

Preliminary Roost Assessment (PRA)

for

Min Yr Afon, Cwmafan



Project data

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1 Summary

1.1 Proposed Development

- 1.1.1 This report has been written to support a planning application to Neath Port Talbot Council for the conversion of a former residential care home to a mix of office, retail, café facilities. Due to the potential presence of roosting bats, bat surveys are required as part of the planning application submission.

1.2 Surveys

- 1.2.1 A Preliminary Roost Assessment (PRA) of the Site was completed in June 2022 and an assessment for breeding birds was made at the same time.

1.3 Results and Assessment

- 1.3.1 Evidence of common pipistrelles was found during the survey, and a number of features within the existing building that may potentially be suitable for roosting bats were also identified.
- 1.3.2 No evidence of nesting birds was noted within the building, although potential for this in the future is possible.

1.4 Recommendations

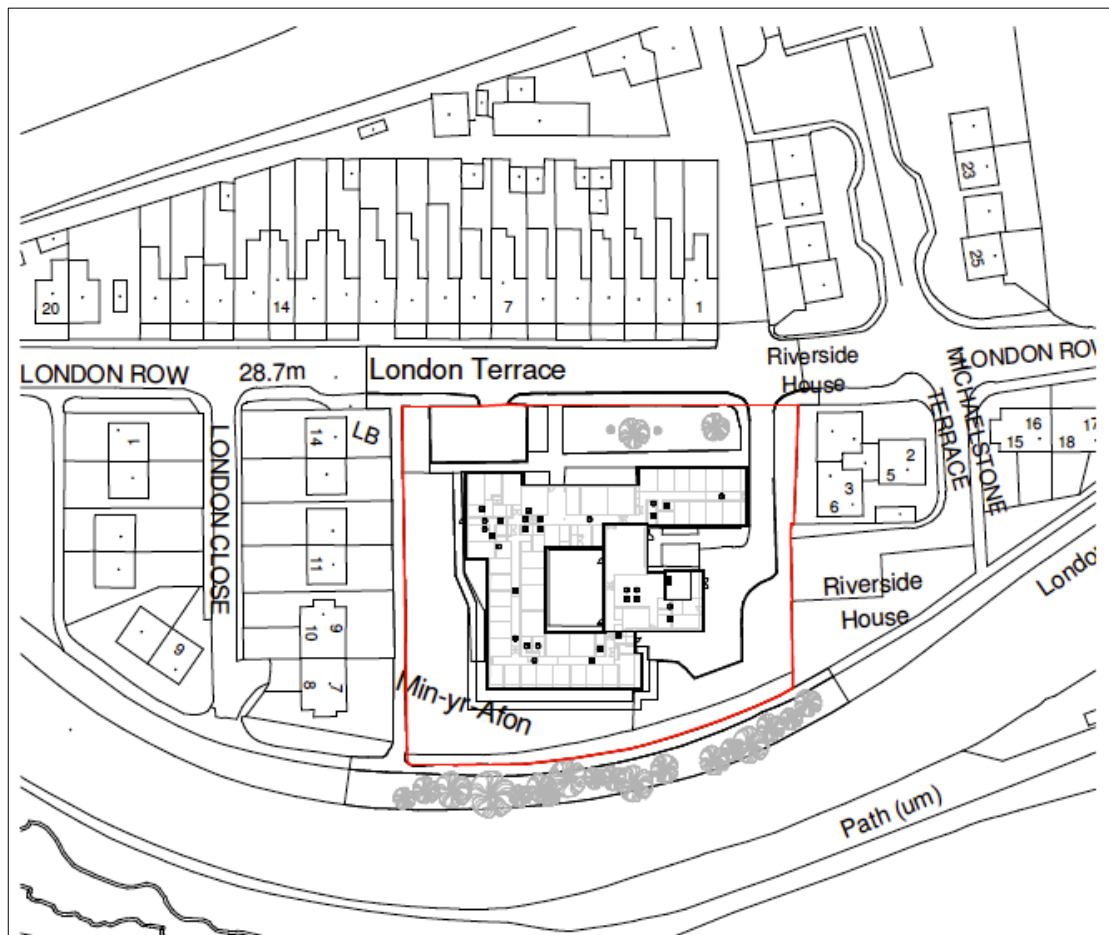
- 1.4.1 Additional survey work in relation to bats is required in order to confirm/discount presence and characterise the likely pipistrelle roost in order to fully assess the impacts of the development proposals on bats. Recommendations in relation to possible enhancements have also been made.
- 1.4.2 It is also recommended that repeat surveys are completed if more than two years passes prior to works commencing, even if planning consent has already been granted.

