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| **Title** | **Proposed Office Building, Taraloka Buddhist Retreat Centre, Bettisfield, SY13 2LD – Walkover Survey & Biodiversity Statement** |
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| **Client** | **Taraloka Buddhist Retreat Centre** |
| **Report Version** | **C542/ V1.0** |

# 1 Introduction

## Background

1.1 This report presents the findings of an ecology walkover survey of land at Taraloka Buddhist Retreat Centre, Bettisfield, SY13 2LD. The walkover survey was required to consider whether there may be any ecological constraints due to the proposed construction of an office building (and associated works) at approximate NGR 346815, 335764. Taraloka Buddhist Retreat Centre (henceforth referred to as 'Taraloka') is located in a rural landscape, approximately 3.5 km to the northeast of Welshampton.

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

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

1.3 A planning application is to be submitted to Wrexham County Borough Council (WCBC) for which this report would provide supporting information. Consultation has been sought with Emma Broad (WCBC's Ecology and Biodiversity Officer) to agree the approach and inform this report[1].

# 2 Methodology

## Walkover Survey

2.1 The walkover survey focused on the footprint of the proposed office/ associated works as indicated on an Axis Architectural Services Ltd pdf plan entitled '*Proposed Office Building, 'Taraloka' – Site Block Plan As Proposed*', drawing no. TA-03_Rev A, dated Mar. 2024 (hereon referred to as the 'survey site'[2]), along with land within an approximately 30 m buffer (where access provided) (hereon referred to as the 'wider survey site'). Immediately adjacent land was viewed from access boundaries where this was deemed relevant. The survey site extends to approximately 0.04 hectares and, along with the wider survey site, is indicated on *Figure 1* appended to this report.

[1] The NBB recommendations as included within this document have been agreed in principle by 'phone on 09/04/24.

[2] At the time of the walkover the carpark space no. 5 (as indicated on drawing no. TA-03_Rev A) was not part of the scheme and is therefore outside the survey site. As it comprises an area of hard-standing, this is not deemed to be a significant constraint.

2.2 The existing land use is dominated by hard-standing (used for building access/ car parking *etc.*), and includes an existing (temporary) office building, and a narrow boundary zone of mature ornamental shrub planting.

2.3 The walkover survey involved walking the survey/ wider survey sites making notes on the habitat/ vegetation and assessing the potential for protected or other priority/ notable species to be present. It was undertaken on 27th March 2024 by Max Ellson of Marches Ecology. The weather was initially 100% cloudy with heavy (hail) showers, becoming dry with scattered cloud.

2.4 The MAGIC[3] website has been consulted to determine whether there are any statutory protected sites close to the survey site and that may have implications for the proposed development. No information on non-statutory protected sites has been obtained as part of this study.

**Survey Limitations**

2.5 No particular limitations were encountered during the walkover survey.

## 3 Proposed Development

3.1 The existing site and proposed development are indicated on a series of Axis Architectural Services Ltd pdf plans as follows:

- Drawing no. TA-02_Rev A (dated Mar. 2024), entitled '*Proposed Office Building, 'Taraloka' – Site Block Plan As Existing*'.
- Drawing no. TA-03_Rev A (dated Mar. 2024), entitled '*Proposed Office Building, 'Taraloka' – Site Block Plan As Proposed*'.
- Drawing no. TA-05_Rev A (dated Mar. 2024), entitled '*Proposed Office Building, 'Taraloka' – Floor Plan & Elevations As Proposed*'.
- Drawing no. TA-06_Rev A (dated Mar. 2024), entitled '*Proposed Office Building, 'Taraloka' – Site Plan As Existing*'.
- Drawing no. TA-07_Rev A (dated Mar. 2024), entitled '*Proposed Office Building, 'Taraloka' – Site Plan As Proposed*'.
- Drawing no. TA-015_Rev A (dated Mar. 2024), entitled '*Proposed Office Building, 'Taraloka' – Rear Elevation As Proposed*'.

3.2 The new office building will be located on existing hard-standing, to be constructed on a brick plinth. It will have external dimensions of approximately 9.8 m by 7.45 m, with walls to approximately 5.2 m high (to roof apex). Internally it will include a main office (with a lobby and meeting area), and a rear office. Externally the walls will be timber clad, whilst the roof will comprise galvanised steel roofing sheets, with solar photovoltaic panels on the south-east elevation. It is understood that planters will be installed around the base of the building once completed.

3.3 Five car parking spaces will be provided as part of the scheme (partly within the footprint of the existing (temporary) office building, which will be removed). A short length of 'new access drive' will partly encroach into an existing narrow boundary zone of mature ornamental shrub planting.

3.4 No further information is currently available.

[3] https://magic.defra.gov.uk/

# 4 Results

## Statutory Protected Sites

4.1 The closest statutory protected sites are associated with 'Fenn's and Whixall Moss' to the east: these are:

- (part of) the Midland Meres & Moses Phase 2 (Wales) Ramsar Sites,
- Fenn's, Whixall, Bettisfield, Wem and Cadney Mosses Site of Special Scientific Interest (SSSI),
- Fenn's, Whixall, Bettisfield, Wem and Cadney Mosses (Wales) Special Area of Conservation (SAC), and
- Fenn's, Whixall and Bettisfield Mosses National Nature Reserve (NNR).

