

**FORMER AMBULANCE STATION HQ,
ST ASAPH, DENBIGHSHIRE**

PRELIMINARY ECOLOGICAL APPRAISAL

JANUARY 2023

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JANUARY 2023

CES:750.160/01.23/SW

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EXECUTIVE SUMMARY

- Cheshire Ecological Services (CES), the commercial arm of Cheshire Wildlife Trust, was commissioned to conduct a Preliminary Ecological Appraisal (PEA) and Daytime Bat Inspection of the Buildings at the Former Ambulance Station HQ site, St Asaph, Denbighshire.
- The survey was conducted on 24th November 2022 by Suzie Whitnall BSc (Hons) MSc ACIEEM, and Lindsay Overstall BSc (Hons) MSc ACIEEM. The purpose was to gain baseline ecological information of the site in order to assess its current status, to identify any ecological constraints to development, and to recommend further survey if necessary.
- The proposed development site totals approximately 0.74 hectares and is located to the south of the village of St Asaph, within Denbighshire, Wales. It is an extension to the Upper Denbigh Road site, the Maes Yr Haul development, which is currently under construction. It will involve the demolition of the existing buildings and construction of 28 residential dwellings. CES undertook several surveys at this site between 2021 and 2022 including a PEA, badger walkover survey, reptile presence/ likely absence survey, GCN eDNA survey and various bat surveys.
- At the time of survey, the site comprised predominantly of the former Ambulance Station HQ buildings surrounded by hardstanding and small pockets of unmanaged grassland, amenity planting and scrub. A small section of the adjacent improved grassland field was included in the red-line boundary. There were five buildings on site which were all unused and in varying condition at the time of the survey.
- As part of the desk-based study, the Local Biodiversity Recording Centre – The North Wales Environmental Information Service (Cofnod) - provided records of protected and Priority species occurring within 2km of the proposed development site, within the past twenty years.
- Features of ecological importance identified during the survey were limited to low numbers of semi-mature native trees. It is recommended that where practicable, these features be retained and sufficiently protected during development works, however the proposed plan indicated these will be lost to facilitate the development. As such, native trees should be planted within the new development.
- The habitat composition of the site was considered to have potential to support legally protected wildlife species, including bats, hedgehog and nesting birds. It was considered unlikely that the site would support amphibians (including GCN), badger, brown hare and common reptile species but they could be associated with the adjacent site.
- It is considered appropriate to recommend further survey effort in respect bats to inform the development proposal and planning application.
- Recommendations are also made to provide positive enhancements in respect of protected species on site, such as bats and nesting birds.
- A number of recommendations are made in respect of the protection of nesting birds, amphibians (GCN), brown hare, common reptile species and hedgehog which

potentially could be adversely impacted by the proposed works in the absence of mitigation.

1.0 INTRODUCTION

- 1.1 Cheshire Ecological Services (CES), the commercial division of Cheshire Wildlife Trust, was commissioned to conduct a Preliminary Ecological Appraisal and Daytime Bat Inspection of the Buildings at the Former Ambulance Station HQ site, in St Asaph, Denbighshire.
- 1.2 The purpose of the survey was to gain baseline ecological information of the 'site' in order to assess its current status; to identify any ecological constraints that may currently be associated with the site or the surrounding land, and; to recommend further survey if necessary.
- 1.3 The survey was conducted by Senior Ecologists Suzie Whitnall BSc (Hons) MSc ACIEEM and Lindsay Overstall BSc (Hons) MSc ACIEEM on 24th November 2022. Both of the surveyors are licensed by Natural Resources Wales to disturb all species of bats in Wales under licence number S091453-1 (Suzie) and S088600/1 (Lindsay). This report has been written by Suzie Whitnall and quality assured by Lindsay Overstall.
- 1.4 Weather conditions at the time of survey were a mix of dry with intermittent heavy rain showers with a moderate breeze and a temperature of 8°C.

2.0 SITE DESCRIPTION

- 2.1 The survey was centred on OS grid reference SJ 04450 73675.
- 2.2 The area of land requested to be surveyed total approximately 0.74 hectares and is hereafter referred to as the 'site'. The site is located to the south of the small cathedral city of St Asaph, in North Wales. The Former Ambulance Station HQ site is an extension to the Upper Denbigh Road site, the Maes Yr Haul development, which is currently under construction. It will involve the demolition of the existing buildings and construction of 28 residential dwellings.
- 2.3 At the time of survey, the site comprised predominantly of buildings surrounded by asphalt car parks and small areas of unmaintained amenity grassland and several semi-mature trees. A small area of the improved grassland field to the south was also included in the red-line boundary.
- 2.4 The site was bounded to the north by a new development of residential properties and to the east by a woodland belt, which likely occupies the site of an old railway line, and agricultural fields. To the south was the Upper Denbigh development (under construction) and to the west was St Kentigern Hospice and the Upper Denbigh development.
- 2.5 Land-use in the wider area comprised of agricultural pasture fields and agricultural buildings (refer to Appendix A - site location plan) and the cathedral city of St Asaph to the North. St Asaph (and the site) sits in a valley between the River Elwy and River Clwyd, the confluence of which is located approximately 1.6km north of the city.

3.0 SURVEY METHODS

3.1 The PEA and daytime bat inspection of the buildings consisted of a desk-based study and field survey.

Desk-based study

3.2 The desk-based study comprised consultation with the following consultees:

- Defra's online mapping facility 'MAGIC'
- Natural Resources Wales online website
- Cofnod - the local Biodiversity Information Service for North Wales
- Ordnance Survey - OS mapping of the local and wider area

3.3 The desk-based study comprised consultation with Defra's online mapping facility 'MAGIC' to search for statutorily designated nature conservation sites within a 5km radius of the site. The Natural Resources Wales (NRW) online site was used to source statutorily designated site citations.

3.4 Cofnod was requested to provide information on non-statutory nature conservation sites and protected, Priority habitats and Priority species within a 2km radius from the site boundary, within the past 20 years. The data search acquired for the adjacent site in 2021 was used and regarded still relevant for this site.

3.5 Ordnance Survey mapping of the local area was reviewed for the presence of habitats and features of potential ecological relevance to this survey, such as ponds.

Extended Phase 1 Habitat Survey

3.6 This survey involved the mapping of various habitat types on the site in addition to any habitat features and botanical species of conservation importance. A thorough walk-over survey was undertaken of the site. The methodology for this survey followed that described by the Joint Nature Conservation Committee (JNCC, 2010).

3.7 Priority habitats and species, for which there is a national or local Biodiversity Action Plan (BAP) and those listed under Section 7 of the Environment Wales Act (2016), were recorded as such where present. The UK BAP list of Priority habitats and species has now been superseded by the Section 7 list, however, as it is still widely recognised the two should be considered interchangeable. Priority habitats and species are of material consideration to planning.

3.8 Preliminary searches were also carried out for legally protected and Priority species such as bats, reptiles and great crested newts (GCN) that may potentially use the site. Scientific names and the national status of vegetative species recorded follow Stace (2019). Scientific and common names stated in the text.

- 3.9 The abundance of all recorded botanical species identified in potential Priority habitats was assessed using the DAFOR scale, as described by Sutherland (1996). The DAFOR scale is a broad interpretive assessment whereby the surveyor assigns one of the following categories to the abundance of the species; Dominant, Abundant, Frequent, Occasional or Rare.

Daytime Bat Inspection of the Buildings

- 3.10 The buildings (A-E) were searched externally and internally for evidence of bat presence, such as droppings or feeding remains and any potential roosting features including bat access points and roosting places, as detailed in the BCT Good Practice Guidelines (Collins, 2016).

- 3.11 External inspections of the buildings were carried out from the ground using binoculars, a high-powered hand torch, ladders and a fibre optic endoscope, where necessary.

Areas searched (where present) included:

- Windowsills
- Window panes
- Walls
- Hanging tiles
- Weather bordering
- Eaves
- Fascias
- Lead flashing
- Gaps in felt
- Under tiles
- Gaps in brickwork / stonework
- Boxed soffits

- 3.12 Internal areas including all accessible rooms and roof voids within the buildings were searched using a ladder, high-powered hand torch and a fibre optic endoscope (where necessary).

Inspections in the roofs of features (where present) included:

- Ridge and hip beams
- Mortise and tenon joints
- Junctions of timbers
- Behind tiles and roof lining
- Top of gable ends or diving walls
- Top of chimney breasts

Inspections in rooms include:

- Behind wooden panelling
- Behind shutters and curtains
- Behind items on walls
- Inside cupboards and chimneys

Assessment criteria

- 3.13 Based on the number, location and type of any potential roost features, the buildings were categorised as having **Negligible, Low, Moderate** or **High potential** to support roosting bats, or confirmed roost, as detailed in Table 4.1 of BCT guidelines (Collin 2016) and summarised in Table 1 below.

3.14 The surrounding habitat was assessed for its potential with regards to roosting, foraging and commuting bats. The habitat features were categorised as having **Negligible, Low, Moderate** or **High suitability** for foraging and commuting bats, as detailed in Table 4.1 of BCT guidelines (Collin 2016) and summarised in Table 1 below.

Table 1: Summary of BCT Bat Roost Potential Categories

Suitability	Description – Roosting habitats	Commuting and foraging habitats
Negligible	Buildings with negligible habitat features to be used by roosting bats.	Negligible habitat features on site likely to be used by commuting or foraging bats,
Low	Buildings with one of more potential roost sites that could be used by individual bats opportunistically, although they are unlikely to be suitable for maternity or hibernation roosting. This category also includes Buildings of sufficient size and age that elevated inspection may reveal features not previously identified, or features seen that have very limited roosting potential.	Habitat that could be used by small numbers of commuting bats such as gappy hedgerows or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.
Moderate	Buildings with one or more potential roost sites to support roosting bats but unlikely to support a roost of high conservation status (with respect to roost type only).	Continuous habitat connected to the wider landscape that could be used by bats for commuting such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
High	Buildings with one of more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods.	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees and woodland edge. High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland. Site is close to and connected to known roosts.

3.15 During the daytime survey the buildings and their associated features were assessed for their suitability for hibernating bats. The following aspects were considered (Middleton 2019):

- The suitability of features to support roosting bats and/or to allow access for roosting bats
- Suitable conditions including temperature and humidity likely to be present within the building during the winter period for hibernating bats
- Surrounding habitat for bats to forage and/or commute during the active bat season (i.e. bats are familiar with the area and thus aware of suitable roosting locations within the site)
- The presence of known roosts within the building, or adjacent buildings, or surrounding area during the active season.