2 Introduction

2.1 The Proposed Development

- 2.1.1 Koru Ecology Associates was commissioned in June 2022 by Andrew Rees of SWS Property Rentals ("the Applicant") to complete a Preliminary Roost Assessment (PRA) at the former residential care home at Min Yr Afon in Cwmafan ("the Site"). The Site is centred on approximate National Grid Reference SS7796791870 and its location is shown in Figure 1 below.

Figure 1. Site Location.



- 2.1.2 This report has been prepared as part of a planning application to Neath Port Talbot Council for the proposed conversion of the existing building to a mix of office, retail, café facilities.

2.2 Study Aims

- 2.2.1 This report details the results of the PRA and gives an initial assessment of the likely impact of the development proposals on bats. An assessment of impacts on breeding birds is also given.
- 2.2.2 Where appropriate, advice is given to help minimise impacts on bats and breeding birds, together with recommendations for additional survey work required and European Protected Species (EPS) mitigation licensing. If followed correctly, this advice will ensure that the development complies with current nature conservation policy and legislation.

3 Methodology

3.1 Study Scope

3.1.5 Koru Ecology Associates was commissioned by the Applicant to complete the following works in relation to the Site:

1. Desk-based study, including written consultation with the local biodiversity records centre to identify records of bats within the local area, and nearby protected sites designated for bats.
2. Preliminary Roost Assessment of the existing building, together with a number of trees scheduled for removal.
3. A check for signs indicating the presence of nesting birds.

3.1.6 All surveys were completed in accordance with current guidance (Collins, 2016).

3.2 Surveyor Qualifications and Experience

3.2.1 Diana Clark MSc MCIEEM completed the survey work for this project and wrote this report. Diana has worked as a consultant ecologist since 2003 and holds two degrees in related disciplines. She is also a full member of the Chartered Institute of Ecology and Environmental Management (CIEEM) and holds a Natural Resources Wales science, education and conservation licence with respect to bats (licence number S088381/1). Koru Ecology Associates is also a CIEEM Registered Practice.

3.2.2 This report has been subject to technical review by Steve Hancock CEnv MCIEEM. Steve has worked as a consultant ecologist since 2009 and holds a degree in a related discipline. Steve is a Chartered Environmentalist, a full member of CIEEM and holds a Natural Resources Wales science, education and conservation licence with respect to bats (licence number S088498/1).

3.3 Study Limitations

3.3.1 Every effort was made during field visits to complete comprehensive surveys and produce a detailed description of the Site. However, no investigation can ensure the

complete characterisation and prediction of the environment 100% of the time. Natural and semi-natural habitats change over time, and thus results given in this report may become less reliable in the future. Repeat surveys are usually recommended if a significant period of time elapses between when surveys were completed and when works commence. Further details are given in Section 6 of this report.

- 3.3.2 No significant constraints were encountered during the survey.

3.4 Desk Study

- 3.4.1 South East Wales Biodiversity Records Centre (SEWBReC) was contacted and asked to supply records of bats within 2km of the Site. Records of roof-nesting birds within 150m were also requested.
- 3.4.2 The MAGIC website (<http://magic.defra.gov.uk>) was searched for details of Special Areas of Conservation (SACs) and Sites of Special Scientific Interest (SSSIs) relevant to bats within 10km of the Site.
- 3.4.3 Whilst biological data searches aren't always necessary for smaller projects such as those impacting a single building, due to the isolated nature of the building, together with the presence of linked tree/woodland habitat close by, a data search was considered appropriate for this project. Desk study data can help provide some additional information with regards to local context.

3.5 Preliminary Roost Assessment

- 3.5.1 A Preliminary Roost Assessment was completed by Diana Clark on 21st June 2022. During the visit, the building was assessed for its potential to support roosting bats, in accordance with current guidance (Collins, 2016), and included both external and internal inspections. Information searched for included locating clear evidence of bat presence (such as live or dead specimens, droppings, staining and/or vocalisations) and/or potential roosting locations/access points (such as lifted tiles, gaps between fascias and walls, missing mortar in stonework, lifted lead flashing, gaps in timber joints, hanging tiles etc.).
- 3.5.2 A high-powered torch was used to inspect internal areas of the building, and an endoscope was used to more closely examine cracks, holes and gaps where required.

