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Formby Business Centre, 42 Duke Street, Formby, Merseyside, L37 4AT

Tel: 01704 875781 Mobile: 07719 108429

Email address: stan@tyrer-ecologicalconsultants.co.uk
kylee@tyrer-ecologicalconsultants.co.uk

Spire Yale Hospital, Croesnewydd Road, Wrexham, LL13 7YP
(National Grid Reference: SJ 32046 50561)

Inspection & Assessment in Relation to Bats & Breeding Birds

Prepared for:

Lawray Architects
Croesnewydd Road
The Byre
Wrexham
LL13 7YP

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Spire Yale Hospital, Croesnewydd Road, Wrexham, LL13 7YP
Inspection & Assessment in Relation to Bats & Breeding Birds

Summary

As part of a proposed Planning Application at Spire Yale Hospital, Wrexham, a daytime inspection was undertaken in relation to bats & breeding birds. Proposed plans for the site include single storey extensions to the north east elevation; several trees will also be removed to provide supplementary car parking facilities. Therefore, The Tyrer Partnership undertook a daytime assessment of the building in relation to bats and breeding birds during November 2016.

During the internal investigation two loft spaces are present to the north east aspect of the building, however, they are extremely cluttered and restrictive due to the truss roof construction combined with extensive pipe work, thus as a consequence it would not suit the basic requirements of loft dwelling bats, such as the Brown Long Eared bat (*Plecotus auritus*). Furthermore, the immediate environs are considered as not being entirely suitable to meet the specific foraging requirements of this species and no recent or historic evidence to suggest the presence of loft dwelling bats was located during the inspection.

Traditional bitumen underfelt is present beneath the roof slates/tiles; which can provide opportunities for crevice dwelling species, however, during the investigation historic or recent evidence to suggest the presence of this species was not located although it should be noted evidence of crevice dwelling bats in lofts is not always present.

During the external inspection typical places often favoured by crevice dwelling bats species such as roof/ridge tiles/slates and soffit boards were found to be tight fitting and sealed to the brickwork with no bat ingress available. Further external facets that are used by bats, such as hanging tiles/fascia/barge boards, are absent.

The trees located to the north and north east of the site that are proposed for removal comprise of young and semi mature specimens consisting of Crack Willow, Horse Chestnut, Lime, Rowan and Silver Birch, however, none of which are capable of supporting a bat roost. For clarity that means the trees are devoid of typical places such as woodpecker, natural holes, splits, loose bark or cavities.

From the survey results it can be concluded that no physical evidence has been identified which would suggest the current or recent presence of crevice or loft dwelling bats. Furthermore, no potential roost opportunities have been identified within the hospital, and it can be conclusively established that the status of the building is considered to be of an absent categorisation in the context of roost bat opportunities and the proposed works will have no impact upon the species.

Due to the buildings unsuitability for breeding, there are no current implications in relation to barn owls or any other bird species that would prevent the extension of the building taking place, however, it is recommended that removal of the trees to the north and north east of the site should be timed outside of the breeding season of birds (March - August) of any year.