DNA Analysis of bat droppings

3.16 During the daytime survey a sample of bat droppings from the roof voids in Building A and C were collected for despatch to the University of Warwick, School of Life Sciences for DNA analysis.

3.17 The results are pending and will be sent to the client once received.

Survey Limitations

3.18 The observations made during this survey have been used to assess the presence, potential presence or likely absence of protected and Priority species within the proposed area of works, and to recommend further actions where required. It should however be noted that this survey serves as a single visit representing a 'snap-shot in time' whereby only the species present at the time of survey were recorded.

3.19 Positive evidence of species that use this site periodically or are in growth at different times of the year may not have been recorded. It is important to consider that the absence of a species from a particular survey does not necessarily indicate the absence (or continued absence) of that species from the area.

3.20 The survey was a daytime survey only. No evening emergence or dawn re-entry surveys were conducted for bats due to time of year.

3.21 Loft voids were accessed where possible and safe to do so. There was limited access to some voids due to safety considerations. The locations are discussed within section 5.

4.0 DESK-BASED STUDY RESULTS

- 4.1 Defra's online mapping facility 'MAGIC' indicates there are five statutorily designated nature conservation sites within 5km of the site which are summarised in Table 2 below.

Table 2: Statutory Sites

Site	Distance (approx.)	Reason for designation
Coedwigoedd Dyffryn Elwy / Elwy Valley Woods SAC ¹	3.2km south-west	The primary reason for the SAC selection is due to the Tilio-Acerion forests of slopes, screes and ravines Annexe 1 habitat that it contains. The site is particularly notable for its excellent woodland ground flora and the presence of rare bryophytes
Coedydd Ac Ogofau Elwy A Meirchion SSSI ²	3.2km south-west	The SSSI citation notes the site to be designated for its semi-natural broadleaved woodland, rare flowering plant assemblage, its bryophyte assemblage and geological and palaeontological interest of caves.
Ffynnon Beuno and Cae Gwyn Caves SSSI ²	4km south-east	The site is notified for its palaeontological interest and its species interest, a winter roost of lesser horseshoe bats <i>Rhinolophus hipposideros</i> .
Mwyngloddfa Pennant SSSI ²	4.4km north-east	The site is of geological interest, and therefore no longer of consideration within this report.
Moel Hiraddug A Bryn Gop SSSI ²	4.5km north-east	The site is of interest for its geology, its calcicolous grasslands, assemblages of nationally rare and scarce vascular and non-vascular plant species.

*¹Special Area of Conservation; ²Site of Special Scientific Interest

- 4.2 Given that the proposed development site is over 3km from SAC & SSSIs, and that the proposed development site does not contain any woodland and does not possess habitat connections to the sites, it is considered unlikely that the proposed development would adversely affect the status of these important sites.
- 4.3 There does remain the possibility that new residential development can result in increased visitor pressures to nature conservation sites where public access is permitted.
- 4.4 Cofnod indicates that there are eight Local Wildlife Sites (LWS) within 2km from the proposed site which are summarised in Table 3 below.

Table 3: Local Wildlife Sites

Local Wildlife Site	Distance (approx.)	Designation
Coed Fron and Eryl Hall Wood	0.6km west	The site is designated for its Ancient woodland with alder (<i>Alnus glutinosa</i>), ash (<i>Fraxinus excelsior</i>), oak (<i>Quercus sp.</i>) and birch (<i>Betula</i>)

		<i>sp.</i>) communities and predominantly surrounds a caravan site.
Nant y Waen	0.7km east	A broadleaved woodland on the gentle slopes of a small stream-valley. Sycamore (<i>Acer pseudoplatanus</i>), ash and pedunculate oak (<i>Quercus robur</i>) dominate the canopy
Fachwen Dingle	0.8km east	A long narrow broadleaved woodland in a shallow valley of a tributary of the river Clwyd. Ash is generally dominant with oak as the other main species.
Rickfield Wood/Coed Ddol Fawr/Coed Llanddol/Maes Elwy Covert (R Elwy Woods)	0.8km south	Ancient broadleaved and replanted woodland along the Elwy Valley
Mount Road Churchyard, St Asaph	1km north-west	Neutral grassland left uncut in the summer. Large population of slow worm recorded on site.
Ty'n-y-Coed Rough (2 areas)	1.4km south-west	Lowland broadleaved woodland
Ty Isa and Pen Palmant valley	1.7km north-east	Neutral grassland grazed by cattle with cock's-foot (<i>Dactylis glomerata</i>), crested dog's-tail (<i>Cynosurus cristatus</i>), common knapweed (<i>Centaurea nigra</i>), agrimony (<i>Agrimonia eupatoria</i>), bird's-foot-trefoil (<i>Lotus corniculatus</i>), Burnet-saxifrage (<i>Pimpinella saxifrage</i>), Autumn Hawkbit (<i>Scorzoneroides autumnalis</i>) the uncommon Spiny Restharrow (<i>Ononis spinosa</i>)
Vale Of Clwyd Grassland	1.7km north	Floodplain grazing marsh with neutral improved and damp grassland, and an area of open water. This part of the Vale is noted for breeding Shelduck.

- 4.5 The proposed development site is a significant distance from the LWSs and possesses no woodland habitats or habitat connectivity to the LWS. As such, it is considered unlikely that the proposed development would adversely affect the status of the sites.
- 4.6 There does remain the possibility that new residential development can result in increased visitor pressures to nature conservation sites where public access is permitted.
- 4.7 The only Priority habitat type identified by Cofnod within 2km of the site was ancient woodland, which was widespread in the area with 65 ancient woodland sites present within 2km of the site. The proposed development site does not border any areas of ancient woodland (the closest being 70m south-west of the site, within the grounds of the Bryn Asaph Manor House) and contains no areas of woodland on site which may form habitat links to other ancient woodland areas. As such, no impacts on ancient woodland sites are likely to result from the development.

4.8 Protected and Priority species data returned by Cofnod was reviewed to search for the potential presence of species pertinent to the proposals and its potential impacts. Those records are presented below.

Table 4: Protected and Priority species returns from between 2002 - 2021:

Scientific name	Common name	Designations
Herpetofauna		
<i>Anguis fragilis</i>	Slow worm	EWAS7, WCA5, LBAP
<i>Lissotriton helveticus</i>	Palmate Newt	WCA5, LBAP
<i>Lissotriton vulgaris</i>	Smooth Newt	WCA5, LBAP
<i>Natrix helvetica</i>	Grass Snake	EWAS7, WCA5, LBAP
<i>Triturus cristatus</i>	Great Crested Newt	HabRegs2, EWAS7, WCA5, LBAP
<i>Zootoca vivipara</i>	Common Lizard	EWAS7, WCA5, LBAP
Birds		
<i>Acanthis cabaret</i>	Lesser Redpoll	EWAS7, UKBR, WBR, LBAP
<i>Accipiter gentilis</i>	Goshawk	WCA1, WCA9
<i>Aegithalos caudatus</i>	Long-tailed Tit	WBA
<i>Alauda arvensis</i>	Skylark	EWAS7, UKBR, WBA, LBAP
<i>Anthus pratensis</i>	Meadow Pipit	UKBA, WBA
<i>Apus apus</i>	Swift	UKBA, WBA
<i>Cuculus canorus</i>	Cuckoo	EWAS7, UKBR, WBR, LBAP
<i>Delichon urbicum</i>	House Martin	UKBA, WBA
<i>Emberiza schoeniclus</i>	Reed Bunting	EWAS7, UKBA, WBA, LBAP
<i>Falco columbarius</i>	Merlin	UKBR,WBA, WCA1, LBAP
<i>Falco peregrinus</i>	Peregrine	WCA1
<i>Falco subbuteo</i>	Hobby	WBA, WCA1
<i>Falco tinnunculus</i>	Kestrel	EWAS7, UKBA, WBR, LBAP
<i>Fringilla montifringilla</i>	Brambling	WCA1
<i>Hirundo rustica</i>	Swallow	WBA
<i>Linaria cannabina</i>	Linnet	EWAS7, UKBR, WBR, LBAP
<i>Loxia curvirostra</i>	Common Crossbill	WCA1
<i>Milvus milvus</i>	Red Kite	WBA, WCA1, WCA9
<i>Muscicapa striata</i>	Spotted Flycatcher	EWAS7, UKBR, LBAP
<i>Oenanthe oenanthe</i>	Wheatear	WBA
<i>Passer domesticus</i>	House Sparrow	EWAS7, UKBR, WBA
<i>Passer montanus</i>	Tree Sparrow	EWAS7, UKBR, WBR, LBAP
<i>Periparus ater</i>	Coal Tit	WBA
<i>Phoenicurus phoenicurus</i>	Redstart	UKBA, WBA
<i>Phylloscopus trochilus</i>	Willow Warbler	UKBA, WBR
<i>Picus viridis</i>	Green Woodpecker	WBA, LBAP
<i>Poecile palustris</i>	Marsh Tit	EWAS7, UKBR, WBR, LBAP
<i>Prunella modularis</i>	Dunnock	EWAS7, UKBA
<i>Pyrrhula pyrrhula</i>	Bullfinch	EWAS7, UKBA, WBR, LBAP
<i>Regulus regulus</i>	Goldcrest	WBA
<i>Sturnus vulgaris</i>	Starling	EWAS7, UKBR, WBR
<i>Sylvia borin</i>	Garden Warbler	WBA
<i>Sylvia communis</i>	Whitethroat	WBA

Scientific name	Common name	Designations
<i>Sylvia curruca</i>	Lesser Whitethroat	LBAP
<i>Turdus iliacus</i>	Redwing	UKBR, WBA, WCA1
<i>Turdus philomelos</i>	Song Thrush	EWAS7, UKBR, WBA, LBAP
<i>Turdus pilaris</i>	Fieldfare	UKBR, WBA, WCA1
<i>Tyto alba</i>	Barn Owl	WBA, WCA1, WCA9, LBAP
<i>Vanellus vanellus</i>	Lapwing	EWAS7, UKBR, WBR, LBAP
Mammals		
<i>Erinaceus europaeus</i>	Hedgehog	EWAS7,
<i>Lepus europaeus</i>	Hare	EWAS7, LBAP
<i>Meles meles</i>	Badger	PBA, LBAP
<i>Myotis</i>	Myotis Bat Species	HabRegs2, WCA5, LBAP
<i>Nyctalus noctula</i>	Noctule Bat	HabRegs2, EWAS7, WCA5, LBAP
<i>Pipistrellus pipistrellus</i>	Common Pipistrelle	HabRegs2, EWAS7, WCA5, LBAP
<i>Pipistrellus pygmaeus</i>	Soprano Pipistrelle	HabRegs2, EWAS7, WCA5, LBAP
<i>Plecotus auritus</i>	Brown Long-eared Bat	HabRegs2, EWAS7, WCA5, LBAP
<i>Rhinolophus hipposideros</i>	Lesser Horseshoe Bat	HabRegs2, EWAS7, WCA5, LBAP
Invasive Species		
<i>Cotoneaster simonsii</i>	Himalayan cotoneaster	WCA9
Invertebrates		
<i>Satyrrium w-album</i>	White letter hairstreak	EWAS7, WCA5