4.2 The closest part of this multi-protected site to the survey site is located at an approximate distance of 390 m.

4.3 Ramsar Sites are wetlands of international importance designated under the Ramsar Convention. SACs are of international (European) importance and are designated under *The Conservation of Habitats and Species Regulations 2017*[4]. SSSIs are of national importance and are designated under *The Wildlife and Countryside Act 1981* (as amended)[5] and are also affected by the *CRoW Act 2000*[6]. NNR's are designated under *The National Parks and Access to the Countryside Act 1949*, or under *The Wildlife and Countryside Act 1981.*

4.4 There is no obvious/ direct hydrological link between 'Fenn's and Whixall Moss' and the survey site.

4.5 There are no other statutory sites within 1 km.

## Habitat and Flora

4.6 Target Note locations (numbered 1,1a to 3, and 10, for the survey site, 4 to 8, 8a and 9 to 21 for the wider survey site, and 22 for immediately adjacent land) described in the text below are indicated on *Figure 1*; no separate target note descriptions are provided.

Survey Site

*General*

4.7 The survey site is dominated by hard-standing on which is set an existing temporary (office) building at *Target Note 2*. Vegetated habitats are limited to narrow areas associated with the western boundary of the survey site, including a small zone of mature ornamental shrub planting (*Target Note 1*), a mature *Fraxinus excelsior* (Ash) tree, and a short section of a longer mature grown-our hedge line (*Target Note 4*). A low retaining wall forms part of the eastern boundary of the survey site at *Target Note 10.*

[4] HMSO (2017). *The Conservation of Habitats and Species Regulations 2017*. HMSO, London.
[5] HMSO (1981). *The Wildlife and Countryside Act 1981*. HMSO, London.
[6] HMSO (2000). *The Countryside and Rights of Way Act 2000*. HMSO, London.



**General view of the survey site from immediately to the south.**

*Scrub/ Ornamental Planting & Trees*

4.8 *Target Note 4* comprises a mature grown-our hedge line, only a short section of which is within the survey site. It is detailed below with reference to the wider survey site.

4.9 At *Target Note 1* there is a small zone of mature ornamental shrub planting. It is approximately 5 m deep at most.




**LHS of photo: ornamental shrub planting at *Target Note 1*.**

4.10 This resource comprises a variety of woody shrubs including *Mahonia aquifolium* (*Oregon-grape*), *Escallonia* sp. (an Escallonia), *Symphoricarpos albus* (Snowberry), *Lonicera* cf. *pileata* (Box-leaved Honeysuckle), various *Rosa* spp. (Rose species), and (young) Ash saplings (this list should not be considered exhaustive). At *Target Note 1a* there is a single mature *Cotoneaster* cf. *salicifolius* (Willow-leaved Cotoneaster). Both *Rubus fruticosus agg.* (Bramble) and *Hedera helix* (Common Ivy) are a feature throughout. The base layer appears to be frequently bare, or with occasional scattered (especially tall-herb/ ruderal) plants (mostly towards/ at the eastern edge), or with a carpet of Common Ivy.

4.11 A mature Ash tree is located at *Target Note 3.* This is described further below with regards 'bats'.

*Other Habitats*

4.12 Other habitats within the survey site are restricted to:

- A carpet of Common Ivy occupying a narrow area of flat ground to the immediate west of the building at *Target Note 2*/ located under the canopy of the Ash tree at *Target Note 3*.
- The (temporary) office building at *Target Note 2.* This is a wooden panelled, flat-roofed structure which is raised over hard-standing, being supported by short breeze block/ patio slab 'feet'. It is further described below with regards 'bats',
- A low retaining wall (*Target Note 10*),
- Fences, and
- Hard-standing.

<u>Wider Survey Site</u>

*General*

4.13 The wider survey site incorporates some of the extensive Taraloka land-holding and includes a variety of buildings, semi-formal garden areas/ associated plantings, a vegetable/ fruit growing area, individual/ groups of trees, infrequently managed grassland/ tall-herbs, a short section of flowing ditch, and areas of hard-standing. Arable fields are located to the north and south of the Taraloka land holding access road; these are within the wider survey site but were not subject to survey due to lack of access provision.




**Above and Below: general views of the wider survey site. Above, the building at *Target Note 9* is central. Below, the two trees are those at *Target Notes 15* & *16*.**




*Scrub/ Ornamental Planting, Hedgerow & Trees*

4.14 The mature grown-our hedge line at *Target Note 4*, only a short section of which is within the survey site, continues within the wider survey site. It comprises mature shrubs and

occasional young/ semi-mature trees, including *Crataegus monogyna* (Hawthorn), *Sambucus nigra* (Elder), Ash, *Ulmus* sp. (an Elm) and Bramble. This resource appears largely unmanaged. The base layer was not assessed in detail.

4.15 Ornamental shrub planting is located at *Target Note 11*, this comprising a narrow zone of scattered mature shrubs at the edge of a lawn area. Woody shrubs include *Forsythia* sp. (a Forsythia), *Buddleja davidii* (Butterfly-bush), Hawthorn, *Lonicera fragrantissima* (Winter Honeysuckle), *Viburnum* sp. (a Viburnum), *Prunus* spinosa (Blackthorn), and *Corylus avellana* 'Contorta' (Contorted Hazel) (this list should not be considered exhaustive). The base layer was not assessed in detail.

4.16 Ornamental hedgerows are located at *Target Notes 13* (mixed native and non-native woody species, some apparently relatively recently planted), and *17* (*Fagus sylvatica* (Beech)). These features were not assessed in detail.

4.17 Individual/ groups of trees within the wider survey site include the following:

- A group of (largely mature) trees at *Target Note 5*, including *Populus* sp. (a Poplar), *Acer pseudoplatanus* (Sycamore) and *Salix* sp. (a Willow),
- A semi-mature *Cedrus* cf. *atlantica* (Atlas Cedar) at *Target Note 12*,
- A mature Ash at *Target Note 15,*
- A mature *Cedrus* cf. *libani* (Cedar-of-Lebanon) at *Target Note 16*,
- A mature *Betula* sp. (a Birch) at *Target Note 18,* and
- A group of semi-/mature trees at *Target Note 19*, including *Salix cf. caprea* (Goat Willow) and Ash.