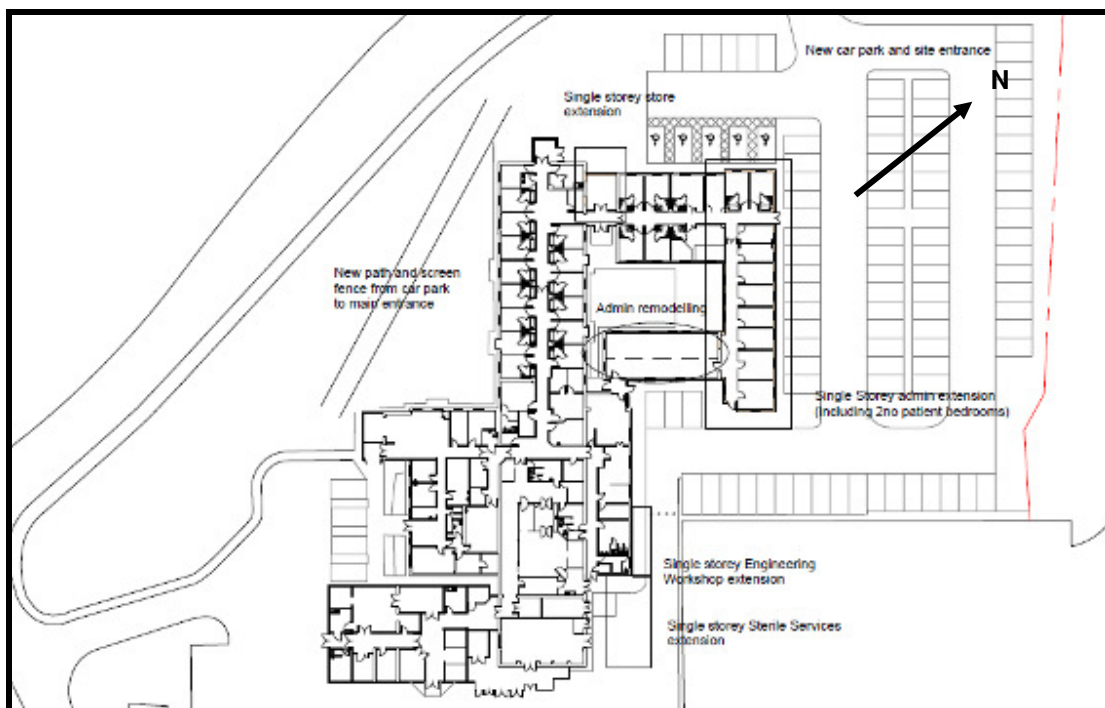
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1.0 Introduction & Reason for Surveys

- 1.1 As part of a proposed Planning Application at Spire Yale Hospital, Wrexham, a daytime inspection was undertaken in relation to bats & breeding birds. Lawray Architects on behalf of the site owner, commissioned the inspection and report. Proposed plans for the site include single storey extensions to the north east elevation; several trees will also be removed to provide supplementary car parking facilities. As part of the Local Authority's Planning Policies ecological surveys are generally required, prior to permission being granted, particularly where a protected species is or may be present that could be affected by the proposals for which the Application seeks consent.



Proposed site plan showing extension to the north east elevation of the hospital

- 1.2 The aim of the inspection was to initially ascertain if the building is of value to bats or breeding birds; if it was found to be suitable for bats, signs of use were located or the survey was inconclusive then more detailed surveys would be recommended i.e. dusk/dawn emergence/re-entry surveys during the main active season of bats which is May – August. If bat/s or their roost/place of rest/shelter is subsequently affected by the work then a European Protected Species Mitigation Licence would be required to proceed with the development.
- 1.3 The optimum time to investigate buildings for evidence of a bat roost is May – August, however that is not to say they cannot be inspected and assessed outside of that time and frequently the results can be conclusive, which can save time and expense for Planning Applicants but it should be borne in mind that equally the inspection can be inconclusive.

2.0 Protected Species & Their Requirements

- 2.1 All British bats and their **roosts are afforded protection under the 1981 Wildlife & Countryside Act (as amended) and are listed in Schedule 2 of the Conservation of Habitats & Species Regulations 2010 (as amended). When dealing with cases where a European Protected Species (all UK bats) may be affected, a planning authority is a competent authority within the meaning of the Regulation 7 of the 2010 Regulations and therefore has a statutory duty to have due regard to the provisions of the Regulations in the exercise of its functions.
- 2.2 *Planning Policy Wales* (PPW) (2002) sets out the land use planning policies of the Welsh Government (WG). It is supplemented by a series of Technical Advice Notes (TANs). Procedural advice is given in National Assembly for Wales / Welsh Office circulars. PPW, Ministerial Interim Planning Policy Statements (MIPPS), the TANs and circulars together comprise national planning policy to which local planning authorities in Wales must have regard in the preparation of development plans.
- 2.3 Detailed advice on the preparation of unitary development plans (UDPs) is contained in *Unitary Development Plans Wales*, 2001. Detailed advice on the preparation of Local Development Plans (LDPs) under the Planning and Compulsory Purchase Act 2004 is given in *Local Development Plans Wales*, 2005.
- 2.4 Technical Advice Note (TAN 5 2009) provides advice about how the land use planning system should contribute to protecting and enhancing biodiversity and geological conservation. This guidance note should be read in conjunction with *Planning Policy Wales* (2002), in particular with Chapter 5 *Conserving and Improving the Natural Heritage and Coast* which sets out the Assembly Government's objectives for the natural heritage and the land use planning policies which support these.