Note: All species names and designations provided by Cofnod

Designations key:

EWAS7 – Environment Wales Act, 2016 – Section 7

WCA1 – Wildlife & Countryside Act, 1981 – Schedule 1

WCA5 – Wildlife & Countryside Act, 1981 – Schedule 5

WCA9 – Wildlife & Countryside Act, 1981 – Schedule 9

HabRegs2 – Conservation (Habitats and Species) Regulations 2017 – Schedule 2

LBAP – Local Biodiversity Action Plan Species

UKBR – UK Birds of Conservation Concern (RSPB) - Red

UKBA – UK Birds of Conservation Concern (RSPB) – Amber

WBR – Welsh Birds of Conservation Concern – Red

WBA – Welsh Birds of Conservation Concern – Amber

PBA – Protection of Badgers Act 1992

4.9 A number of other species records were provided but have not been included in this report as it is considered highly unlikely that they would be associated with the proposed development site. For example, numerous records of wading and riverine birds were provided. Given the habitat composition of the site and the nature of the proposed works, it is considered highly unlikely that the proposed development would impact upon such species.

4.10 With the exception of ancient woodland as described earlier, no other Priority Habitats were highlighted by Cofnod within 1km of the site.

5.0 FIELD SURVEY RESULTS

- 5.1 The results of the field survey undertaken on 24th November 2022 are presented below and are discussed by habitat type. Phase 1 Habitat Mapping is presented in Appendix B, and photographic plates in Appendix D.

Habitats

Buildings & Hardstanding (Plates 1- 28)

- 5.2 The site consists mainly of the former Ambulance Station HQ buildings surrounded by asphalt car parking areas. There were five buildings on site.

Building A – (Plates 1-8)

- 5.3 This building was a 'U' shaped building located at the entrance to the site (northern boundary). The building was single storey and contained three roof voids.
- 5.4 Externally, it had brick with peddle dash render walls and several hipped roofs. The roofs consisted of slates and clay ridge tiles. Wooden boxed soffits were present at the eaves.
- 5.5 A number of potential roost features (PRFs) were found externally, summarised in table 5 below and locations indicated in Appendix C - Bat PRF plan, and Appendix D – Photographic Plates.

Table 5: Building A PRFs

PRF #	Description	Location
A1	Damaged tile on the hip ridge	Various locations around the building
A2	Gap between the soffit and wall	Various locations around the building
A3	Damage /broken pebble render on the chimney	North-eastern section
A4	Gap under the clay ridge tile at the valley	Norther-western section
A5	Gap under the lead flashing	Various locations around the building
A6	Gap under the tiles and ridge around the skylight	Central section
A7	Missing slate with direct access into roof void	North-west section on the southern aspect
A8	Gap in the corner of the valley into the soffit	North-west section on the eastern aspect

- 5.6 A number of old birds' nests were also found within the external structure of the building including a potential old swallow's nest on the northern aspect and potential sparrows nest in the soffit on the eastern aspect (see Appendix C).
- 5.7 Internally, there were three roof voids (1-3). Roof void (1) was located within the western section and was approximately 18m long by 8.5m wide with a maximum ridge height of

4m. It had a timber King post structure with timber rafters and purlins. The slates were unlined with the lime mortar and underside of the slates visible. The roof and void showed signs of deterioration. There was a missing slate at the hip end (corresponding with the external PRF A7). There were signs of water ingress at this location and also around the two skylights on the western roof aspect. **There were approximately 4 possible bat droppings near to the access hatch (eDNA analysis undertaken).** There was also evidence of rats within the void including rat faeces. Roof void (2) was located in the centre of the building. The loft hatch directly into this void was inaccessible, however access was gained through roof void (3). The void was approximately 36m long by 5m wide with a height of 1.5m. At the centre point, it opened into another void of approximately 7m by 8.5m. The long void contained three windows and therefore it was well-lit from natural light. Roof void (3) is located in the eastern section and was approximately 18m long by 8.5m wide with a maximum ridge height of 4m. It had a timber King post structure with timber rafter and purlins. It was unlined and with the lime mortar and underside of the slates visible. A missing slate was present above the loft hatch with evidence of water ingress. It contained two skylights on the eastern roof aspect. Evidence of rats was also present.

Building B – (Plates 9-13)

- 5.8 This building was a large, single storey building located to the south-east of Building A. Externally, it had a single skin composite panel wall construction. It had a multiple pitched roof with corrugated, possible asbestos, sheet roof. Timber cladding was present on the north-west and south-east gable ends, and wooden fascia were present on the roof overhangs.
- 5.9 The building had a limited number of potential roost features externally, which were mainly found around the entrance to the building (eastern elevation), summarised in table 6 below and locations indicated in Appendix C - Bat PRF plan and Appendix D – Photographic Plates.

Table 6: Building B PRFs

PRF #	Description	Location
B1	A small gap between the timber window frame and cladding	Western elevation
B2	A small gap between the top of the wall and small flat roof section. NB: an old birds' nest on the frame	Western elevation
B3	A small gap between the wooden fascia and wall of the flat roof section	Western elevation

- 5.10 A number of old birds' nests were present on the buildings frame under the overhang roof (see Appendix C).
- 5.11 Internally, there was a single roof void, accessed from a loft hatch at the western end of the building. The roof had a timber trussed frame with unlined potential asbestos roof and Rockwool type installation. It was approximately 1.5m high with a number of small

clear panels in the roof. The void was not inspected internally due to the potential presence of asbestos.

5.12 No evidence of bats was found externally or internally in Building B.

Building C (Plates 14-20)

5.13 This building was a large 'U' shape building, similar externally to Building A. It was single storey with three roof voids. Externally, it had brick with pebble dash render walls and several hipped roofs. The roofs consisted of slates and clay ridge tiles. Wooden boxed soffits were present at the eaves. Flat roof extensions were present on the northern elevation.

5.14 A number of potential roost features were found externally, summarised in table 7 below and locations indicated in Appendix C - Bat PRF plan and Appendix D – Photographic Plates.

Table 7: Building C PRFs

PRF #	Description	Location
C1	Small gaps between the wall and soffit	Various locations around the building
C2	Gap at the end tiles (missing mortar) of the lean-to	Connects Building C to B
C3	Raised ridge tile	Various locations around the building
C4	Gap under lead flashing at the valley	Various locations around the building
C5	Hole in the render (possibly where a pipe was located)	Western section on the northern end wall
C6	Gap under lead work on the mono pitch roof section	Eastern section on the western elevation

5.15 There is a single storey building with a flat flet roof and wooden soffits which connects Building C, B and D. No features were found in this section.

5.16 Internally, there are three roof voids (1-3) similar to Building A. Roof void (1) was located in the eastern section of the building. It was approximately 26m long by 8m wide with a maximum ridge height of 4m. The loft hatch was open with excessive water ingress from the roof into the room below. The timbers and ceiling around the hatch looked damp and rotting. As such, the void was not thought safe to enter. Roof void (2) was located in the western section of the building. It was approximately 26m by 8m wide with a maximum ridge height of 4m. It was mostly of a timber King post structure with timber rafters and purlins and unlined slates. However, there was a section towards the southern end that was of timber trussed structure and bitumen lined. This section of the void had a slightly raised flooring which appeared to be a 'false' ceiling of the room below, as such further inspection was not undertaken due to safety. Droppings which could pertain to bats were found within the loft void, however the droppings appeared to be 'greasier' than bat droppings and thought potentially to be of pygmy shrew (*Sorex minutus*). Roof void (2)

was located between 1 and 2, and accessible from void 2 through a small door. The void was approximately 36m long by 5m wide with a maximum height of 1.5m. At the centre point a smaller void opened into another void of approximately 12m by 9.5m. **Approximately 4 potential bat droppings were found within the western end of this void (Plate 20).**

Building D – (Plates 21-24)

- 5.17 A smaller single storey building located in the north-eastern corner of the site. It had brick walls and a pitched roof and wooden fascia boards at the eaves. The roof tiles were in good condition and no gaps were present.
- 5.18 It had a limited number of potential roosting features externally, summarised in table 8 below and locations indicated in Appendix C - Bat PRF plan and Appendix D – Photographic Plates.

Table 8: Building D PRFs

PRF #	Description	Location
D1	A small gap under the fascia board	Southern gable end
D2	Gaps under the soffits although mesh blocked access therefore not suitable for roosting bats	Eastern elevations
D3	A gap at the end tile (missing mortar)	Northern gable end
D4	Gap in the door vent	Western elevation

- 5.19 Internally, there were five rooms each with a small roof void above. Access into each void was gained through a small hatch in each room. The voids had a timber rafter and purlin construction with bitumen felt lining which was in good condition and intact. The voids varied in size but were approximately 3m by 5m with a maximum ridge height of 1m. There was no access into both end rooms and corresponding loft voids. An old birds' nest was present in the central roof void.
- 5.20 No evidence of bats was found externally or internally in Building D.

Building E – (Plates 25-28)

- 5.21 This was a long narrow, single storey building located on the eastern boundary of the site. It had timber panel walls and glass windows set in timber frames. It had a hipped and pitched roof with potential asbestos roof tiles.
- 5.22 It had a limited number of potential roosting features externally, summarised in table 9 below and locations indicated in Appendix C - Bat PRF plan and Appendix D – Photographic Plates.

Table 9: Building E PRFs

PRF #	Description	Location
E1	Gap in the ridge	Southern end
E2	Broken tiles leading directly into the building	Northern end on the western elevation

E3	Gaps under the soffit	Northern end on the western elevation
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5.23 Internally, there is no accessible roof void. A small void was present; however, it was filled with loft insulation.

