandstone walls, a further large void is present in the southern wall, and small crevices are present throughout the walls. No evidence of this species group was encountered by the surveyor, though this is often the case owing to their crevice dwelling nature, and an absence of direct evidence does not necessarily indicate absence.

Based on the above, the building is considered unsuitable for the breeding purposes of loft-dwelling bat species such as the brown long-eared bat; these species require open loft spaces with room for free flight in which to raise their young, as well as with constant thermal dynamics. This does not necessarily rule out usage of the structure for alternative roosting purposes, with favourable foraging and commuting habitat in proximity to the site, though no evidence of this species was located by the surveyor.

Based on the above presence of PRFs and the discussed suitable habitats in the immediate and wider landscape, the structure B2 is duly categorised as pertaining to '**High**' bat roost suitability, in accordance with Bat Conservation Trust – Bat Surveys for Professional Ecologists: Good Practice Guidelines, 4th ed. (2023)¹.

- 6.2 Several trees are present throughout the gardens of the site as a whole, however these are outside of the scope of works and as such were not assessed relative to their potential to offer roosting features in relation to bats.

Breeding Birds

- 6.3 In relation to WCA Schedule 1 specially protected bird species, such as barn owl, no evidence to indicate use of the buildings was encountered, and neither of the structures on site provide suitable nesting platforms for this species, or other Sch.1 listed raptor species likely to be present in the immediate and wider landscape.
- 6.4 Regarding more common bird species, the aforementioned PRFs for bats within **B2** could provide bird species adapted to urbanisation an entry point to areas of nesting potential within the structure. In addition, the shrub vegetation in the gardens could provide nesting birds with suitable nesting platforms during the breeding bird season.

¹ B2 is outside of the scope of the works, however due to proximity to B1 and the potential for future development either remedial or for change of use, it has been assessed within this report in the interests of best practice.

7.0 Conclusions & Recommendations

Habitats

- 7.1 The works area lies upon the hardstanding footprint that is currently covered by the timber and glass conservatory and through the bare ground which extends beyond this.

Bats

- 7.2 Based upon the findings of the survey, covered through sections 6.0 – 7.0 of the report and supported by **Appendix I, B1** at Oakdale is determined to offer '**Negligible**' bat roost suitability, in accordance with Bat Conservation Trust – Bat Surveys for Professional Ecologists: Good Practice Guidelines, 4th ed. (2023), warranting no requirement for further survey effort at the site. See **Figure 7.1**.

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.

^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).

Figure 7.1 – BCT extract on roost suitability criteria

- 7.3 No further surveys in the form of dusk/dawn emergence / re-entry surveys are recommended at this time.
- 7.4 Bats are transient species and buildings can deteriorate over time. In the highly unlikely event that bat(s), or evidence of bat(s), are found during proposed works unsupervised by the ECoW, then as a legal requirement the work at the site should immediately cease and an Ecologist be contacted for further advice. If bat(s) or their roost(s) will be affected, then an EPSML may be required to legally commence with the works. See **Figure 7.2** for indicative evidence of bats.



Figure 7.2 – Evidence of bats – droppings on the left / a Common Pipistrelle bat on the right - indicative

- 7.5 Natural Resources Wales provide online information and guidance concerning the requirement for EPSDL's and the following extract is included in that guidance:

“When would works require a licence?”

A licence is required for anything that would be an offence under the Regulations (covered in section 2.9 of this report). For example, this could include works which would disturb (as defined in the legislation) bats, damage a bat roost, or damage or destroy a breeding site.

NRW can only grant a licence if the following three tests are met:

- 1) The purpose of the work is for preserving public health or public safety or other imperative reasons of over-riding public interest (IROPI) including those of a social or economic nature and beneficial consequences of primary importance for the environment,*
- 2) There is no satisfactory alternative,*
- 3) The action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status (FCS) in their natural range; this last test might require that the work is modified to avoid or minimise adverse effects (mitigation), or that an alternative breeding site/resting place or habitat is provided instead to safeguard the FCS (compensation). Either way, you will need the advice of an ecological consultant. Along with filling in the licence application form, the ecological consultant will need to write a method statement (within the EPSML) explaining how the work will be done to minimise any detrimental effects.*

If the consultant ecologist, on the basis of survey information and specialist knowledge of the species concerned, considers that on balance the proposed activity is reasonably unlikely to result in an offence being committed then no licence is required. However, in these circumstances Natural Resources Wales would urge that reasonable precautions be taken to minimise the effect on European protected species should they be found during the course of the activity. If protected species are found, cease the work until you have assessed whether you can proceed without committing an offence.

When might I work without a licence?

There might be situations in which you could continue without a licence. If the work can be organised in such a way that there would be no offences committed (i.e. no damage or destruction of a breeding site/resting place, no capturing, killing or injuring of individuals) then there is no need for a licence. This is a difficult area legally and your ecological consultant will be able to advise you further.

Developers should be aware that if work is held up or modified and there is a possibility that animals will be disturbed, or a breeding site / resting place will be unavailable to them (even if only temporarily), they should apply for a licence in good time.