When determining planning applications, local planning authorities should aim to conserve and enhance biodiversity by applying the following principles:-

If significant harm resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused

2.5 Use of Buildings by Bats

- a) Summer breeding roost.
- b) Hibernation.
- c) Transitional or temporary roost.

Roost selection is often closely correlated to suitable foraging habitat within a reasonable commuting distance from the roost and different sites are used depending upon insect densities and abundance, climatic conditions can also affect their ability to successfully forage. All British bats are insectivorous.

** The term roost is generically referred to as a place that bat/s use for the any of the above reasons, however it should be noted that under the Conservation of Habitats & Species Regulations 2010 (Regulation 41) the term roost is not used but refers to “a breeding site or resting place of such an animal” and is afforded legal protection. The roost, breeding site or resting place of bats, which ever terminology is used is legally protected whether or not bats are in occupation.

- 2.6 All wild birds (with only minor exceptions) and their nests whilst being built or containing eggs or dependant young are protected under the Wildlife & Countryside Act 1981 (as amended). Birds listed on Schedule 1 e.g. barn owls are afforded a greater level of protection. Where nesting birds are present then work should be timed outside of the nesting season (March – August) so as to avoid disturbance.
- 2.7 Barn owls (*Tyto alba*) are a specially protected as a Schedule 1 Part 1 species under the 1981 Wildlife & Countryside Act (as amended), which gives protection to barn owls at all times. The main points in relation to nest sites are: “It is offence to intentionally or recklessly disturb them at or near a nest containing eggs or young. Intentionally damage or destroy a barn owl nest whilst in use or being prepared for use. It is also an offence to intentionally or recklessly disturb dependant young of a wild barn owl.”
- 2.8 Within buildings adaption to artificial nest boxes occurs given that suitable habitat exists within feeding range and linear features such as hedgerow, ditches or watercourses are present as links to other areas, which allows the expansion of young barn owls looking for territories. The boxes can serve both as a breeding site and as a place for general roosting or shelter.
- 2.9 Barn owls are essentially a bird of the open countryside, particularly where rough grassland exists, which supports their main prey by way of small mammals and successful breeding is heavily dependant upon 1) a secluded nest site and 2) a plentiful supply of prey being available. It is possible that loss of an occupied nest site can have an adverse affect even if other alternative sites were made available.

Thus where possible it is always preferable to retain an occupied site and not take the approach of providing an alternative in a different location.

3.0 Bat Species in North Wales

- 3.1 Up to eleven bat species have been recorded in North Wales, most of which use built structures, notably occupied residential properties, for roosting. The most frequently encountered species is the Pipistrelle bat (*Pipistrellus*) and its abundant status in North Wales is reflected throughout the UK.
- 3.2 Barn owls are regularly recorded within North Wales where an agricultural matrix that includes suitable bank sides of drainage ditches or rough pasture that will provide habitat for their main prey i.e. small mammals; however they are constantly under threat from loss of habitat and nest sites, which is a situation that is mirrored throughout most of the UK.

4.0 Survey Methodology

4.1 BCT Survey Good Practice Survey Guidelines state:

The guidance should be interpreted and adapted on a case-by-case basis, according to the expert judgement of those involved. There is no substitute for knowledge and experience in survey planning, methodology and interpretation of findings, and these guidelines are intended to support these. Where examples are given they are descriptive rather than prescriptive.

In context with the above the daytime survey was conducted by an experienced bat surveyor and the methodology, results and conclusions of the survey were established by the experience and judgement of the surveyor.

- 4.2 The daytime survey was conducted on 16th November 2016 when the building that will be extended was inspected for potential places that may be of value to bats and if evidence of use was present. Two loft spaces are present within the hospital which were inspected for evidence of use which mainly includes droppings or prey items; the interior was also considered in terms of its suitability for roosting bats and all external elevations were investigated from ground floor level, with the aid of close focussing binoculars, for places that are frequently used by bats as roosts or as access into roost chambers.

- 4.3 The survey was conducted by Mrs K Wilding, a highly experienced bat surveyor whom holds a Natural England Class 2 bat license (CLS-14227), but more relevant to the site location is an accredited agent on a Natural Resources Wales bat license (Mr S Irwin: 73156: OTH: CSAB: 2014); the inspection was undertaken at a time when bats are at the end of their breeding season which falls within a sub optimum time to undertake such surveys. Furthermore Mrs Wilding is also an accredited agent on the NRW barn owl disturbance licence held by Mr Irwin. (71664:OTH:DBE:2016)

- 4.4 The results, conclusions and recommendations are based on a number of factors i.e.