5.24 No evidence of bats was found externally or internally in Building E.

Neutral grassland (Plates 29-31)

5.25 There were three small areas of species poor, semi-improved neutral grassland around the buildings. The grassland areas appear to be former amenity grassland that have been left unmanaged since the closure of the Ambulance Station HQ. The grassland had a tall sward height and was abundant in cock's foot grass (*Dactylis glomerata*) with patches of occasional smooth meadow grass (*Poa pratensis*), false oat grass (*Arrhenatherum elatius*), bent sp (*Agrostis sp*), and red fescue (*Festuca rubra*). Herb species within the assemblage included meadow buttercup (*Ranunculus acris*), creeping cinquefoil (*Potentilla reptans*), bristly oxtongue (*Helminthotheca echioides*), spear thistle (*Cirsium vulgare*), sow thistle (*Sonchus sp*), selfheal (*Prunella vulgaris*), ribwort plantain (*Plantago lanceolata*), common ragwort (*Senecio jacobaea*), creeping buttercup (*Ranunculus repens*), dandelion (*Taraxacum officinale agg*), hop trefoil (*Trifolium campestre*), broad-leaved dock (*Remex obtusifolius*), Canadian fleabane (*Conyza canadensis*), yarrow (*Achillea millefolium*), greater willowherb (*Epilobium hirsutum*) and cleavers (*Galium aparine*).

Scrub (Plate 33)

5.26 A few small patches of scrub had established around the buildings. It was dominated by bramble (*Rubus fruticosus*) with other species including dog rose (*Rosa canina*), willow sp (*Salix sp*), pendulous sedge (*Carex pendula*) and rose sp (*Rosa sp*).

Introduced shrub (Plate 34)

5.27 There was an area of amenity planting at the entrance of Building C with species including cotoneaster sp (*Cotoneum sp*) (TN2), lavender (*Lavandula angustifolia*), ivy (*Hedera*), field rose (*Rosa arvensis*), hawthorn (*Crataegus monogyna*), willow sp and birch sp (*Betula sp*). The area has been unmanaged since the closure of the site and was overgrown.

5.28 Snowberry (TN1) was present on the site within the amenity grassland area between Building A and B and the area between Building B and E.

Scattered trees (Plate 32)

5.29 There were several semi-mature trees within the site; notably occasional silver birch (*Betula pendula*) between Building B and E, and a dead tree and two smaller fruit trees within the area between Building A and B.

Improved grassland

- 5.30 A small area of the adjacent field to the south of the former Ambulance Station HQ site occurs within the red-line boundary. This field was also surveyed and assessed during the 2021 PEA. The field condition appeared unchanged since the 2021 survey with an unmanaged sward and species-poor.
- 5.31 The sward was species-poor and dominated by coarse grasses such as Yorkshire fog (*Holcus lanatus*) and perennial rye grass (*Lolium perenne*), with cock's foot and false oat-grass also occasionally present. Injurious weeds such as broadleaved dock, spear thistle, creeping thistle (*Cirsium arvense*) and common ragwort were also frequently encountered within the sward, with few flowering herbs present such as red bartsia (*Odontites vernus*), buttercup (*Ranunculus*) and clover (*Trifolium*) species.

Habitats adjacent to site

- 5.32 The site is bordered by a new residential development to the north, St Kentigern hospice to the west and the Upper Denbigh Road development to the south.
- 5.33 The east of the site borders a linear strip of woodland, running roughly north to south, thought to be a former railway line. The woodland is separated from the site by an area of rough grassland. The woodland is dominated by trees including aspen (*Populus tremula*), pedunculate oak (*Quercus robur*), ash (*Fraxinus excelsior*) and sycamore (*Acer pseudoplatanus*) in the north but becomes shrubbier in the south with hawthorn and other shrubs becoming dominant. While the understorey was dominated by ivy, the understorey species were moderately diverse, with plants such as enchanter's nightshade (*Circaea lutetiana*), wood dock (*Rumex sanguineus*), St John's wort species (*Hypericum*) and a variety of fern species (*Dryopteris sp.*) observed.
- 5.34 The woodland provides suitable habitats for a range of species but is particularly important as a commuting corridor within the local landscape, particularly for mammals, such as bats.

Features of Ecological Interest

- 5.35 The following features were considered to be of ecological importance at the site level:
- Scattered semi-mature trees
- 5.36 It is recommended that where practicable, the trees be retained and sufficiently protected during development works. If they cannot be retained, then native trees of a ratio of 1:1 should be incorporated on the site.
- 5.37 In addition, the woodland adjacent to the eastern site boundary is considered to be of local ecological importance. The site proposals should therefore ensure that the woodland is not subject to any adverse effects during development, such as damage to vegetation, excessive noise or dust. An undeveloped buffer of at least 10m should ideally be implemented.

Species discussion

5.38 The habitat composition of the site has potential to support legally protected and Priority wildlife species. It was not within the scope of this survey to carry out detailed searches for protected species, although the potential for the study site to support the following species is discussed below:

- Badger
- Barn owl
- Bats
- Birds
- Brown Hare
- Great crested newt and other amphibians
- Hedgehog
- Invasive species
- Invertebrates
- Reptiles

Badgers

5.39 Badgers and their setts are protected under British law. Therefore, surveys are required to check for the presence of badgers or their setts if they are likely to be disturbed for any reason. Statutory guidance indicates that a licence may be required if potentially disturbing works are to take place within 30m of a badger sett.

5.40 Cofnod provided details of badgers occurring within 1km of the proposed development site since 2001, including badger setts, though no sett records were returned on or adjacent to the site.

5.41 During the 2021 PEA (CES, 2021) and subsequent badger walkover survey (CES, 2022) for the adjacent Upper Denbigh Road site, evidence such as latrines were found on the fields and a badger nest and outlier sett was found to be present in the woodland to the east. Both the outlier sett and nest are located over 30m from this proposed site.

5.42 The former Ambulance Station HQ site has limited suitable habitat for foraging badgers and no suitable habitat for sett building, given that the majority of the site is either buildings or hardstanding. No evidence of badgers was found on site or within 30m of the site.

5.43 As such, no further survey work in respect of badger is required.

5.44 Given that there are setts within the woodland to the east, it would be best practice to follow the reasonable avoidance measures (RAMs) set out for the adjacent development to which this will be an extension of.

5.45 The badger RAMs detailed below should be implemented during development works and may be secured by means of planning condition(s):

Badger Reasonable Avoidance Measures (RAMs)

- a) Prior to commencing development at the site, a suitably experienced consultant ecologist should be appointed by the developer to ensure that the badger RAMs are successfully implemented.
- b) As badgers are a highly mobile species and can quickly create new setts, a pre-commencement check of the site should be undertaken by the appointed ecologist no more than one month prior to the commencement of development activities at the site, in order to ensure the status of badgers at the site has not changed and that no setts are present on or within 30m of the working area.
- c) Wherever practicable, excavations should be made good to ground level at the earliest opportunity so as to remove any hazard to badgers or other wildlife that may inadvertently stray on to the construction site.
- d) Should any excavations be required to be left open at night, they should be covered with boards or similar. Alternatively, for shallower excavations that cannot easily be covered, a means of escape (e.g. a wooden ramp or plywood, etc.) should be provided.
- e) **If evidence of badger sett building activity is recorded on or adjacent the working area (within 30m) during the development works, work should cease and CES be contacted for advice.**

Barn owl

5.46 Barn owls receive special protection under Schedule 1 of the Wildlife & Countryside Act, 1981 (as amended). In addition to the protection afforded to all wild birds under Section 1 of the Act, species listed on Schedule 1 also receive special legal protection when breeding; making it an offence to intentionally or recklessly disturb any wild barn owl whilst it is at or near a nest containing eggs or young, or disturb the dependent young of such a bird. Barn owls nest and roost in buildings and within deep cavities in trees, and will readily utilise nest boxes where available.

5.47 Cofnod provided details of Barn Owl occurring within around 2km of the site since 2001.

5.48 The habitats onsite are unsuitable for foraging barn owls and the buildings do not provide suitable features for nesting barn owls. Therefore, the development of this section of the site would not adversely affect any barn owl population locally.

5.49 No further surveys are required.

Bats

5.50 All British species of bat and their roosts are protected under the provision of Section 9, Schedule 5 of the Wildlife & Countryside Act 1981 (as amended) and Regulation 41(I), Schedule 2 of The Conservation of Habitats and Species Regulations 2017 (as amended).

5.51 Cofnod provided twenty-three bat records within around 2km of the site since 2001, comprising soprano pipistrelle, common pipistrelle, pipistrelle species, brown long-eared bat, myotis bat species, noctule, lesser horseshoe and unknown bats species. Several records of roosts were returned, but no roosts were noted on site or within adjacent land parcels.

Trees

5.52 There were no trees on site that contain any suitable features that could be used by roosting bats. No further survey work or mitigation is required for bats in trees on site.

Buildings

5.53 The buildings on site were all inspected for their suitability to support roosting bats. PRFs were found in all the buildings and the following Table 10 summaries their suitability:

Table 10: Bat Roost Potential of the Buildings

Building reference	Bat roost potential (as per Table 1)	Reasoning
A	Moderate - High	The building contained several external and internal PRFs that could support bats and could potentially support larger pipistrelle sp roosts. No external evidence was found; however the survey was completed outside the optimum summer roosting season, and any evidence such as droppings could have been weathered away. Internal conditions are not ideal due to excess water ingress and natural light, however potential low number of bat droppings were found.
B	Low	Limited number of external PRFs that could be used by individual bats opportunistically.
C	Moderate - High	The building contained several external and internal PRFs that could support bats and could potentially support larger pipistrelle sp roosts. No external evidence was found; however the survey was completed outside the optimum summer roosting season, and any evidence such as droppings could have been weathered away. Internal conditions are not ideal due to excess water ingress and natural light, however potential low number of bat droppings found.
D	Low	Limited number of external PRFs that could be used by individual bats opportunistically.

E	Low	Limited number of external PRFs that could be used by individual bats opportunistically.
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- 5.54 The buildings have **Low** suitability for hibernating bats. Bats are not typically found to over wintering in these types of buildings. However, due to the uncertain nature of hibernation occurring with pipistrelle species (Korsten et al., 2015) unexpected incidents of hibernation could occur, albeit low. No further survey in respect of hibernating bats is considered necessary.
- 5.55 Presence/likely absence surveys of all five buildings will be required in the next active bat survey season, May to September, inclusive. The number of surveys required per building and timings should follow Table 7.1 and 7.2 of the BCT guidelines, as documented in table 11 and 12 below.