Additionally, close-focusing binoculars were used to visually check any inaccessible parts of the external roof structure. Photographs and notes were taken of the building and any features of interest.

3.6 Breeding and Roosting Birds

- 3.6.1 During the Preliminary Roost Assessment visits, the building and the trees were also checked for evidence of breeding and/or roosting birds. Evidence indicating their presence includes signs of nesting (for example, associated with chimney structures, internal beams, at the top of internal attic walls, within walls themselves, externally attached to buildings immediately below eave boards etc.). Additionally, the presence of birds themselves, droppings, pellets and broken egg shells were also looked for. Where present, notes were taken with regards to the location of any evidence and (where possible) likely species.

4 Results

4.1 Desk Study

- 4.1.1 No Special Areas of Conservation (SACs) or Sites of Special Scientific interest (SSSIs) designated for the presence of bats are located within 10km of the Site.
- 4.1.2 SEWBreC returned 19 records of bats within 2km of the Site, the majority of which are foraging/commuting/acoustic records and located at least 600m from the Site. An unidentified bat roost was recorded approximately 700m from the Site in 2004, with no further details provided. Two bat rescue records were also noted, although no details with regards to a possible roost were mentioned. Species recorded include common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelle *P. pygmaeus*, noctule *Nyctalus noctula*, whiskered *Myotis mystacinus* and Daubenton's *M. daubentonii*.
- 4.1.3 SEWBreC returned 31 records of roof-nesting birds within 2km of the Site, including Eurasian blue tit *Cyanistes caeruleus*, house martin *Delichon urbicum*, kestrel *Falco tinnunculus*, swallow *Hirundo rustica*, European herring gull *Larus argentatus*, lesser black-backed gull *L. fuscus*, pied wagtail *Motacilla alba*, spotted flycatcher *Muscicapa striata*, great tit *Parus major*, house sparrow *Passer domesticus*, starling *Sturnus vulgaris* and barn owl *Tyto alba*. All of these records are located at least 500m from the Site.

4.2 Site Context

- 4.2.1 The Site is located on the south eastern edge of Cwmafan and is bordered to the north west by the residential street known as London Row, beyond which is the wider Cwmafan settlement. The River Afon is located approximately 20m to the south east of the Site, along which a narrow strip of woodland is present. Beyond the river to the south is the A4107 and open countryside with pockets of forestry.
- 4.2.2 Figure 2 below shows the Site location within the context of the local area.