Where deemed relevant these are described further below with regards 'bats'.

*Grassland*

4.18 *Target Notes 7* and *14* comprise areas of infrequently mown lawn, the species-composition of which was not assessed in detail.

4.19 An area of grassland/ tall-herbs is located at *Target Note 20*, this being part of a larger area of the land-holding which is less formal and infrequently managed. A range of tall-herbs and coarse-leaved grasses characterise this area, such as *Anthriscus sylvestris* (Cow Parsley), *Pentaglottis sempervirens* (Green Alkanet), *Symphytum* sp. (a Comphrey), *Dactylis glomerata* (Cock's-foot), *Heracleum sphondylium* (Hogweed), *Arrhenatherum elatius* (False Oat-grass) and *Rumex obtusifolius* (Broad-leaved Dock).

*Other Habitats*

4.20 Other habitats within the wider survey site are restricted to:

- A vegetable/ fruit growing area/ associated adjacent tall-herbs (*Target Note 6*),
- A short section of flowing ditch at *Target Note 21*,
- Buildings, including at *Target Notes 8/ 8a* and *9.* Where deemed relevant, buildings are described below with regards 'bats',
- A low retaining wall (*Target Note 10*),
- Fences, and
- Hard-standing.

4.21 At *Target Note 21* there is a ditch, of which an approximately 5 m length is within the wider survey site. It initiates at a pipe, and flows in a southwest direction.




**Ditch at *Target Note 21*. Photo taken from pipe at northern end.**

4.22 The channel is approximately 1.5 to 2 m wide. The water is fast flowing; the depth is unknown but appears shallow, perhaps less than 0.3 m. The water is turbid/ brown in colour. The channel is partially vegetated with *Glyceria* sp. (a Sweet-grass), occasionally across the entire width. Both banks comprise earth and are at an approximate angle of 45°; both are vegetated with tall-herbs/ coarse-leaved grasses. The western bank is approximately 4 m wide at most and the vegetation appears unmanaged. The eastern bank extends to approximately 1 m and then flattens out – here the vegetation appears to be infrequently managed to approximately 1.5 m from the bank top.

Immediately Adjacent Land

4.23 At *Target Note 22* there is an area of managed (apparently infrequently) grassland adjacent to the ditch. Coarse-leaved grasses visually dominate the sward which includes a range of characteristic (tall-)herbs/ forbs. The sward height was to approximately 0.2 m high at most.




**Infrequently managed grassland at *Target Note 22*.**

*Flora*

4.24 No plant species of note in the local context were recorded within the survey or wider survey sites, or immediately adjacent land. A single Cotoneaster shrub was recorded at *Target Note 1a* within the survey site. This is considered likely to be Willow-leaved Cotoneaster (which is not listed in *Schedule 9* of the *Wildlife and Countryside Act 1981*), however due to the complexities of Cotoneaster identification, a precautionary approach will be adopted in this report. A *Schedule 9* species, C*rassula helmsii* (New Zealand Pigmyweed), is known from a pond within the Taraloka land-holding.

**Fauna**

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

*Badger*

4.26 No evidence of Badger (*Meles meles*) was recorded within the wider/ survey sites/ immediately adjacent land. Considering the lack of recorded evidence, along with the location/ character and current uses/ well-used nature of the habitats present within the wider/ survey sites, and the immediately adjacent land to the west comprising large arable fields, the potential presence of Badgers (and or setts) at this location is deemed to be low.

*Bats*

Survey Site

4.27 There is a single tree within the survey site which could provide potential value for roosting bats: a mature Ash at *Target Note 3.* This is double-trunked, with an approximate diameter at breast height (dbh) of the largest being 0.4 m. It supports dense Common Ivy growth into the canopy. No particular Potential Roosting Features (PRFs) were observed, however the

Ivy could be utilised if/ where it is mature enough. This tree is considered to provide no more than low bat roost potential.

4.28 There is a single structure within the survey site: a (temporary) office building at *Target Note 2.* This comprises a timber clad, flat roofed structure which is raised off the ground. The building appears to be well-sealed. The timber cladding appears to be in good condition. The roof comprises corrugated metal or plastic. There are wooden barge boards extending down from the roof – the associated gaps were found to be too wide/ open to be PRF's. No PRFs were observed. This building has negligible bat roost potential.




**Temporary office building at *Target Note 2*.**

4.29 The habitats that comprise the survey site (dominated by hard-standing) offer minimal opportunities for foraging/ commuting bats, these being restricted to the western boundary (which supports mature ornamental shrubs/ a mature tree/ a grown-out hedge line which continues into the wider survey site).

Wider Survey Site

4.30 Not all trees within the wider survey site were assessed for their potential to support roosting bats. Only trees within approximately 10 m of proposed works, and or of more than moderate bat roost potential were considered. At *Target Note 15,* a mature Ash has been pollarded in the past further to a natural loss of the canopy. It supports extensive significant PRFs in the remaining trunk and may be of high bat roost potential. A mature Cedar-of-Lebanon at *Target Note 16* is a significant tree, much of the trunk/ canopy of which is difficult to view due to the height. No PRFs were observed, however it may provide moderate bat roost potential.

4.31 Several buildings are located within the wider survey site, of various types and constructions. These were not assessed in detail for their potential to support roosting bats.

The building at *Target Note 9* is located immediately adjacent to the survey site boundary; it comprises a low, single-skinned (brick or breeze block walls with corrugated metal or plastic roof) structure. It is largely open ended on the southern elevation. Internally it is used for storage of materials and equipment.