Table 11. Recommended timings for presence/absence surveys to give confidence in a negative result for structures.

Table 7.1 Recommended timings for presence/absence surveys to give confidence in a negative result for structures (also recommended for trees but unlikely to give confidence in a negative result).		
Low roost suitability	Moderate roost suitability	High roost suitability
May to August (structures) No further surveys required (trees)	May to September ^a with at least one of surveys between May and August ^b	May to September ^a with at least two of surveys between May and August ^b

^a September surveys are both weather- and location-dependent. Conditions may become more unsuitable in these months, particularly in more northerly latitudes, which may reduce the length of the survey season.

^b Multiple survey visits should be spread out to sample as much of the recommended survey period as possible; it is recommended that surveys are spaced at least two weeks apart, preferably more, unless there are specific ecological reasons for the surveys to be closer together (for example, a more accurate count of a maternity colony is required but it is likely that the colony will soon disperse). If there is potential for a maternity colony then consideration should be given to detectability. A survey on 31 August followed by a mid-September survey is unlikely to pick up a maternity colony. An ecologist should use their professional judgement to design the most appropriate survey regime.

Table 12 Recommended minimum number of survey visits

Table 7.3 Recommended minimum number of survey visits for presence/absence surveys to give confidence in a negative result for structures (also recommended for trees but unlikely to give confidence in a negative result).		
Low roost suitability	Moderate roost suitability	High roost suitability
One survey visit. One dusk emergence or dawn re-entry survey ^a (structures). No further surveys required (trees).	Two separate survey visits. One dusk emergence and a separate dawn re-entry survey. ^b	Three separate survey visits. At least one dusk emergence and a separate dawn re-entry survey. The third visit could be either dusk or dawn. ^b

- 5.56 Therefore, it is recommended that at least 3 dusk emergence/ dawn re-entry surveys of Buildings A and C and at least 1 dusk emergence/ dawn re-entry survey of Buildings B, D and E are conducted. If bat roosts are found within the buildings during the surveys, then further surveys may be required to characterise the roosts, and a mitigation licence is likely to be required.
- 5.57 A lighting proposal should be produced to avoid light spill onto the woodland belt to the east of the site. The Bat Conservation Trust provides guidance on bats and artificial lighting.

5.58 A bat and bird box scheme has been produced in conjunction with this report. It included the provision of bat boxes on new buildings to provide roosting opportunities for bat species on site. These are habitat enhancement features and have not been recommended as direct compensation for loss of bat roosts. If bat roosts are found within the buildings during the presence/likely absence surveys, then specific compensation suitable to the species and type of roost will be required.

Birds

5.59 All species of wild bird, their nest and eggs are protected under Section 1 of the *Wildlife and Countryside Act*, 1981 (as amended) and additional protection is afforded to species listed on Schedule 1 of the Act. Additionally, bird species listed on Section 41 of the NERC Act 2006 are Priority species of material consideration to planning.

5.60 Cofnod provided numerous records of Priority and protected bird species occurring within the search area since 2001.

5.61 All woody vegetation on site has potential to support nesting birds, with applicable habitats on site including scattered trees and dense scrub. Several of the buildings (A, B & D) were found to contain various old birds' nests including potential swallow and house sparrows' nests. Both species should be considered at planning.

5.62 The woody vegetation and buildings on site are proposed for removal/demolition to facilitate the development. While the habitats on site present suitable foraging and nesting habitat for Priority bird species, the availability of these habitats is plentiful in the wider landscape, and the losses under the proposed development are not envisaged to significantly affect the conservation status of protected and Priority bird species in the local area.

5.63 There are no habitats to be adversely affected that offer suitable habitat likely to support any Schedule 1 species such as kingfisher and peregrine, or ground nesting species.

5.64 **It is recommended that all site preparation works, including vegetation removal and building demolition, be conducted between September and February (i.e. outside of the 'core' nesting bird season, which generally encompasses March to August inclusive).** If this is not possible and works are required to be conducted during the 'core' bird nesting season, CES should be contacted, and a nesting bird survey be conducted prior to any potentially disturbing works taking place. In the event that nesting birds are found to be present, an appropriate mitigation strategy should be formulated and implemented.

5.65 It is also acknowledged that birds may nest outside the 'core' nesting bird season, and as such, due diligence must be shown by site staff or contractors when undertaking vegetation clearance activities outside this time. Should a nest be suspected, vegetation clearance works/ building demolition should cease and CES be contacted for advice.

5.66 The site could also be enhanced via the provision of nest boxes for birds within new buildings, via a bird box specification. Priority species tolerant of nearby human habitation should be targeted, including house sparrow (*Passer domesticus*), swift (*Apus apus*) and swallows. A bat and bird box plan has been produced in conjunction with this report.

Brown hare

5.67 Brown hare is a Local and UK BAP Priority species and is listed on Section 41 of the Natural Environment & Rural Communities Act, 2006.

5.68 Cofnod provided details of brown hare occurring within around 1km of the proposed development site since 2001, the closest record was located 1.1km to the south-west within open pasture fields.

5.69 The site offers limited suitable habitat to support brown hare, as it is mainly buildings and hardstanding, though the small area of improved grassland habitat in the south of the site is considered suitable. However, it is considered that the loss of this habitat on site would have a negligible effect on the conservation status of brown hares in the local area, given the extensive areas of similar habitat exist within the local area.

5.70 Due to the presence of suitable habitat on site, it is recommended that any work within these habitats which has potential to disturb leverets (young brown hares) be conducted outside of the brown hare breeding season; which generally encompasses February to August. If this is not practicable, it is recommended that the site be made unsuitable for breeding brown hares before February. The grass on site should be cut to a short sward height (<10cm) and maintained at this level until development works begin. This should deter brown hares from breeding on the site.

5.71 If brown hares or leverets are discovered during development works, CES should be contacted for advice. No further survey effort in respect of this species is considered necessary.

Great crested newt and smooth newt

5.72 GCN their resting places and breeding sites are legally protected under the provision of Section 9, Schedule 5 of the Wildlife & Countryside Act 1981 (as amended) and Regulation 41(l), Schedule 2 of The Conservation of Habitats and Species Regulations 2017 (as amended).

5.73 Adult GCN predominantly live terrestrially but utilise ponds for breeding purposes during the spring and summer months. Statutory guidance indicates that a survey may be necessary to check for the presence of GCN if background information on distribution suggests that they may be present. Detailed indicators include:

- Any historical records for GCN on the site, or in the general area

- A pond on or near the site (within around 500m), even if it holds water only seasonally. Note that muddy, cattle-poached, heavily vegetated or shady ponds, ditches and temporary flooded hollows can be used by GCN
- Sites with refuges (such as piles of logs or rubble), grassland, scrub, woodland, or hedgerows within 500m of a pond

5.74 Cofnod provided details of great crested newt, palmate newt and smooth newt occurring within 1km of the proposed development site since 2001. The closest record of GCN was located within a farmland pond 390m south of the site. The closest record of palmate newt to the site was 970m to the east and the closest record of smooth newt 980m to the north.

5.75 A single pond (Pond 1) was present in the adjacent Upper Denbigh Road development site, and five further potential ponds are within 500m of the site boundary. An eDNA survey was conducted by CES in April 2022 (CES, 2022) of Pond 1, no access was available to the further afield ponds. Pond 1 was an established field pond and it offered 'Good' suitability for GCN, according to the HSI. The pond was found to be negative for GCN eDNA and furthermore no GCN or eggs were found within the pond. As such, GCN are considered likely to be absent from the Pond.

5.76 The GCN eDNA report concluded that positive records of GCN had been returned for Pond 3 (390m south) in 2004. Therefore, given the terrestrial range of individual GCN from their breeding sites is typically within 250m, sometimes up to 500m, and occasionally over 1km, it is possible that individual GCN associated with the off-site ponds could include the Upper Denbigh site within their terrestrial range. However, given the evidence collected during the eDNA survey, they were likely absent from the site. However, Reasonable Avoidance Measures (RAMs) have been implemented on the site during the construction phase.

5.77 The habitats within the former Ambulance Station HQ site were considered suboptimal for GCN, given the lack of natural habitats with the majority of the site comprising buildings or hardstanding. However, there are small pockets of unmanaged grassland and scrub, though these are fragmented from the surroundings by the hardstanding and buildings.

5.78 It is therefore unlikely that GCN are present within this site. However, as good practice given the potential presence within 500m of the site, the GCN RAMs implemented on the Upper Denbigh site should be followed.

GCN/Amphibian Reasonable Avoidance Measures

- 1) It is recommended that the areas of grassland / scrub to be lost to the proposed development area should be maintained at a short level to discourage amphibians and other wildlife from the proposed clearance areas.
- 2) Prior to commencement of works, the developer (the applicant) shall undergo an ecological tool-box talk conducted by a suitably qualified ecologist, whereby the

Reasonable Avoidance Measures are discussed. An amphibian identification guide will be provided by the ecologist and a copy of the GCN RAMs will be retained on-site for reference throughout the development period.

- 3) The working area, together with any storage areas, will be kept clear of debris, and any stored materials (including waste materials) will be kept off the ground on pallets so as to prevent amphibians from seeking shelter or protection within them.
- 4) Where materials need to be delivered to the site for immediate use and/or temporary storage, care should be taken not to cause unnecessary or inadvertent damage or disturbance to neighbouring habitat.
- 5) Any open excavations (e.g. foundations / footings / service trenches etc.) will be covered with plywood sheeting (or similar) at the end of each working day. The edges of these sheets will be covered with a thick layer of topsoil or similar to prevent amphibians from seeking shelter beneath them. Any excavation must be in-filled and made good to ground level with compacted stone or similar at the earliest opportunity, so as to remove any hazard to amphibians / reptiles. If excavations cannot be covered overnight, then a soil/spoil ramp shall be provided as a means of escape.
- 6) All excavations that are required to be left open overnight shall be checked for the possible presence of wildlife that may have fallen in before being filled in. Ideally, all excavations should be filled at the end of the working day, or otherwise covered or a ramp provided to provide a means of escape.
- 7) The proposed working area shall be kept clear of materials and debris, which might otherwise attract sheltering amphibians or reptiles. Any earth that is required to be stored on site for later use shall be compacted so that animals cannot gain access within gaps.
- 8) During the construction period, if any common frog, common toad or smooth newt is discovered in the working area, it shall be captured by hand and released into suitable cover habitat (locations to be advised by the ecologist during the pre-commencement toolbox talk).
- 9) The RAMs DO NOT allow for GCN to be captured and moved from the site. In the event that GCN are found within the working area, work must stop and CES be contacted immediately for advice on how to proceed.