Example: If a building with a bat roost requires re-roofing or repair work, you would not need a licence if:

- the existing materials are replaced like-for-like (i.e. similar type of roofing slates, similar felt or membrane),*
- the same access points are retained and there are no structural changes made to the roost,*
- the work is done whilst bats are absent and is completed before they would normally return to the roost."*

- 7.6 Where more detailed bat surveys are recommended by the Ecologist, following an initial daytime investigation, then Local Planning Authorities, on the advice of their ecological advisors, may not determine the application until such time that all relevant information is gathered, i.e., by conducting dusk / dawn surveys. The advice that is provided by the ecological advisors is also in accordance with the obligations placed upon Local Authorities by way of its duties under the Conservation of Habitats & Species Regulations 2019 (as amended). Therefore, it would be prudent to make enquiries to the relevant departmental Planning Officer before submitting a Planning Application that includes an ecological survey report that recommends more detailed surveys.
- 7.7 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 of that are currently free from illumination. A bat-sensitive lighting plan is therefore recommended in order to avoid potential impacts to bats that may use the surrounding treelines. Several options to consider have been listed below, though the reader is referred to the Bat Conservation Lighting Guidelines for further information.

Appropriate luminaire specifications: Luminaires come in a myriad of different styles, applications and specifications which a lighting professional can help to select. The following should be considered when choosing luminaires.

All luminaires should lack UV elements when manufactured. Metal halide, 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. Lighting should be directed to where it is needed, and light spillage avoided. This can be achieved by the design of the luminaire and by using accessories such as hoods, cowls, louvres and shields to direct the light to the intended area only. Planting can also be used as a barrier or manmade features that are required within the build can be positioned so as to form a barrier.

Predicting where the light cone and light spill will occur: There are lighting design computer programs that are widely in use which produce an image of the site in question, showing how the area will be affected by light spill when all the factors of the lighting components listed above are taken into consideration. This should be a useful tool to inform the mitigation process.

Light levels: The light should be as low as guidelines permit. If lighting is not needed in any particular area, do not light. Numerous software programmes are currently available which can be used inform lighting plans, demonstrating how lighting decisions will illuminate a site.

Please refer to the 'Landscape and urban design for bats and biodiversity' (Gunnell et. al., 2012, Bat Conservation Trust) Guidance Note 8 'Bats and Artificial Lighting' 2018, Bat Conservation Trust for further information.

- 7.8 No recommendations are necessary in relation to bats and **B2** and/or bats and trees, on the understanding that **B2** and no trees are understood to be within the scope of works.

Breeding Birds

- 7.9 No impacts are applicable in relation to any Sch.1 (WCA) specially protected bird species such as barn owl, and no further surveys or recommendations are necessary in relation to specially protected birds.
- 7.10 In relation to common birds the building could feasibly offer small birds nesting habitat, particularly during the breeding bird season, however no evidence of breeding birds was encountered during the survey.
- 7.11 In the interests of potential impact avoidance it is recommended that proposed works should be undertaken outside of the nesting bird season. The nesting bird season is weather dependent but generally extends between March and September inclusive (peak period March-August). For works within the breeding bird season, any areas that can support nesting birds should be checked by a professional Ecologist for nesting birds within 48 hours or less prior to works commencing.
- 7.12 Where 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.

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."*

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.*

Biodiversity Enhancement

- 7.13 As a means of enhancement and aiding the design of the scheme in keeping with local and national planning policy considering biodiversity net-gain principles, the proposals may consider incorporating wildlife friendly provisions in addition to those described. Further recommendations, regarding birds, native botanical species and invertebrates are provided within **Appendix II**.

8.0 Bibliography

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Appendix I: Site Photographs



Plate 1 – *South-western elevation of B1 at Oakdale.*



Plate 2 – *North-eastern elevation of B1 at Oakdale*



Plate 3 – *The attached single-storey outhouse.*



Plate 4 – *The gardens and site of the proposed detached garage.*



Plate 5 – *The roof of the single-storey extension on the northern aspect of B1.*



Plate 6 – *The loft space of B1 with the piled insulation in one corner.*



Plate 7 – ‘Danger’ sign attached to a purlin within the loft space of B1.



Plate 8 – The inside of the single-storey conservatory on the southern aspect of B1.



Plate 9 – *The ground floor living space of B1.*



Plate 10 – *The southern and western aspects of B2*



Plate 11 – *Internal view of B2 with voids in the wall and ceiling visible.*



Plate 12 – *Internal view of B2 evidencing storage of building materials.*



Plate 13 – *Void behind window lintel of B2.*

Appendix II: Biodiversity Enhancement: General Recommendations

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.



Breeding Birds - 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

New feature landscaping should incorporate native woody plants as opposed to non-native species that are of significantly less benefit to biodiversity. Species such as Blackthorn (*Prunus spinosa*), Honeysuckle (*Lonicera periclymenum*), Rowan (*Sorbus aucuparia*), Guelder-rose (*Viburnum opulus*) and Hawthorn (*Crataegus monogyna*) are native and will provide a valuable resource for a myriad of wildlife as opposed to non-native, exotic species which are generally much less effective, particularly to pollinator groups including bees, butterflies and moths.

Suitable Trees	Suitable Woody Shrubs
English Oak (<i>Quercus robur</i>)	Hawthorn (<i>Crataegus monogyna</i>)
Rowan (<i>Sorbus aucuparia</i>)	Honeysuckle (<i>Lonicera periclymenum</i>)
Wild Service Tree (<i>Sorbus torminialis</i>)	Guelder Rose (<i>Viburnum opulus</i>)
Silver Birch (<i>Betula pendula</i>)	Elder (<i>Sambucus nigra</i>)
Ash (<i>Fraxinus excelsior</i>)	Wild Privet (<i>Ligustrum vulgare</i>)
Goat Willow (<i>Salix capraea</i>)	Blackthorn (<i>Prunus spinosa</i>)
Beech (<i>Fagus sylvatica</i>)	
Wild Cherry (<i>Prunus avium</i>)	