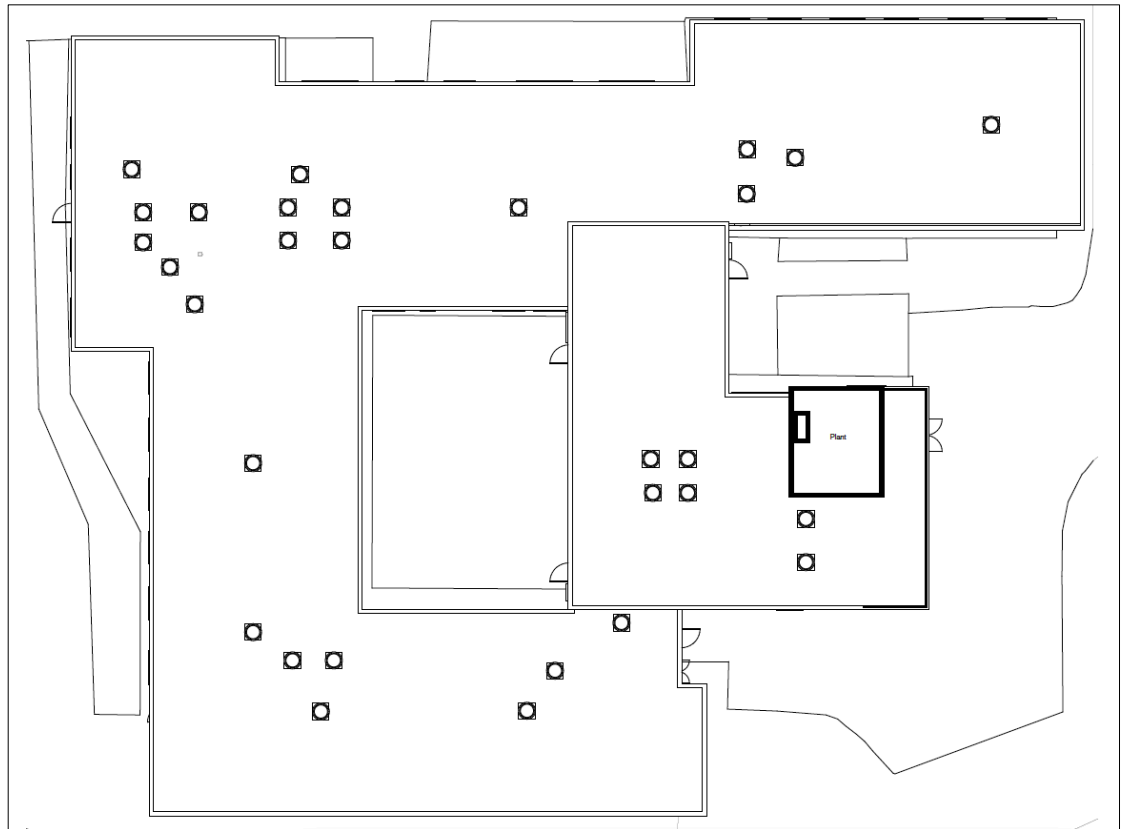
Figure 2. Site Context.



4.3 PRA of the Building

- 4.3.1 Figure 3 below shows the existing layout of the Site. The building is single storey brick built and has a felted flat roof (see Figure 4). An additional structure is present on the roof of the building, towards the eastern edge, and is covered with uPVC cladding, with several areas of damage noted (Figure 5).
- 4.3.2 The building is of brick construction with cladding on the top c.1m of the external walls. This is uPVC to the front (north) – and for a short section to the west and east – and wooden boarding to the rear (south) and much of the sides (west and east). The windows are uPVC framed and are nearly all well-sealed and boarded up. One or two windows to the rear have missing/damaged glass (Figure 6).
- 4.3.3 The uPVC cladding is in reasonable condition, although a number of areas there are gaps around the tops of this, particularly above windows, and gaps underneath (see Figures 7 – 9 for some examples). The wooden cladding is in poor condition and there are numerous areas where this is rotten, damaged, lifted away from the walls or just missing completely, exposing the brickwork below – which in many areas to the rear is also damaged (see Figures 10 – 12 for some examples).
- 4.3.4 A single suspected bat dropping was noted on one window to the front, directly below a gap in the roof verge above (see Figures .

Figure 3. Existing layout of the building.



- 4.3.5 A narrow crack in brickwork, where two sections of wall are poorly joined together, is present on the western elevation. No other signs of bats were noted during the external visual inspection.
- 4.3.6 A store room on the south eastern corner of the building is open externally, and there is a crack to the rear at the top of the wall with potential access for bats.
- 4.3.7 Figure 14 below shows the location of a number of the features mentioned above, alongside detailed target notes describing several in more detail.

Figure 4. Single storey building with a flat roof.



Figure 5. Additional structure on the roof to the east.



Figure 6. Window to the rear with missing glass.



Figure 7. uPVC cladding – gaps underneath.



Figure 8. uPVC cladding – gaps underneath and above windows.

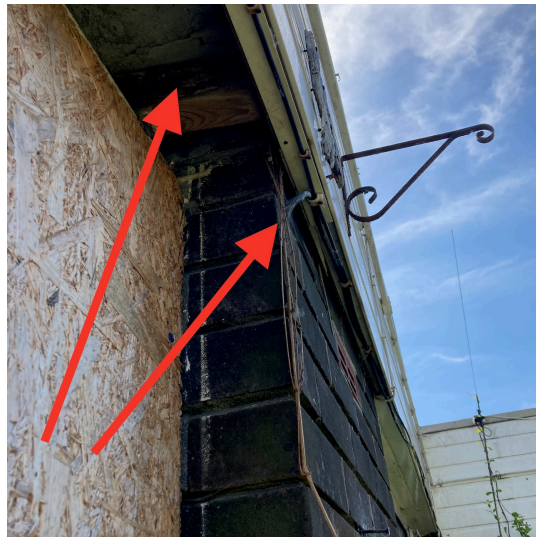


Figure 9. Gaps along roof verge at top of cladding.