Hedgehog

5.79 Hedgehog are a UK BAP Priority species and listed on Section 7 of the Environment Wales Act. Hedgehogs favour mosaic habitats such as scrub, woodland edges and mature gardens, where they can forage amongst short vegetation and shelter in dense scrub and amongst cover objects.

- 5.80 Cofnod provided details of hedgehog occurring within approximately 1km of the proposed development site since 2001, the closest record being on Lower Denbigh Road 630m west of the site.
- 5.81 The pockets of scrub and grassland habitats on site were considered to offer hedgehog with limited suitable foraging and shelter habitat. Development at the site has the potential to impact upon hedgehogs, therefore it is recommended that all woody and scrub vegetation (standing or fallen) to be affected by the works be removed by hand prior to any potentially disturbing works taking place. These measures should be sufficient in discouraging and/or displacing hedgehogs from the working areas. Upon completion of the development, it is also recommended that hedgehogs be able to gain access to the gardens through a series of holes/gaps if close panel fencing or walls are to be used; although ideally boundaries would comprise hedgerows. Gaps should be at ground level, approximately 13cm by 13cm, and incorporated into each garden.

Invasive Species

- 5.82 Cofnod provided details of Himalayan cotoneaster (*Cotoneaster simonsii*) occurring within around 1km of the proposed development site, though as only a 4 figure grid reference was provided this could have been anywhere within a 1km area. While other records for invasive species were also returned, none were located on or in close proximity to the site. Himalayan cotoneaster is listed under Schedule 9, Part II of the Wildlife and Countryside Act 1981. As such, it is an offence under section 14(2) of the Act to plant this species or to cause it to grow in the wild.
- 5.83 Non-native cotoneaster sp (TN2) and snowberry (TN1) were recorded within the amenity introduced shrub and scrub. No other invasive species was noted during the survey. This area of vegetation will be removed to facilitate the development. The plants should be mechanically removed with the root mass excavated so as to remove the entire plant. The material should be chipped or burnt on site or removed to a licensed landfill as controlled waste.
- 5.84 It should be noted however that many invasive species spread profusely and can quickly colonise a new site. As such site contractors should be aware of the identification features of common invasive species, and CES contacted for advice should invasive species be suspected on site.

Invertebrates

- 5.85 Cofnod provided details of white letter hairstreak butterfly occurring within 2km of the site since 2001, the closest record at 1.8km north-west of the site.
- 5.86 Food plants for the white letter hairstreak are largely restricted to elms, including wych elm (*Ulmus glabra*), English elm (*Ulmus procera*) and small-leaved elm (*Ulmus minor*).

5.87 The site is therefore considered unlikely to be an important resource for white letter hairstreak, and no further survey is recommended in regard of this species or other invertebrates. Opportunity does exist however to provide additional food resources for white letter hairstreak, through using wych elm as a component of any new hedgerow planting on site.

Reptiles

5.88 All six species of British reptile are protected against intentional killing, injury or sale under Schedule 5 of the Wildlife and Countryside Act, 1981. The sand lizard and smooth snake are afforded a higher degree of protection under European law, which, amongst other things, makes it an offence to damage, destroy or obstruct their places of shelter or disturb these species in such a place. However, the distribution of these species is limited, and is largely restricted to a few southern counties in England, with the exception of some coastal sites in Merseyside and North Wales which support populations of sand lizard.

5.89 The distribution of the remaining 'common' species (i.e. adder, grass snake, slow worm and common lizard) is widespread. With some variation between species, reptiles prefer undisturbed habitats with open areas for basking and warmth, and more vegetated areas for shelter and feeding. They shelter and hibernate in crevices underground, such as within old mammal burrows, cracks within concrete bases and within spoil/rubble mounds.

5.90 Cofnd provided details of slow worm, common lizard and grass snake occurring within around 2km of the proposed development site since 2001, with all species present within a graveyard approximately 980m north of the site.

5.91 There is limited suitable habitat for common species of reptile with the only potential habitat the small pockets of unmanaged grassland and scrub which are fragmented from surrounding habitat by the buildings and hardstanding. Furthermore, presence/ likely absence reptile surveys of the adjacent Upper Denbigh Road site which contains far better habitats found no evidence of reptile using the site.

5.92 Therefore, it is highly unlikely that reptiles are associated with this proposed development site. No further survey work for reptiles is required. Furthermore, the GCN/amphibian RAMs will also serve to protect reptiles.

6.0 SUMMARY RECOMMENDATIONS TABLE

	Species potentially associated with the site/s?	Further survey effort required?	Survey timing	Recommendations
Badger	Unlikely	No	-	Implement Badger RAMs
Barn owl	No	No	-	-
Bats	Yes	Yes Presence/ likely Absence Surveys: Building A&C – at least 3 dusk emergence/ dawn re-entry Building B,D&E - at least 1 dusk emergence/ dawn re-entry	May-September, inclusive	No potentially disturbing work should take place until the results of the presence/ likely absence surveys are known. Further survey effort may be required if the bats are found to be present within buildings. A bat and bird box plan will accompany this report.
Birds	Yes	Potentially: Nesting bird surveys will be required <u>if</u> vegetation removal or building demolition works are to take place between March & September.	March - August	Vegetation removal and building demolition works should take place outside of the bird breeding season (i.e. October – February). A survey will not be required if potentially disturbing works are undertaken during this period. A bat and bird box plan will accompany this report.
Brown hare	Yes	No	-	Grassland on site should be kept low (<10cm) to deter brown hare from using the site.

Great crested newt	Unlikely	No		Implement GCN/Amphibian RAMs
Hedgehog	Yes	No	-	Where possible, all woody/scrub vegetation to be affected should be removed by hand prior to potentially disturbing works taking place. Access provision for hedgehog into garden areas should be made via gaps in fencing 13cm x 13cm.
Invasive Species	Yes – non-native plants	No		Remove cotoneaster sp. and snowberry and either chip or burn on site.
Reptiles	Unlikely	No	-	Implemented GCN/Amphibian RAMs will also cover reptiles
Recommendations for enhancement	<ul style="list-style-type: none"> • Bat and bird boxes on new buildings • A sensitive lighting scheme should be used to avoid the lighting of features suitable for bats i.e. woodland belt to the east 			

7.0 REFERENCES

CES: Site off Upper Denbigh Road, St Asaph, Denbighshire – *Preliminary Ecological Appraisal* (Revised March 2022)

CES: Site off Upper Denbigh Road, St Asaph, Denbighshire – *Badger Survey & Outline Mitigation Strategy* (Revised March 2022)

CES: Site off Upper Denbigh Road, St Asaph, Denbighshire – *Reptile Survey Report* (October 2021)

CES: Site off Upper Denbigh Road, St Asaph, Denbighshire – *GCN eDNA Survey Report* (May 2022)

Collins, J. (ed.) (2016) BCT Bat Surveys for Professional Ecologists Good Practice Guidelines (3rd edn). The BCT, London.

JNCC (2010). Handbook for Phase 1 Habitat Survey: A Technique for Environmental Audit. Joint Nature Conservation Council.

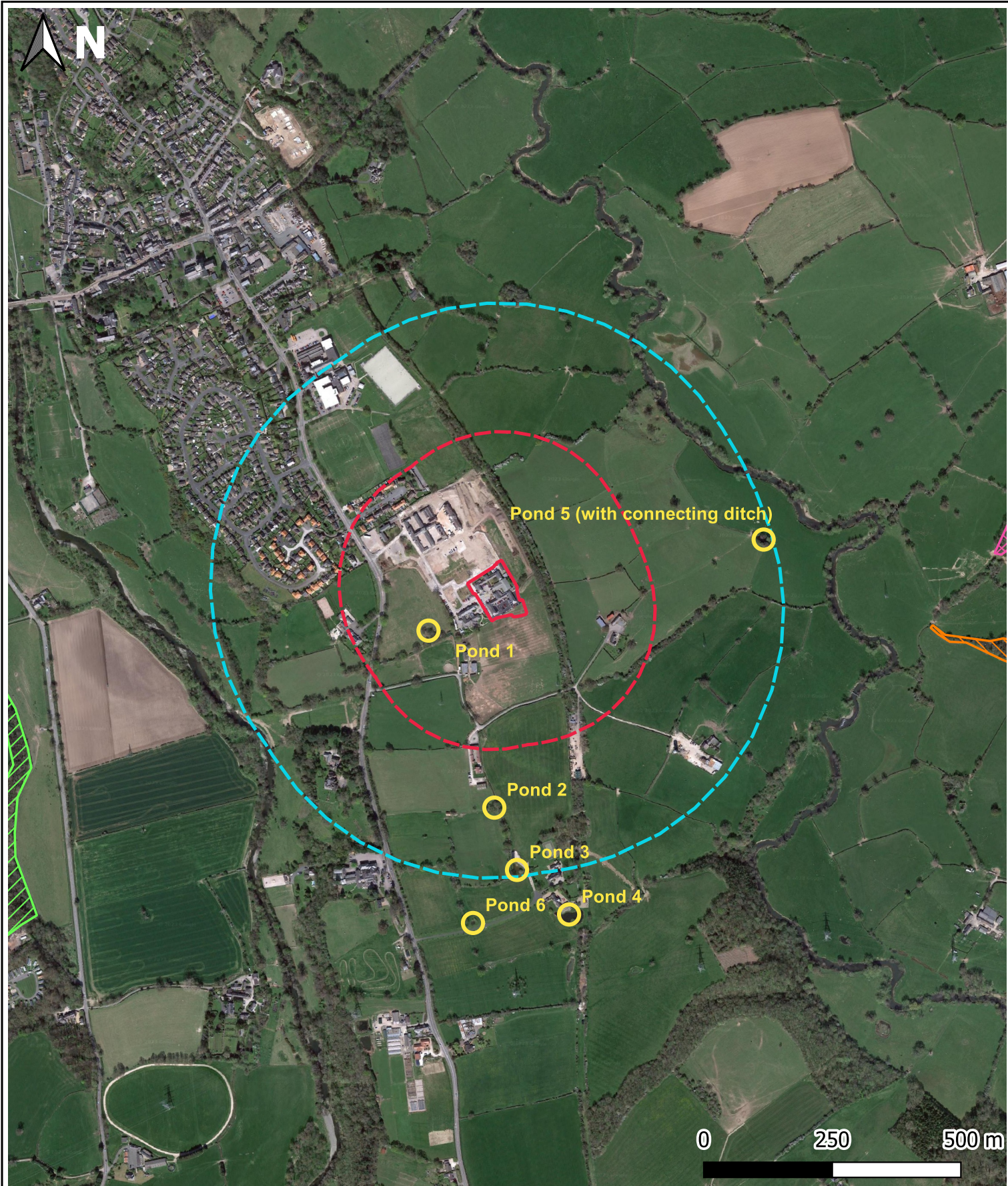
Harris et al (1989). Surveying Badgers: An Occasional Publication of the Mammal Society No.9, The Mammal Society

Shawyer, C. R. (2011). Barn Owl (*Tyto alba*) Survey Methodology and Techniques for use in Ecological Assessment: Developing Best Practice in Survey and Reporting. IEEM, Winchester.