Practical experience of surveyor
Knowledge of bat species relevant to the site location and geographical range
Nature of the immediate and surrounding habitat in relation to foraging opportunities
Condition of the building
Presence/absence of a loft space
Presence/absence of roost potential
Value of roost potential – if present

- 4.5 Trees within the site were also investigated in relation to bat roost opportunities that could include woodpecker/natural holes, crevices or split limbs and nesting bird potential.

Criteria for roost assessment are based upon the following determinant which is based upon the Bat Conservation Trust 'Bat Surveys: Good Practice Guidelines' (2016):

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Table 4.1 Guidelines for assessing the potential suitability of proposed development sites for bats, based on the presence of habitat features within the landscape, to be applied using professional judgement.		
Suitability	Description Roosting habitats	Commuting and foraging habitats
Negligible	Negligible habitat features on site likely to be used by roosting bats.	Negligible habitat features on site likely to be used by commuting or foraging bats.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions ^a and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity or hibernation ^b). A tree of sufficient size and age to contain PRFs but with none seen from the ground or features seen with only very limited roosting potential. ^c	Habitat that could be used by small numbers of commuting bats such as a gappy hedgerow or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.
Moderate	A structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions ^a and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only – the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed).	Continuous habitat connected to the wider landscape that could be used by bats for 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	A structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions ^a and surrounding habitat.	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.

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

^b Evidence from the Netherlands shows mass swarming events of common pipistrelle bats in the autumn followed by mass hibernation in a diverse range of building types in urban environments (Korsten *et al.*, 2015). This phenomenon requires some research in the UK but ecologists should be aware of the potential for larger numbers of this species to be present during the autumn and winter in large buildings in highly urbanised environments.

^c This system of categorisation aligns with BS 8596:2015 Surveying for bats in trees and woodland (BSI, 2015).

4.7 Due to the building being categorised as absent in terms of bat roost potential and that a full assessment of the site and the immediate and extending landscape relative to bats could be undertaken, a data search was not requested in context with the site nor can it be justified.

4.8 The inspection for birds was conducted in tandem with the investigation for bats, when they will be outside of their breeding season; external elevations of the building were inspected for signs indicative of nesting birds such as nests, or accumulations of nesting materials and droppings. The overall potential of the site including the surrounding habitat to meet the basic requirements of nesting birds was also assessed during the site visit.

5.0 Constraints

5.1 The daytime survey was conducted outside of the breeding season, when bats are within the early stages of hibernation and birds are not nesting which is not within the optimum time to undertake such surveys. However, no access restrictions preventing assessment of all required building areas arose. Consequently, a full appraisal and inspection of the building was achievable in relation to assessing the level of bat roost/nesting bird potential that may exist.

- 5.2 Taking into consideration the above it is considered that there were no significant survey constraints that would prevent the gathering of information on which to base conclusions and recommendations.

6.0 Daytime Results

- 6.1 The study site is located on the outskirts of Wrexham in an urban environment, approximately 1.60 kilometres north west of Wrexham town centre; it is one of a number of buildings within Wrexham Technology Park which generally comprise of medical facilities. Several young / semi mature trees are located to the perimeter of the car park and a mature linear tree line; Croesnewydd Hall trees are observed to the north east.
- 6.2 The extending landscape is represented by established tree lines to the south west which provide connecting foraging / commuting routes to further features beyond the site, which notably comprise of woodland at Plas Power Park and the Clywedog trail incorporating the River Clywedog. The identified habitat features, as part of the wider ecological mosaic can be considered as being of high value for the species for which the survey was undertaken, subject to them being present in the locality. Where such habitat is present close to buildings then the percentage use of those buildings, by bats/barn owls, increases given that roost/nesting opportunities are available and vice versa.