Figure 10. Damage to wooden cladding, south east corner.



Figure 11. Damage to wooden cladding, south west corner.



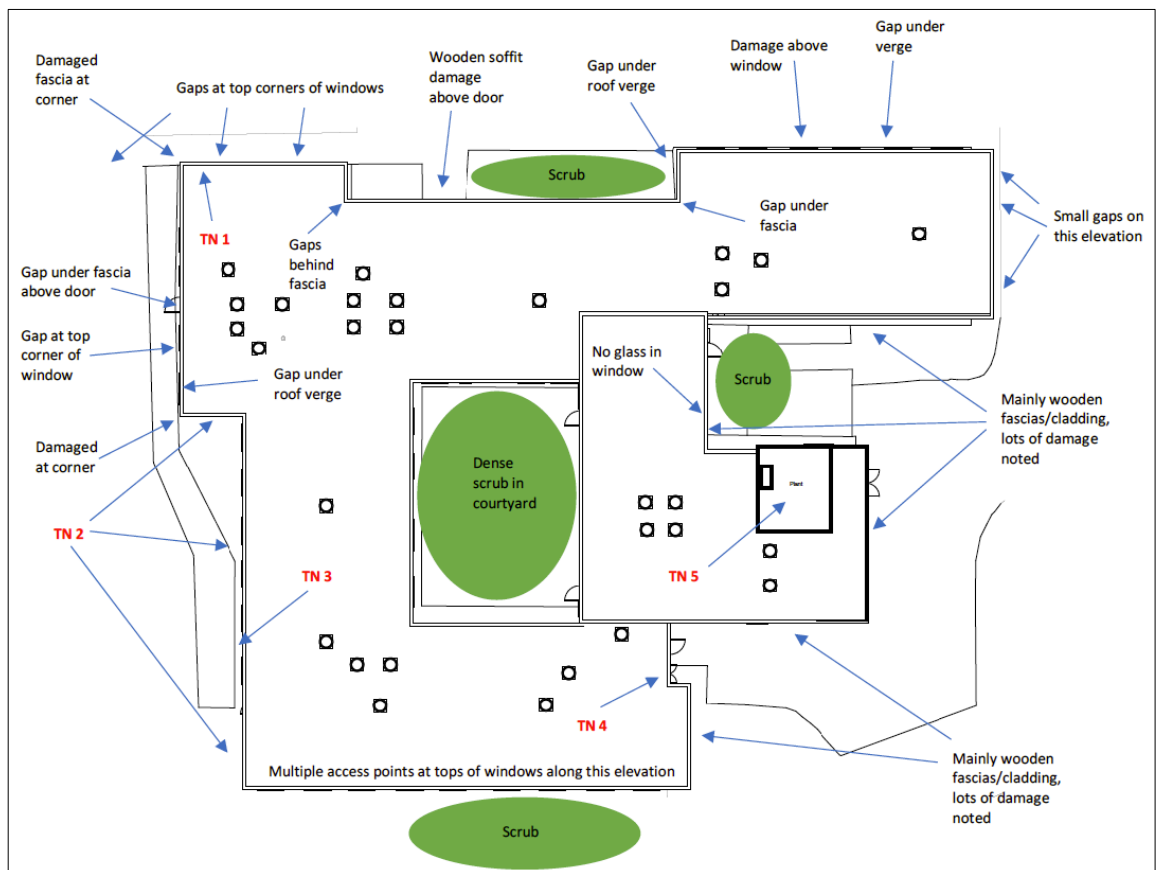
Figure 12. Damage to wooden cladding, eastern elevation.



Figure 13. Suspected roost access point, dropping on window below.



Figure 14. Potential access points and features, with Target Notes.



Target Notes

- TN1. Gap in wood under roof, single dropping on window directly below. Suspect pipistrelle roost.
- TN2. Wooden cladding/fascias, multiple gaps between wall and cladding along this whole elevation. Rot damage at top in the corner area too. Some areas of roof damaged repaired with black plastic.
- TN3. Wall crack. Potential for roost, including summer/hibernation roost, although west facing. No signs of bats noted during survey.
- TN4. Store cupboard, open on the external wall. Gaps along top of wall to the rear.
- TN5. Additional structure on roof with uPVC cladding, damaged sections on most sides.