**Building at *Target Note 9*.**

4.32 A complex of two-storey residential buildings is located at *Target Note 8.* At *Target Note 8a* the closest part of the building to the survey site is at a distance of approximately 7 m. the building comprises rendered walls with a pitched, slate roof. There is an adjoined low porch structure.




**Building at *Target Note 8a*.**

4.33 The complex of habitats within the wider survey site provide varied potential for foraging bats; there are no particular significant potential commuting features, however the resources present connect to the wider countryside.

*Otter & Water Vole*

4.34 No evidence of Otter (*Lutra lutra*) or Water Vole (*Arvicola amphibius*) was observed at the ditch at *Target Note 21*, however a detailed survey was not undertaken.

4.35 From review of OS map 1:25, 000 scale and relevant internet-based mapping including aerial photography[7], the ditch appears to be an isolated feature which extends to an approximate length of 60 m adjacent to the boundary of the Taraloka land-holding. Given this, it's potential value to Otter is deemed to be negligible, and this species will not be considered further in this report.

4.36 The ditch provides potential habitat for Water Vole, a species which is understood to be in this area of Wrexham County Borough. Approximately 30 m downstream from the start of the culvert, the ditch appears to enter dense scrub vegetation (viewed from a distance during the walkover survey). As such the potential length of the ditch which may provide suitable habitat including for burrowing, food sources *etc*., may be limited.

*Great Crested Newts*

4.37 There is no aquatic habitat (suitable for breeding Great Crested Newts (*Triturus cristatus*)) within the survey or wider survey sites.

4.38 The terrestrial habitat resource provided by the survey site is dominated by hard-standing (concrete), which is of negligible potential value for this species (although animals would be

[7] https://www.google.co.uk/maps/@52.9153611,-2.7926666,429m/data=!3m1!1e3?entry=ttu

able to traverse across it). The habitats associated with the western boundary largely provide moderate potential habitat at most – this potential being associated with for example subterranean refugia opportunities provided by roots associated with shrubs/ trees at *Target Notes 1, 3* and *4.* Some minimal opportunities may be provided by the cover afforded by, and the temporary storage of materials under, the temporary building at *Target Note* 2 (refer to photo above). The retaining wall at *Target Note 10* could also provide opportunities. However, the complex of habitats within the wider survey site provide much greater potential (in terms of quantity of, and potential value of, habitat provision). An area of infrequently managed short grassland located on immediately adjacent land (*Target Note 22*) provides moderate potential habitat at most (this being largely dependent on the height/ density of the sward which will vary (it being subject to infrequent management)).

4.39 However, the potential presence of Great Crested Newts in terrestrial habitat is governed more by the proximity of a suitable breeding pond than by the quality of the terrestrial habitat. Two ponds are known from the Taraloka land-holding:

- a pond at NGR: 346798, 335650, this being approximately 95 m south of the survey site boundary at its closest point.
- a small garden/ ornamental pond at NGR: 346864, 335704, approximately 70 m to the south-east.

4.40 It is understood that Great Crested Newts utilise both ponds (although breeding is not confirmed) and that terrestrial animals are seen on the Taraloka land-holding.

4.41 An initial review of the OS map 1:25, 000 scale and relevant internet-based mapping including aerial photography (refer to footnote 7) indicates that there may be two other ponds, and two possible ditch complexes, within 250 m of the survey site. The Shropshire Union Canal which passes through the 250 m buffer to the south of the Taraloka land-holding is a maintained/ navigated canal and is deemed unlikely to be of any potential breeding value to Great Crested Newts.

*Reptiles*

4.42 The potential presence of reptiles within the survey site is deemed to be negligible. However the complex of habitats in the wider survey site, which in turn connects to the wider Taraloka land-holding and the wider countryside (including the Shropshire Union Canal) provides habitat of greater potential value, particularly for example for Grass Snake (*Natrix helvetica*).

*Birds*

4.43 Nesting opportunities within the survey site are limited to the shrub/ tree resources associated with the western boundary (*Target Notes 1, 3* and *4*). The building at *Target Note 2* is deemed to provide negligible potential value for nesting birds. Significantly greater opportunities are presented by habitats/ features within the wider survey site; frequent bird boxes which were observed during the walkover survey.

# 5 Potential Ecological Constraints and Recommendations

## Introduction

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

## Statutory Protected Sites

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

## Habitats and Flora

5.3 Direct impacts (permanent or temporary) to vegetated habitats associated with the proposal will be limited to loss of some of the ornamental shrub resource at *Target Note 1*, and possibly a small area of Common Ivy carpet located under the canopy of the Ash tree at *Target Note 3*. Construction of a pond (refer to *Section* 6) will result in the loss of a small area of species-poor grassland. No further survey with regards habitat/ flora is deemed necessary. Recommendations provided below (under 'General Avoidance and Mitigation Measures') include for temporary fencing of the Ash tree at *Target Note 3*/ unmanaged hedge at *Target Note 4*.

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

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

*Non-native Invasive Plants*

5.5 It is illegal to plant or otherwise cause to grow in the wild any plant listed in *Schedule 9* to the *Wildlife and Countryside Act 1981* (as amended). The *Schedule 9* list of animal and plant species has been amended by the *Wildlife and Countryside Act 1981 (Variation of Schedule 9)(England and Wales) Order 2010*'[8]. *Section 14 (1)* covers spreading the species or transferring polluted ground material from one area to another.

5.6 The Cotoneaster shrub at *Target Note 1a* may not be directly impacted by the scheme, however as a precautionary approach it is recommended that appropriate control/ avoidance measures should be implemented prior to the commencement of site clearance/ construction works in order to avoid spreading this plant (including to other sites). It may be possible to pull or dig up this shrub and place it in a 'secure' location within the Taraloka land-holding to decompose.