Stace, C. (2019). New Flora of the British Isles. Fourth Edition. Cambridge.

Appendices

Appendix A: Site Location Plan



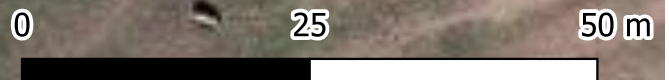
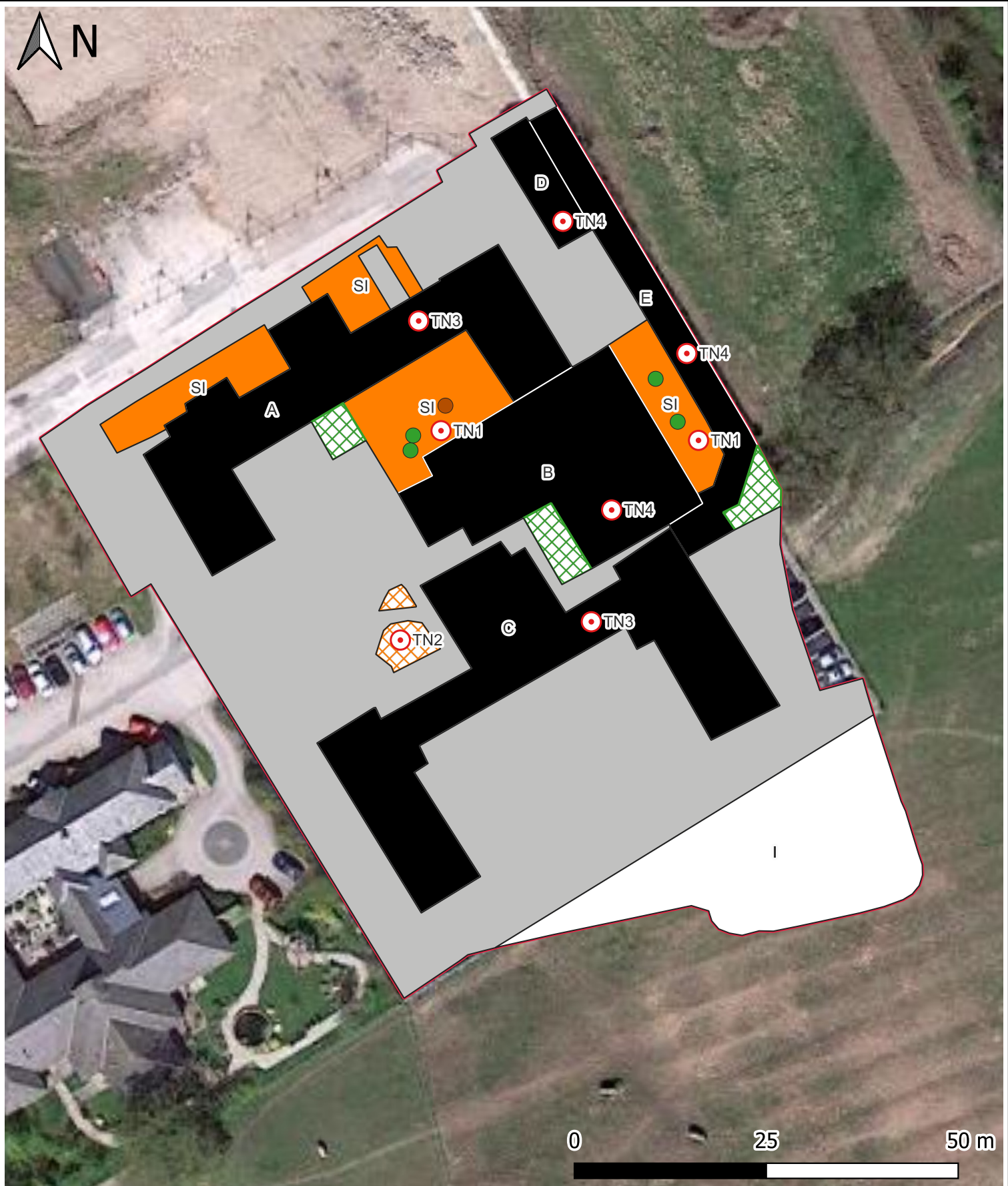
Bickley Hall Farm
Bickley
Malpas
Cheshire
SY14 8EF

Project:	Former Ambulance Station, St Asaph
Map:	Site Location Plan
CES Ref:	CES/750.160/01-23/KM
Scale:	Approximate
Date:	January 2023
Baselayer obtained from 'Proposed Site Plan', Revision O, Castle Green Homes, with whom all rights remain.	

- Site Boundary
- 250m Buffer
- 500m Buffer
- Ponds

- Local Wildlife Sites
- Coed Fron & Eryl Hall Wood
 - Fachwen Dingle
 - Nant Y Waen

Appendix B: Extended Phase 1 Habitat Survey Plan



Cheshire Ecological Services

Bickley Hall Farm
Bickley
Malpas
Cheshire
SY14 8EF

Project:	Former Ambulance Station, St Asaph
Map:	Extended Phase 1 Habitat Survey Plan
CES Ref:	CES/750.160/01-23/KM
Scale:	Approximate
Date:	January 2023
Aerial Baselayer obtained from Google Maps, Google LLC, with whom all rights remain.	

- Site Boundary
- Bramble Scrub
- Buildings
- Hardstanding
- Improved Neutral Grassland
- Introduced Shrub
- Poor Semi-Improved Neutral Grassland

- Scattered Trees
 - Dead Tree
- Target Notes
- TN1 - Snowberry
 - TN2 - Cotoneaster sp.
 - TN3 - Buildings with Moderate to High BRP (A & C)
 - TN4 - Buildings with Low BRP (B, D & E)


Appendix C : Bat Potential Roost Features Plan



Cheshire
Ecological Services

Key

A-E – Buildings

 A1, A2.....–
External potential
roosting features

 N - Old birds'
nests



St Kentigern Hospice

N



Google Earth



Cheshire
Ecological Services

Key

1-3 – roof voids within the buildings A and C.

D – Potential bat droppings within the voids.



Appendix D: Photographic Plates

Building A



Plate 1. Building A - western corner

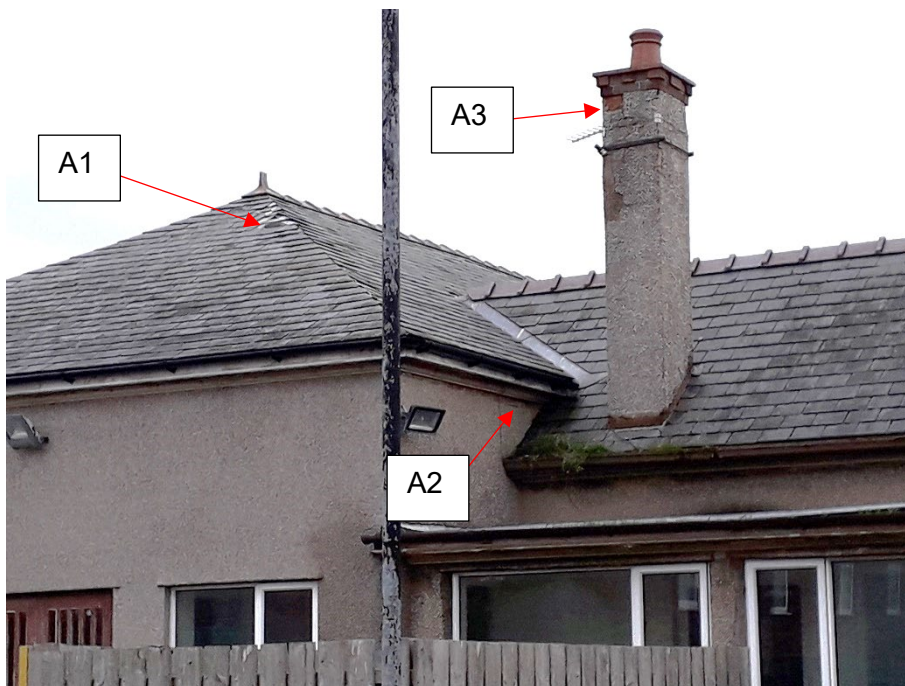


Plate 2. North-eastern section – PRFs A1- A3 on the north aspect.



Plate 3. Example of PRF A2 – gap between wall and soffit.



Plate 4. Rear view of the building and PRF A7 – missing slate on hipped end.



Plate 5. Evidence of potential swallow birds' nest under the soffit.



Plate 6. Internal view of roof void 1.



Plate 7. Potential bat droppings near the access hatch of void 1.



Plate 8. Missing slate within the roof of void 3.

Building B



Plate 9. North and east elevation.



Plate 10. Western elevation and location of PRFs.



Plate 11. Western elevation – PRF B1



Plate 12. Old birds' nests on the roof frame of overhanging roof.



Plate 13. Internal view of small roof void.

Building C



Plate 14. North-west elevation (front) of the building.



Plate 15. South-east elevation (rear) of the building.



Plate 16. Example of PRF C1 – gap between wall and soffit.



Plate 17. PRF C2 gap in the end tile.



Plate 18. Ceiling below roof void 1 and part of 2.



Plate 19. Roof void 2 access from void 3.



Plate 20. Potential bat droppings in void 2 by the access door to 3.

Building D



Plate 21. Southern gable end of the building. PRF D1 – gap under the fascia boards.



Plate 22. Northern gable end and access door on the western side. PRF D3 – gap at the end tiles.



Plate 23. Example of roof void within the building.



Plate 24. Old birds' nest within one of the central roof voids.