- 4.3.8 Internally, the building contains multiple rooms laid out on both sides of a circular corridor, and includes bedrooms, communal areas, kitchens, bathrooms, store cupboards etc. These are all in poor condition (see Figure 15), having been subject to theft and vandalism. All windows and doors that face onto the central courtyard were either boarded or bricked up at the time of the survey. Many of the rooms are also very dark, due to the external boarding.



- 4.3.9 No loft void is present, due to flat roof construction, and the internal ceilings comprise suspended ceiling tiles in corridors, and plasterboard in individual rooms. In the corridors, significant damage is present, with pipe work and wiring having been removed by vandals. In some places it was possible to confirm the underside of the roof covering is of OSB construction (see Figure 16).
- 4.3.10 No evidence of bats was noted in any of the rooms, cupboards or corridors internally, although it should be noted that due to missing glass in two windows to the rear, it is possible that bats may be able to access the internal areas of the building.

4.4 Breeding Birds

- 4.4.1 No signs indicating the presence of nesting birds were noted anywhere within the building and no nests were noted within scrub adjacent to the building.

4.5 Results of eDNA lab analysis of dropping

- 4.5.1 The results of the lab analysis of the single dropping revealed this to be of common pipistrelle – see Figure 17 below for the lab report.

Figure 17. Lab report from DNA analysis.

Order Number: 1327		koruecologyassociates@gmail.com					
Samples submitted							
Sample Code	Multi-species?	Sample Type	Date Sample Found	Species Group	Site postcode/post town /grid ref	Site description / comments (Optional)	Suspected identity of species
SEL-1327-1	No	Faecal	21/06/2022	Bats	SS7796791870		Pipistrelle
Analysis Results							
Sample Code	DNA Extraction Code	Species Identified	ID Method	Ct value	% match		
SEL-1327-1	EG-2022-0564	Pipistrellus pipistrellus (Common pipistrelle bat)	qPCR	27			
Company No. 6233860. Registered in England and Wales. VAT Reg No. 901 5587 33							

5 Assessment

5.1 Legislation

- 5.1.1 Bats and their habitats are protected under the Wildlife and Countryside Act 1981 (as amended), and by the Conservation of Habitats and Species Regulations 2017 (as amended). Taken together, these make it an offence to:
- a) Deliberately capture, injure or kill a bat;
 - b) Deliberately disturb any bat, in particular any disturbance which is likely to (i) impair their ability to survive, breed, reproduce or to rear or nurture their young; or in the case of hibernating or migratory species, to hibernate or migrate; or (ii) to affect significantly the local distribution or abundance of the species to which they belong.
 - c) To be in possession or control of any live or dead bat or any part of, or anything derived from a bat.
 - d) Damage or destroy a breeding site or resting place of a bat;
 - e) Intentionally or recklessly obstruct access to any place that bat uses for shelter or protection;
 - f) Intentionally or recklessly disturb a bat while it is occupying a structure or place that it uses for shelter or protection.
- 5.1.2 A bat roost may be any structure a bat uses for breeding, resting, shelter or protection. It is important to note that since bats tend to re-use the same roost sites, current legal opinion is that a bat roost is protected whether or not the bats are present at the time.
- 5.1.3 The Environment Act (Wales) 2016 requires public authorities to seek to maintain and enhance biodiversity in the exercise of functions in relation to Wales. In complying with this duty, public authorities must have regard to a list of living organisms and types of habitat which in their opinion are of principal importance for the purpose of maintaining and enhancing biodiversity in relation to Wales. This list must be prepared and published by the Welsh Ministers under Section 7 (1) of the same Act.
- 5.1.4 Until this list has been published, the list of Habitats and Species of Principal Importance previously published under Section 42 of the Natural Environment and Rural Communities (NERC) Act 2006, should be used. Eight species of bat are on this list, including barbastelle *Barbastella barbastellus*, Bechstein's *Myotis bechsteinii*, noctule

Nyctalus noctula, common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelle *P. pygmaeus*, brown long-eared *Plecotus auritus*, greater horseshoe *Rhinolophus ferrumequinum* and lesser horseshoe *R. hipposideros*.