5.7 Also refer to *paragraph 6.11*/ *Section 6.*

[8] http://www.nonnativespecies.org/index.cfm?pageid=67

*Biosecurity*

5.8 As a precautionary approach, it is advised that basic biosecurity measures[9] should be implemented throughout the proposed work (also refer to *paragraph 5.21* regarding Great Crested Newt Reasonable Avoidance Measures (RAMs)).

**Badger**

5.9 No particular impacts on Badger are envisaged at the current time.

5.10 If the development works are not initiated within 12 months of the walkover (*i.e.* March 2025), a pre-works check (for setts) should be completed by a suitability qualified ecologist. Up-to-date decisions can be made on any subsequent requirements, such as licensing, at that time.

**Bats**

5.11 No further consideration regarding potential direct impacts to roosting bats is deemed to be warranted. The temporary office building at *Target Note 2* is deemed to be of negligible potential value.

5.12 No works to the tree at *Target Note 3* are currently envisaged. However, should it become necessary to remove and or *e.g.,* prune this tree (which is deemed to provide low bat roost potential) to facilitate the works, it is recommended that it is subject to a detailed inspection by a licensed bat surveyor in the first instance. This inspection may require the tree to be climbed. The bat ecologist would determine whether the tree contains any features of potential value for roosting bats, and, if present, whether further survey might be required. Any mitigation measures that may be required could be considered further to the completion of this survey.

5.13 There is no formal guidance on disturbance in relation to bat roosts, however taking into account the locations and or perceived roost potential of nearby trees/ buildings, no further consideration is deemed warranted.

5.14 Assuming best practice measures with regards bats and any external lighting proposals are implemented, no potentially significant (in)direct impacts on any potential foraging/ commuting resources (for example the western boundary habitats) are envisaged to result from the proposal. Any external lighting should follow guidance included in Bat Conservation Trust and Institution of Lighting Professionals (2023)[10]. All external works should be completed in daylight hours only.

**Water Vole**

5.15 A pond is to be constructed (refer *to Section 6*) in the vicinity of the ditch at *Target Note 21* which provides potential habitat (albeit likely limited potential) for Water Vole. However, the pond (and any associated construction activity) will be located in an area of (infrequently) managed short grassland, and at a minimum of 5 m from the ditch top. As such, no potential impacts on any Water Voles which may use the ditch/ banks are envisaged. Should any physical works be required in closer proximity to the ditch (excluding the proposed dead hedge – also refer to *Section 6*) any such works/ the potential requirement

[9] https://www.forestryengland.uk/sites/default/files/pdf/Biosecurity%20Policy.pdf
[10] Bat Conservation Trust and Institution of Lighting Professionals (2023). *Guidance Note 08/23. Bats and Artificial Lighting at Night*.

for a detailed survey should be considered in the first instance by a suitability qualified ecologist.

**Great Crested Newts**

5.16 It is understood that Great Crested Newts use two nearby ponds (although breeding is not confirmed) (70 m and 95 m from the survey site), and that terrestrial animals are seen on the Taraloka land-holding.

5.17 No impacts on aquatic habitats will result as part of the proposed development. Potential direct impacts on terrestrial habitat of more than negligible potential value to Great Crested Newts will be limited to: 1) loss of some of the ornamental shrub resource at *Target Note 1*/ possibly a small area of Common Ivy carpet located under the canopy of the Ash tree at *Target Note 3* (moderate potential habitat at most), 2) removal of the existing temporary office at *Target Note 2* (may provide minimal opportunities itself and or associated with materials stored underneath it), and 3) loss of/ disturbance to a small area of infrequently managed short grassland located (*Target Note 22*) (associated with proposed pond construction, *Section 6*). It is also possible that some temporary disturbance during the construction could result to the low retaining wall at *Target Note 10,* which could also provide opportunities.

5.18 Potential impacts would be short-term only, and at an individual animal scale (disturbance, injury/ killing); potential impact from loss of/ disturbance to habitats (which is negligible when taking into account potential habitat availability in the vicinity) is not deemed significant in the long-term. Given the presence of Great Crested Newts at Taraloka is known, the potential for a 'development' licence to be required from Natural Resources Wales has been considered. However, taking into account the small scale of the scheme, and that largely direct impacts will be to existing areas of hard-standing, the overall risk to Great Created Newts/ their habitat is deemed to be low and as such it has been concluded that it is sufficient and proportionate for non-licensed RAMs to be implemented in this instance. This approach was agreed with Emma Broad by 'phone on 09/04/24.

5.19 Such RAMs would be required to be implemented both before and during the proposed site clearance/ construction works (including pond construction, *Section 6*). The implementation of the RAMs will be organised and overseen by a suitably qualified ecologist in accordance with a RAMs Method Statement. The Method Statement will detail methods of working that will minimise any perceived risk to Great Crested Newts. The proposed RAMs will include a Toolbox Talk by a suitably qualified ecologist that would outline the responsibility of individual contractors (with regards Great Crested Newts and other valued ecological resources). Site clearance would be undertaken in conjunction with the ecologist, with controlled vegetation removal/ visual/ hand-/ destructive-searches of the development/ pond footprints being supervised/ undertaken by the ecologist prior to commencement of the works. The contractors would then be required to maintain a 'watching brief' for the duration of the construction period. Appropriate biosecurity measures should be followed at all times.

5.20 The inherent risk (to the proposed development) with using such an approach would be that should a Great Crested Newt be found at any time during the preparatory or construction works then they would need to immediately cease and are unlikely to be able to re-commence until a Natural Resources Wales 'development' licence had been obtained.