Location of Spire Yale Hospital within the immediate landscape

- 6.3 Open pasture and agricultural land within the wider landscape provides a high level of favourable hunting grounds for barn owls, and where this landscape is present close to buildings the percentage use of those buildings, by barn owls increases given that roost/nesting opportunities are available and vice versa.
- 6.4 Spire Yale Hospital provides private health care within North and Mid Wales, Cheshire and Shropshire; currently it is fully operational providing a wide range of medical care for its patients. The construction of the hospital comprises of single and two storey elements of brick construction with both slate and tile hipped roof pitches; the building is representative and of typical design suited to its purpose.
- 6.5 During the internal investigation two loft spaces were identified to the north east aspect of the building, they are respectively noted to be to approximate dimensions of 29 metres long x 15 metres (at widest point) x 1.25 metres high and 14 metres long x 12 metres wide x 1.25 metres high. Internally, they are extremely cluttered and restrictive due to the truss roof construction combined with extensive pipe work, thus as a consequence would not suit the basic requirements of loft dwelling bats, such as Horseshoe bats (*Rhinolophus*) or the Brown Long Eared bat (*Plecotus auritus*) as these are a species that generally favour unrestricted loft spaces that allow free flight, with consistent warm and relatively stable temperatures. Furthermore, despite the extending habitat offering potential, the immediate environs are considered as not being entirely suitable to meet the specific foraging requirements of these species and no recent or historic evidence to suggest the presence of loft dwelling bats was located during the inspection.
- 6.6 Traditional bitumen underfelt is present beneath the roof slates/tiles; the presence of such lining can provide opportunities for crevice dwelling species, whereby they often roost between tiles/slates and roofing materials, provided external access exists. The breeding roosts of Pipistrelle bats are proportionally higher in occupied residential dwellings where the warm, dry conditions favour the requirements of a maternity colony but other structures are also used, especially for hibernation or by male bats which do not need the same conditions as a maternity colony. During the investigation historic or recent evidence to suggest the presence of this species was not located although it should be noted evidence of crevice dwelling bats in lofts is not always present.
- 6.7 During the external inspection typical places often favoured by crevice dwelling bats species such as roof/ridge tiles/slates and soffit boards were found to be tight fitting and sealed to the brickwork with no bat ingress available. Further external facets that are used by bats, such as hanging tiles/fascia/barge boards, are absent.
- 6.8 The trees located to the north and north east of the site that are proposed for removal comprise of young and semi mature specimens consisting of Crack Willow, Horse Chestnut, Lime, Rowan and Silver Birch, however, none of which are capable of supporting a bat roost. For clarity that means the trees are devoid of typical places such as woodpecker, natural holes, splits, loose bark or cavities.

- 6.9 The extending habitat is considered as being suitable for barn owls; however the building is devoid of potential in relation to breeding/roosting. Due to its construction and nature it is considered less than ideal as there are no cavities or secluded places to nest or access into loft spaces. Signs of other nesting birds that rely upon built structures, e.g. Swallows (*Hirundo rustica*), House martin (*Delichon Urbica*) or Swift (*Apus apus*) was, on the day of the survey were absent.

7.0 Conclusions

- 7.1 High value opportunities for loft dwelling species are absent throughout the building, thus, it is considered the proposed extension of the hospital will not impact upon loft dwelling bats and no further surveys will be recommended.
- 7.2 From the survey results it can be concluded that no physical evidence has been identified which would suggest the current or recent presence of crevice dwelling bats. Furthermore, no potential roost opportunities have been identified within the hospital, and it can be conclusively established the status of the building is considered to be of an absent categorisation in the context of roost bat opportunities and the proposed works will have no impact upon the species.
- 7.3 Due to the buildings unsuitability for breeding, there are no current implications in relation to barn owls or any other bird species that would prevent the extension of the building taking place.

8.0 Daytime Survey Recommendations

- 8.1 In relation to bats, no further specific recommendations or additional surveys are applicable in relation to the proposed work schedule at Spire Yale Hospital but as generic advice if at anytime bat/s is are encountered then as a legal requirement work should immediately cease and a bat ecologist contacted for further advice.
- 8.2 It is recommended that removal of the trees to the north and north east of the site should be timed outside of the breeding season of birds (March - August) of any year, if this can not be achieved, then a further site visit, by an ecologist, should be conducted to establish if nesting birds are present. If nesting birds were present during a subsequent visit the work will need to be re-scheduled so as to avoid potential damage to an occupied nest and subsequently committing an offence.

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**Appendix I –
Site Photographs**



Front & general nature of Spire Yale Hospital



Location to the north east where extension is proposed



Further area of the building to the north east where extension is proposed

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Trees proposed for removal to the north and north east of the site