5.2 Habitat Assessment for Bats

- 5.2.1 The Bat Survey Guidelines (Collins, 2016) state that habitats of high suitability for commuting and foraging bats include '*continuous high-quality habitat 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*'.
- 5.2.2 The Site is located within around 20m of the River Afon, along which a belt of woodland is present, linking the Site with the wider countryside to the south, south east and south west. In addition, no lighting is present on the Site currently.
- 5.2.3 Taking the above into account, the suitability of commuting and foraging habitats for bats nearby is considered to be **high**.

5.3 Impact Assessment on Known Nearby Roosts

- 5.3.1 None of the known roosts highlighted by the desk study will be directly impacted on by the development proposals. No indirect impacts are predicted due to the nature, small scale of the proposals and their distance from the Site.

5.4 Building Assessment for Bats

- 5.4.1 The suitability of the building for bats is considered to be **moderate** due to the presence of numerous potential access points throughout, tempered by the generally poor condition of the building (allowing water ingress to cause rotting and damp) and lack of heating due it being currently vacant. It should be noted that due to the building being large and complex, some areas are in better condition than others, and some features may be classed as being of lower suitability for bats.
- 5.4.2 Due to the presence of multiple potential access points for bats, coupled with the location of the Site close to the wooded River Afon, the presence of bat roosts cannot be discounted by the PRA alone. In particular, the presence of a single confirmed bat

dropping directly below an obvious potential access point indicates that there is a likely roost already identified within the building.

- 5.4.3 Further survey work is required in order to a) confirm/discount this as a roost, b) characterise roost if confirmed, c) confirm presence/likely absence of any other bat roosts, and if present, d) characterise those roosts as well. The requirement for additional survey work is addressed in more detail in Section 6 of this report.

5.5 Impacts on Breeding Birds

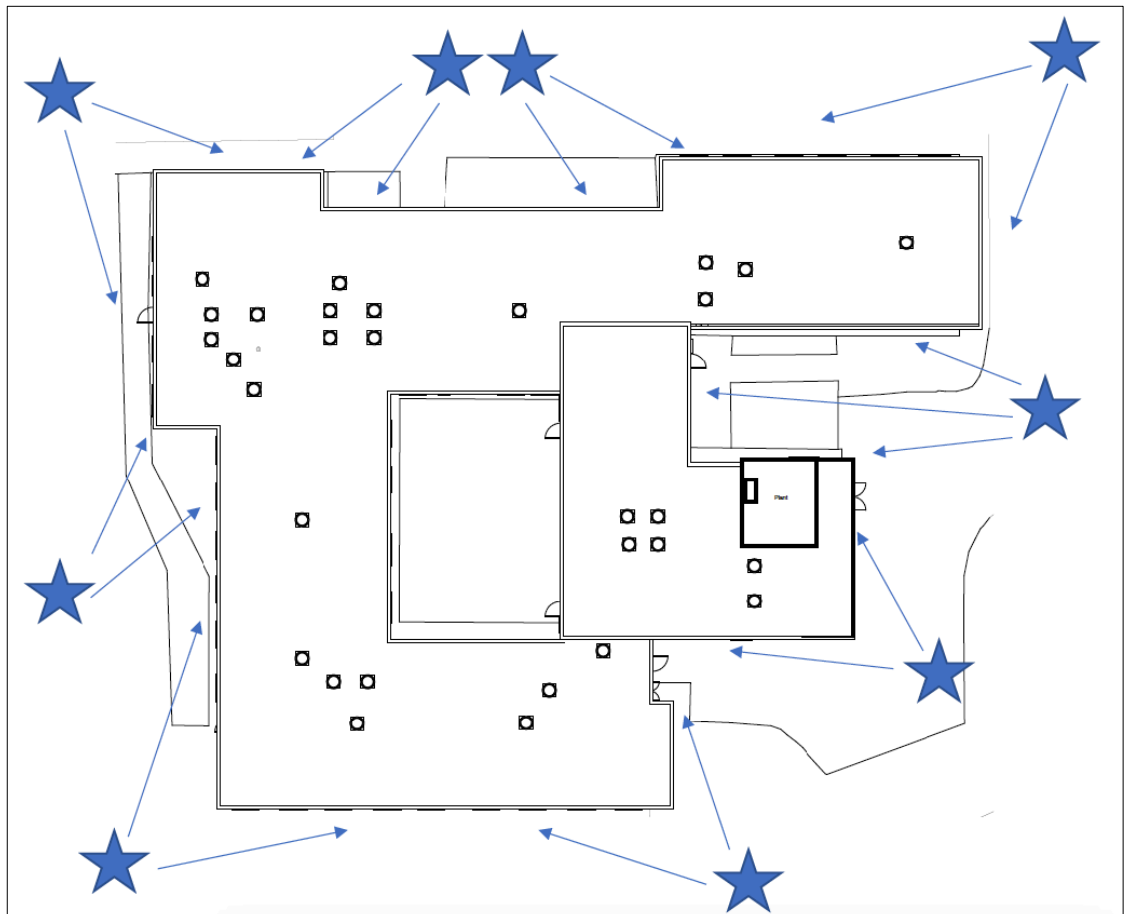
- 5.5.1 All nesting birds are protected under the Wildlife and Countryside Act 1981 (as amended), which makes it an offence to intentionally kill, injure or take any wild bird or take, damage or destroy its nest whilst in use or being built, or take or destroy its eggs. In addition to this, for some rarer species (listed on Schedule 1 of the Act), it is an offence to intentionally or recklessly disturb them while they are nest building, or at, or near a nest with eggs or young, or to disturb the dependent young of such a bird.
- 5.5.2 No evidence of nesting birds was noted anywhere in the building or within the scrub adjacent to the building, during the site visit. However, this building has numerous potential access points for nesting birds and it is possible that nesting birds may colonise the building in the future. Appropriate precautions in relation to nesting birds are therefore required, further details of which are given in Section 6 of this report.