5.21 Assuming the above, no particular long-term (adverse) impacts on Great Crested Newts are anticipated. The habitat measures included in *Section 6* includes enhancement proposals (pond, hibernaculum) which will be of potential benefit to this species.

**Reptiles**

5.22 No particular impacts on reptiles are envisaged. As a precautionary approach, the potential presence of reptiles within the site will be explained by the ecologist during the Great Crested Newt Toolbox Talk. The ecologist and or contractors will subsequently maintain a watching brief throughout the works. Should a reptile be found at any time when the ecologist is not present, all works in this area should immediately cease and the ecologist be contacted for advice.

**Birds**

5.23 The destruction of any bird nests that are in use is illegal. The simplest option to avoid issues arising from the presence of nesting birds is to schedule work that affects nesting habitat (*e.g.*, clearance of ornamental shrubs at *Target Note 1*, removal of the building at *Target Note 2*) outside the nesting period (March to August inclusive). Should any occupied nests be found during the construction phase, a buffer zone (determined on the basis of the species concerned and the location of the nest in the context of the surrounding vegetation, but no less than 5 m) would be retained until it can be ascertained that the chicks have left the nest. The buffer zone will be appropriately fenced and signed.

5.24 If it is not possible to clear the ornamental shrubs at *Target Note 1,* and or remove the building at *Target Note 2*[11] outside the nesting season, these features should be subject to a check by a suitably qualified ecologist prior to commencement of works. If any active nests are found at this time, a buffer zone as detailed above would be provided.

**General Avoidance and Mitigation Measures**

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

1. Protection Measures for Retained Hedgerow and Tree. Due to the proximity of the mature Ash tree at *Target Note 3*/ unmanaged hedge at *Target Note 4* it is recommended that temporary protective fencing (*e.g*., heras panels) is installed prior to the start of any works. This fencing should remain in place throughout the construction work. The aim of this fencing is to avoid inadvertent damage to this habitat. Site personnel should be made aware of the purpose of this fencing.
2. Great Crested Newt RAMs. Preparation and implementation of Method Statement as detailed above.
3. Nesting Bird Season. The avoidance measures as detailed above should be followed.

[11] Although the building is considered to be of negligible potential value to nesting birds, it is sited immediately adjacent to shrubs/ the tree at *Target Note 3*, both of which could be utilised.

# 6 Enhancement Measures: Net Benefit for Biodiversity

## Introduction

6.1 Technical Advice Note 5 (Nature Conservation and Planning) (Welsh Assembly Government, 2009)[12] and Wrexham County Borough Council (2011)[13] seek developments to achieve net biodiversity gain. The requirement to secure and maintain net benefit for biodiversity (NBB) (through enhancements) was reinforced in a letter issued by the Chief Planner (Welsh Government) to all planning departments in October 2019. NBB has been defined as '*the concept that development should leave biodiversity and ecosystems in a better state than before, through securing long term, measurable and demonstrable benefit, primarily on site*'[14].

6.2 This was reiterated in a letter from the Minister for Climate Change to the Heads of Planning dated October 2023. An Annex[15] attached to this letter provided text to update Planning Policy Wales (PPW), which has been adopted in PPW 12 (Welsh Government 2024[16]). . Chapter 6 of PPW was updated as of 11/10/23 (and is now included in PPW 12) which provides '*further clarity .... on securing net benefit for biodiversity through the application of the step-wise approach, including the acknowledgement of off-site compensation measures as a last resort, and, the need to consider enhancement and long-term management at each step*'.

6.3 WCBC (2011, *op. cit.*) lists '*examples of how enhancements could be achieved on development sites*'. The options provided include for the '*creation of ponds and scrapes*' and '*creating reptile and amphibian hibernacula'.* CIEEM (2022) states that '*a key requirement is that the measures put forward are suitable in the local context of the site*'[17]. As such it is proposed to create a small new pond, associated amphibian hibernaculum, and dead hedge.

## Assessment of Required Level of Provision

6.4 Construction of the new office building (and associated works) can be categorised as a small/ low impact proposal. Development of this site would not result in a significant impact on any valued ecological resource at this location.

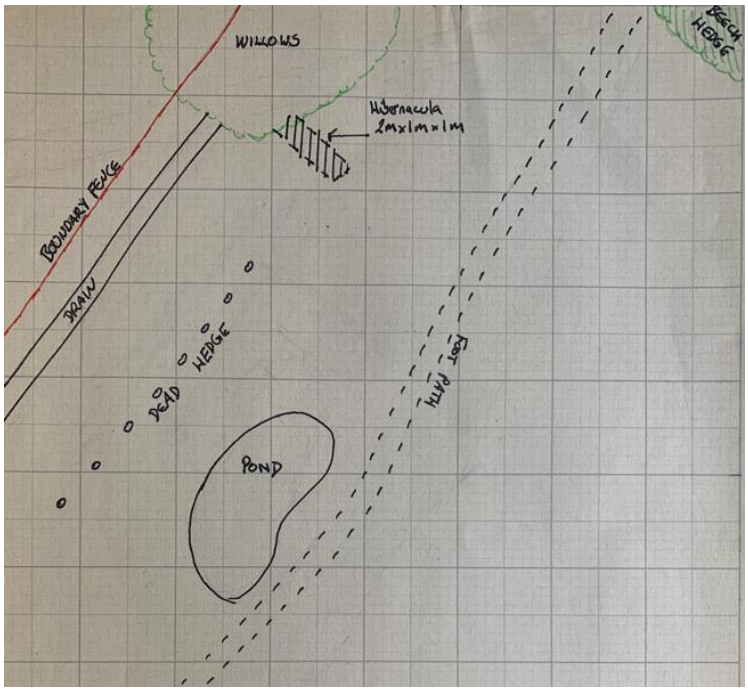
6.5 NBB provision '*should be proportional to the extent and impact of development* (CIEEM 2022, *op. cit.*). The proposed enhancements will therefore target priority habitats/ species/ species of nature conservation interest known to be present at the site: specifically pond(s), and Great Crested Newt (a priority habitat/ species under *Section 7* of the *Environment (Wales) Act 2016*).