Building E



Plate 25. Western elevation of the building.



Plate 26. Building joining Building E to Buildings B and C.



Plate 27. Internal view of Building E.



Plate 28. Example of roof void filled with insulation.

Other Habitats on site



Plate 29. Unmanaged grassland at the front of Building A.



Plate 30. Unmanaged grassland at the front of Building A.



Plate 31. Unmanaged grassland between Buildings A and B with several trees and non-native snowberry.



Plate 32. Unmanaged area between Buildings B and E containing 2 sliver birch trees and non-native snowberry.



Plate 33. Small area of scrub by Buildings B and C.



Plate 34. Amenity planting (introduced shrub) by the entrance of Building C.

Appendix E: Relevant Legislation

Species/Habitat	Protected by:	UK BAP	Local BAP
Badger	<i>Protection of Badgers Act, 1992</i>	No	Yes
Barn owl	Schedule 1, Part 1 of the <i>Wildlife and Countryside Act, 1981</i>	No	Yes
Bats	Regulation 42 of <i>The Conservation of Habitats and Species Regulations, 2017</i> Section 9 of the <i>Wildlife and Countryside Act, 1981</i> (as amended) Section 7 of the <i>Environment (Wales) Act 2016</i>	Dependent on species	Dependent on species
Brown hare	Section 7 of the <i>Environment (Wales) Act 2016</i>	Yes	Yes
Butterflies & Moths	Section 7 of the <i>Environment (Wales) Act 2016</i>	Dependent on species	Dependent on species
Common frog	Provision 5 of Section 9 of the <i>Wildlife and Countryside Act, 1981</i> (as amended)	No	No
Common toad	Provision 5 of Section 9 of the <i>Wildlife and Countryside Act, 1981</i> (as amended) Section 7 of the <i>Environment (Wales) Act 2016</i>	Yes	Yes
Cotoneaster	Section 14 of the <i>Wildlife and Countryside Act, 1981</i> (as amended)	No	No
Great crested newt	Regulation 42 of <i>The Conservation of Habitats and Species (Amendment) Regulations, 2017</i> Section 9 of the <i>Wildlife and Countryside Act, 1981</i> (as amended) Section 7 of the <i>Environment (Wales) Act 2016</i>	Yes	Yes
Hedgehogs	Section 7 of the <i>Environment (Wales) Act 2016</i>	Yes	No
Invasive species	Section 9 of the <i>Wildlife and Countryside Act, 1981</i> (as amended)	-	-
Nesting birds	Section 1 of the <i>Wildlife and Countryside Act, 1981</i>	Dependent on species	Dependent on species
'Widespread' reptiles	Provisions 1 and 5 of Section 9 of the <i>Wildlife and Countryside Act, 1981</i> (as amended) Section 7 of the <i>Environment (Wales) Act 2016</i>	Yes	Dependent on species

The Conservation of Habitats and Species Regulations, 2017

European protected species are listed on Schedule 2 of the *Conservation of Habitats and Species Regulations 2010*. Those species listed on Schedule 2 are protected under Regulation 41, which refers to the protection of wild animals of a European Protected Species. The following is a summary of the offences listed under Regulation 41, however, the *Conservation Regulations* should always be referred to for the exact and current wording:

Under Regulation 41 of the *Conservation of Habitats and Species Regulations, 2010* it is an offence to –

- deliberately capture or kill a wild animal of a European protected species;
- deliberately disturb wild animals, in particular any disturbance which is likely:

- to impair their ability to survive, to breed or reproduce, or to rear or nurture their young; or
- to impair their ability, in the case of animals of a hibernating or migratory species, to hibernate or migrate;
- to affect significantly the local distribution or abundance of the species to which they belong
- deliberately take or destroy the eggs of such an animal; or
- damage or destroy a breeding site or resting place of such an animal.
- keep, transport, sell or exchange, or offer for sale or exchange, any live or dead wild animal of a European protected species, or any part of, or anything derived from, such an animal.

Wildlife and Countryside Act, 1981 (as amended)

British protected species of animal are listed on Schedule 5 of the *Wildlife and Countryside Act, 1981 (as amended)*. Those species listed on Schedule 5 are protected under Part 1, Section 9, which refers to the protection of certain wild animals. The following is a summary of the offences listed under Section 9; however the Act should always be referred to for the exact and current wording:

Under Section 9 of the *Wildlife and Countryside Act, 1981 (as amended)* if any person –

- intentionally kills, injures or takes any wild animal included in Schedule 5;
- has in his possession or control any live or dead wild animal included in Schedule 5 or any part of, or anything derived from such an animal;
- intentionally or recklessly damages or destroys, or obstructs access to, any structure or place which any wild animal included in Schedule 5 uses for shelter or protection;
- disturbs any such animal included in Schedule 5 while it is occupying a structure or place which it uses for that purpose;
- sells, offers or exposes for sale, or has in his possession or transports for the purpose of sale, any live or dead wild animal included in Schedule 5, or any part of, or anything derived from, such an animal; or,
- publishes or causes 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, he shall be guilty of an offence.

Wildlife and Countryside Act, 1981 (as amended) - Birds

All species of wild bird, their nests and eggs are protected under Section 1 of the *Wildlife and Countryside Act, 1981 (as amended)*; therefore surveys are required to check for their presence where they are likely to be disturbed for any reason.

The following is a summary of the offences listed under Section 1; however the Act should always be referred to for the exact and current wording:

Under Section 1 of the *Wildlife and Countryside Act, 1981 (as amended)*, if any person:

- Intentionally kills, injures or takes any wild bird;

- Intentionally takes, damages or destroys the nest of any wild bird while that nest is in use or being built;
- Intentionally takes or destroys an egg or any wild bird, he shall be guilty of an offence;
- Has in his possession or control any live or dead wild bird or any part of, or anything derived from, such a bird; or
- Has in his possession or control an egg of any wild bird or any part of such an egg, he shall be guilty of an offence.

Schedule 1 (Part 1 and Part 2) of the *Wildlife and Countryside Act, 1981* (as amended) lists bird species that receive special attention under Section 1. Any person convicted of an offence listed above, in respect of a bird included in Schedule 1 or any part of, or anything derived from, such a bird; the nest of such a bird; or an egg of such a bird or any part of such an egg, shall be liable to a special penalty.

Also, if any person intentionally or recklessly disturbs any wild bird included in Schedule 1 while it is building a nest or is in, on or near a nest containing eggs or young; or disturbs dependent young of such a bird, he shall be guilty of an offence and liable to a special penalty.

Schedules 1, 2, 3 and 4 of the *Wildlife and Countryside Act, 1981* (as amended) list different species of bird and different Parts of Section 1 of the Act refer to different offences which may be committed in relation to the varying Schedules. The following is a summary of the type of protection offered to species of wild bird listed on each of the Schedules, however the Act itself should always be referred to for the exact and current wording and full species lists:

Schedule 1: Birds which are protected by special penalties:

Part 1: At all times.

Part 2: During the close season.

Schedule 2: Birds which may be killed or taken:

Part 1: Outside the close season.

Part 2: By authorised persons at all times.

Schedule 3: Birds which may be sold:

Part 1: Alive at all times if ringed and bred in captivity.

Part 2: Dead at all times.

Part 3: Dead from 1st September to 28th February.

Schedule 4: Birds which must be registered and ringed if kept in captivity.

The Environment (Wales) Act, 2016

Section 7 of the *Environment (Wales) Act, 2016* replaces the duty in Section 42 of the *Natural Environment and Rural Communities (NERC) Act, 2006* (as amended). Section 7 comprises a list of species and habitats of principle importance which is the same as the list under the superseded Section 42 of the *NERC Act, 2006*. The *Environment (Wales) Act* itself should be referred to for the exact and current wording however a summary is detailed below:

- The Welsh Ministers will publish, review and revise lists of living organisms and types of habitat in Wales, which they consider are of key significance to sustain and improve biodiversity in relation to Wales;
- They must therefore consider any appropriate evidence, for example as provided in the State of Natural Resources Report, and also engage with any relevant stakeholders;
- The Welsh Ministers must also take all reasonable steps to maintain and enhance the living organisms and types of habitat included in any list published under this section, and encourage others to take such steps.

The *Protection of Badgers Act, 1992*

The following is a summary of the offences contained in the Act; however the *Protection of Badgers Act, 1992* itself should always be referred to for the exact and current wording.

Under the *Protection of Badgers Act, 1992* a person is guilty of an offence if, except as permitted by or under this Act he:

- wilfully kills, injures or takes, or attempts to kill, injure or take, a badger;
- has in his possession or under his control any dead badger or any part of, or anything derived from, a dead badger;
- cruelly ill-treats a badger;
- uses badger tongs in the course of killing or taking, or attempting to kill or take, a badger;
- digs for a badger; or,
- sells a live badger or offers one for sale or has a live badger in his possession or control.

A person is also guilty of committing an offence under the *Protection of Badgers Act, 1992* if he intentionally or recklessly interferes with a badger sett by doing any of the following things:

- damaging a badger sett or any part of it;
- destroying a badger sett;
- obstructing access to, or any entrance of, a badger sett;
- causing a dog to enter a badger sett; or,
- disturbing a badger when it is occupying a badger sett,

The definition of a badger sett within the meaning of the 1992 Act is given as “any structure or place, which displays signs indicating current use by a badger”. ‘Current’ is not defined in the Act, and may be open to interpretation. Natural England indicates that a sett is in ‘current’ use if it has been occupied at all over the previous 12 months. Whatever the interpretation of ‘current use’ however, it is important to note that a sett is protected whether or not there is a badger actually in residence at the time of inspection.

Natural England Guidelines (which is also referred to in Wales) state that work that disturbs badgers or their setts is illegal if not carried out under licence. Badgers could be disturbed by work near their sett even if there is no direct interference or damage to the sett itself, for example, using very heavy machinery within 30 metres of an active sett. Lighter machinery (particularly for any digging operation) within 20 metres, or light work such as hand digging or scrub clearance within 10 metres of an active sett, all require a licence. There are some activities which can cause disturbance at a far greater distance (such as using explosives or pile driving) and should therefore be given individual consideration. Certain criteria must be met before a licence can be issued to enable otherwise prohibited works to proceed. Such criteria may be subject to change without notice.

Timing of operations should also be considered. If required, site-specific badger disturbance licences are normally only issued between the months of July and October so as to avoid the badger’s breeding season. This aspect should be borne in mind when assessing any possible constraints upon the development timetable.



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