6 Recommendations

6.1 Further Survey Work for Bats

- 6.1.1 In order to fully assess the impact of the proposed works on bats, additional survey work is required in relation to the building. The Bat Survey Guidelines (Collins, 2016) state that for moderately suitable structures, at least two survey visits should be completed between May and August inclusive.
- 6.1.2 The number of surveyors used during each visit should be sufficient to cover all potential access points at the same time, without moving around. Suggested surveyor/camera locations are given in Figure 18 below. It may be possible to reduce the number of surveyors following the first visit, if conditions of some individual features are considered to be of lower suitability.

Figure 18. Suggested surveyor/camera locations (stars) & viewpoints (arrows).



6.1.3 Once the additional survey work has been carried out, a full assessment of the use of the buildings by bats can be completed.

6.1.4 Note that if the suspected pipistrelle roost is confirmed as such, and/or if other roosts are found within the building, a mitigation licence from Natural Resources Wales is likely to be required prior to any development work commencing.

6.2 Scrub Clearance

6.2.1 All works to remove areas of scrub around the building should be timed to avoid the bird nesting season, generally considered to be March – August inclusive. Therefore as far as possible scrub and tree removal should be completed between September and February. If that is not possible, the areas concerned should be checked by a suitably competent ecologist immediately prior to removal, and only cleared/felled if no evidence of nesting birds is observed. Should any nesting birds be present, clearance should not proceed until the young have fledged the nest or if the nest becomes unviable.

6.3 Enhancements

6.3.1 It is recommended that bat and bird boxes be built into the new sections of the building wherever possible. Bat and bird boxes should be suitable for species likely to use the Site and its vicinity (for example starlings, blue tit, great tit and house sparrow, all of which were highlighted by the desk study and are likely to be in the area) and be installed in appropriate locations and at appropriate density.

6.3.2 Other enhancements could include the inclusion of an appropriate landscaping scheme and aftercare plan for trees and shrubs within the grounds of the building, ideally comprising native species appropriate to the location of the Site.

6.4 Repeat Surveys

6.4.1 In order to provide robust and up-to-date data for impact assessment, it is generally considered good practice to repeat surveys should a period of two years lapse between a survey being completed and the works commencing. **This should be addressed even if planning permission has already been granted**, since bats and breeding birds are protected by legislation entirely outside the planning system.

7 References

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

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HMSO (2017) The Conservation of Habitats and Species Regulations 2017 (as amended). London: HMSO.

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HMSO (2016) Environment (Wales) Act 2016. London: HMSO.