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

**Biodiversity Enhancement Recommendations**

*Pond*

6.6 It is proposed to create a small kidney-shaped pond. This will be located within the grassland at *Target Note 22* (*Figure 1*). Also see hand-drawn location plan below provided by the client.




**Proposed locations of biodiversity enhancements.**

6.7 The following provides indicative guidance on pond design only; specialist advice should be sought as deemed necessary prior to undertaking the works. Comprehensive advice on pond creation/ planting is available at:

- https://freshwaterhabitats.org.uk/advice-resources/pond-creation-hub/

6.8 The pond will have approximate maximum dimensions of 10 x 4 m, and 2 m deep. During the construction it will be provided variable depths internally and at the edges (which will be largely shallow/ sloping). There will be a minimum 5 m standoff between the pond/ and the ditch (top) at *Target Note 21*, including for construction purposes.

6.9 A nearby/ accessible source of water may need to be considered (especially if the pond is lined) for the initial fill and for example for topping up, for example rain water butts.

6.10 Prior to creating the pond, a trial pit will be excavated to determine the suitability of the substrate to hold water. Further to this, the pond will be lined should it be deemed necessary (the best option for which would be a flexible liner made of PVC or butyl rubber, protected on both sides by old carpet). Should the pond be lined, some soil from the excavation process will be put back into the pond (to assist plant establishment).

6.11 If the pond is lined this will also require planting with locally sourced native aquatic/ marginal plants. Whilst appropriate plants could be obtained from the Taraloka land-holding, care must be taken not to introduce plants from the site pond which is known to support New

Zealand Pigmyweed. Otherwise a local reputable supplier should be sought. The following are possible species to utilise:

- Deepwater plants: *Ceratophyllum demersum* (Rigid Hornwort), *Ranunculus* spp. (Water-crowfoots), *Callitriche* spp. (Water-starworts), *Myriophyllum* spp. (a Water-milfoil), *Potamogeton crispus* (Curled Pondweed).
- Floating-leaved: *Potamogeton natans* (Broad-leaved Pondweed), *Nuphar lutea* (Yellow Water-lily), *Glyceria fluitans* (Floating sweet-grass).
- Shallows: *Ranunculus* spp. (a Spearwort), *Myotosis scorpioides* (Water Forget-me-not).
- Edge and marsh plants: *Mentha aquatica* (Water-mint), *Iris pseudacorus* (Yellow-flag), *Caltha palustris* (Marsh-marigold).

6.12 If not lined, the pond could be left to naturally vegetate/ develop.

6.13 Depending on the extent, and site based requirements, further to the pond construction works, disturbed peripheral areas could be sown with a suitable wildflower seed (including 'damp') species mix(es), for example from Phoenix Amenity Supplies[18]. At this stage it is not possible to be prescriptive on seed mix types, however 'BFS 3 – Floodplain Meadow Grassland Seed Mix', 'BFS 5 – Wetland & Pond Edge Wildflower Seed Mix', and 'BFS 10 – Species Rich Wildflower Meadow Seed Mix' might all be appropriate, depending on the location, scale and soil type to be sown. The Phoenix Amenity Supplies Code of Practice confirms that they 'only grow British Native plants that are from fully known British provenance'. Advice should be obtained from the supplier on ground preparation, how and when to sow.

*Amphibian Hibernaculum*

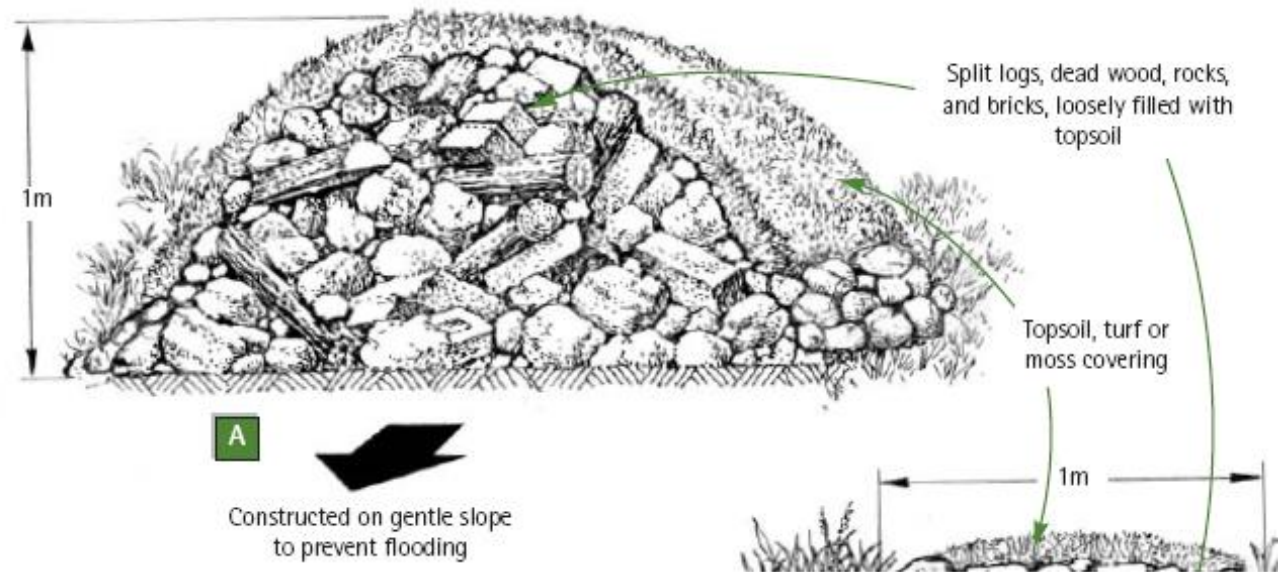
6.14 The hand-drawn location plan above also shows the proposed amphibian hibernaculum. This will be created at the same time as the pond and may use some of the soil and turf from the footprint in its construction.

6.15 As Great Crested Newts are known to spend a considerable proportion of their terrestrial phase either underground or just above ground under refuge sites, it is of great benefit to provide artificial sites, known as hibernacula which they can utilise. A hibernaculum will be created using site-won material (from the construction site) wherever possible. A mixture of hardcore, brick rubble, logs, sleepers *etc.*, and loose topsoil will be piled into a mound which will then be covered with a topsoil cap and, ideally, a turf covering. The lower margins of the mound should be exposed to facilitate access.

6.16 This will be constructed by hand where possible and suitable RAMs measures will be implemented during the works.

6.17 The design will follow that provided in Langton, *et al*. (2001)[19]; refer below. It will be at least 2 m length x 1 m width x 1m height.

[18] https://grassandflower.co.uk/phoenix-amenity-supplies/store/products/category/phoenix-amenity/wildflower-seeds/native-wildflower-meadow-seed-mix/
[19] Langton, T, Beckett, C. & Foster J. (2001). *Great Crested Newt Conservation Handbook*. Froglife, Halesworth.




*Dead Hedge*

6.18 The dead hedge, as shown on the hand-drawn location plan above, will be installed a minimum 3 m from the top of the ditch bank. It will be created from materials gained from the Taraloka land-holding.

6.19 Comprehensive advice on dead hedge creation is available at:

- https://www.rspb.org.uk/helping-nature/what-you-can-do/activities/build-a-dead-hedge-for-wildlife

**Maintenance and Monitoring**

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

6.21 The hibernaculum will not need long-term management. The dead hedge will likely benefit from an annual 'top up' of material.

6.22 Once established, the pond will require annual/ long term management to maintain areas of open water, varied vegetation structures and to prevent silting up. The weblink provided in *paragraph 6.7* provides advice on management of ponds. In addition, regular monitoring for New Zealand Pigmyweed will be undertaken, with prompt removal/ control works undertaken should it be found. It should be noted that management of/ physical works to ponds supporting Great Crested Newts would require specialist advice, and possibly an NRW 'conservation' licence.

6.23 Where possible a record should be maintained of wildlife using the pond, with species records submitted to Cofnod[20] (the Local Environmental Records Centre for North Wales). It should be noted that an NRW 'survey and disturbance' licence is required to be held by individuals undertaking surveys where Great Crested Newts are known to or may be present.

[20] https://www.cofnod.org.uk/Home

# 7 Appendix 1

## Introduction

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

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

## Badger

7.3 The Badger is protected in Britain under the *Protection of Badgers Act 1992* and *Schedule 6* of the *Wildlife and Countryside Act 1981* (as amended). The legislation affords protection to Badger and Badger setts, and makes it a criminal offence to:

- wilfully kill, injure, take, possess or cruelly ill-treat a Badger, or attempt to do so;
- interfere with a sett by damaging or destroying it;
- to obstruct access to, or any entrance of, a Badger sett; or
- to disturb a Badger when it is occupying a sett.

## Bats

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

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

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

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

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

## Water Vole

7.8 The Water Vole is protected under *Section 9* of *Schedule 5* of the *Wildlife and Countryside Act 1981* (as amended). This protection was extended by the *CRoW Act 2000*. Under the above legislation it is an offence to:

- intentionally or recklessly damage, destroy or obstruct access to any structure or place that Water Voles use for shelter or protection;

- intentionally or recklessly disturb a Water Vole while it is using such a place;
- intentionally kill, injure or take any wild Water Vole;
- possess or control any live or dead wild Water Vole or any part of, or anything derived
- from, such an animal;
- sell, offer or expose for sale, or have in his possession or transports for the purpose of
- sale, any live or dead water vole, or any part of, or anything derived from, such an
- animal; or
- publish or cause to be published any advertisement likely to be understood as
- conveying that he buys or sells, or intends to buy or sell, any of those things.

7.9 The Water Vole is included on *Section 7* of the *Environment Act 2016*.

**Great Crested Newt**

7.10 Great Crested Newts are listed on *Schedule 5* of the *Wildlife and Countryside Act 1981* (as amended), and receive full protection under *Section 9*. The 1981 Act was amended by the *CRoW Act 2000* which further extends the protection. They are also listed as European Protected Species on *Schedule 2* of *The Conservation of Habitats and Species Regulations 2017* which gives it full protection under *Regulation 42(1)*. The legislation applies to all life stages of the Great Crested Newt, including eggs, larvae, juveniles and adults.

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

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

7.12 The Great Crested Newt is included on *Section 7* of the *Environment Act 2016*.

**Reptiles**

7.13 Viviparous Lizard, Grass Snake, Slow-worm and Adder are all listed under *Schedule 5* of the *Wildlife and Countryside Act 1981* (as amended), in respect of *Section 9(5)* and part of *Section 9(1)*. This protection was extended by the *CRoW Act 2000*.

- Under the above legislation it is an offence to
- intentionally or recklessly kill or injure any individual of such a species; or
- sell or attempt to sell any part of the species alive or dead.

7.14 All four of the above listed reptiles are included on *Section 7* of the *Environment Act 2016*.

**Birds**

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

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

- kill, injure or take any wild bird;

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

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

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

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