

Bat Survey Report

for

Gorphwysfa Chapel, Skewen



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 (NPTC) for the change of use of the school house at Gorphwysfa Chapel in Skewen from an educational facility to a residential property. A pre-app response from NPTC (Q2023/0106) indicated that a bat survey would be 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 April 2024 and an assessment for breeding birds was made at the same time.

1.3 Results and Assessment

- 1.3.1 No signs of bats were noted anywhere in the building. A number of features were identified that may support roosting bats, although none of the works proposed as part of the planning application are considered likely to impact on any of these features. Evidence of historical nesting birds was noted in the loft void and there are multiple opportunities for nesting birds to colonise the building elsewhere in the future.

1.4 Recommendations

- 1.4.1 No further survey work in relation to bats is recommended as part of the change of use planning application. However, recommendations are given for additional survey work that may be required in relation to potential future works to the building, whether or not planning consent is required.

- 1.4.2 Recommendations with regards to enhancements for biodiversity are also given within the report.
- 1.4.3 Repeat surveys are recommended if a period of more than two years elapses between the date of this survey and commencement of any works.

2 Introduction

2.1 The Proposed Development

2.1.1 Koru Ecology Associates was commissioned in March 2024 by Danny KilBride and Rhian Jones ("the Applicants") to complete a Preliminary Roost Assessment (PRA) in relation to bats at Gorphwysfa Chapel on New Road in Skewen ("the Site"). The Site is centred on approximate National Grid Reference SS7303997404 and its location is shown in Figure 1 below.

Figure 1. Planning application boundary (red) and Ownership Boundary (blue).

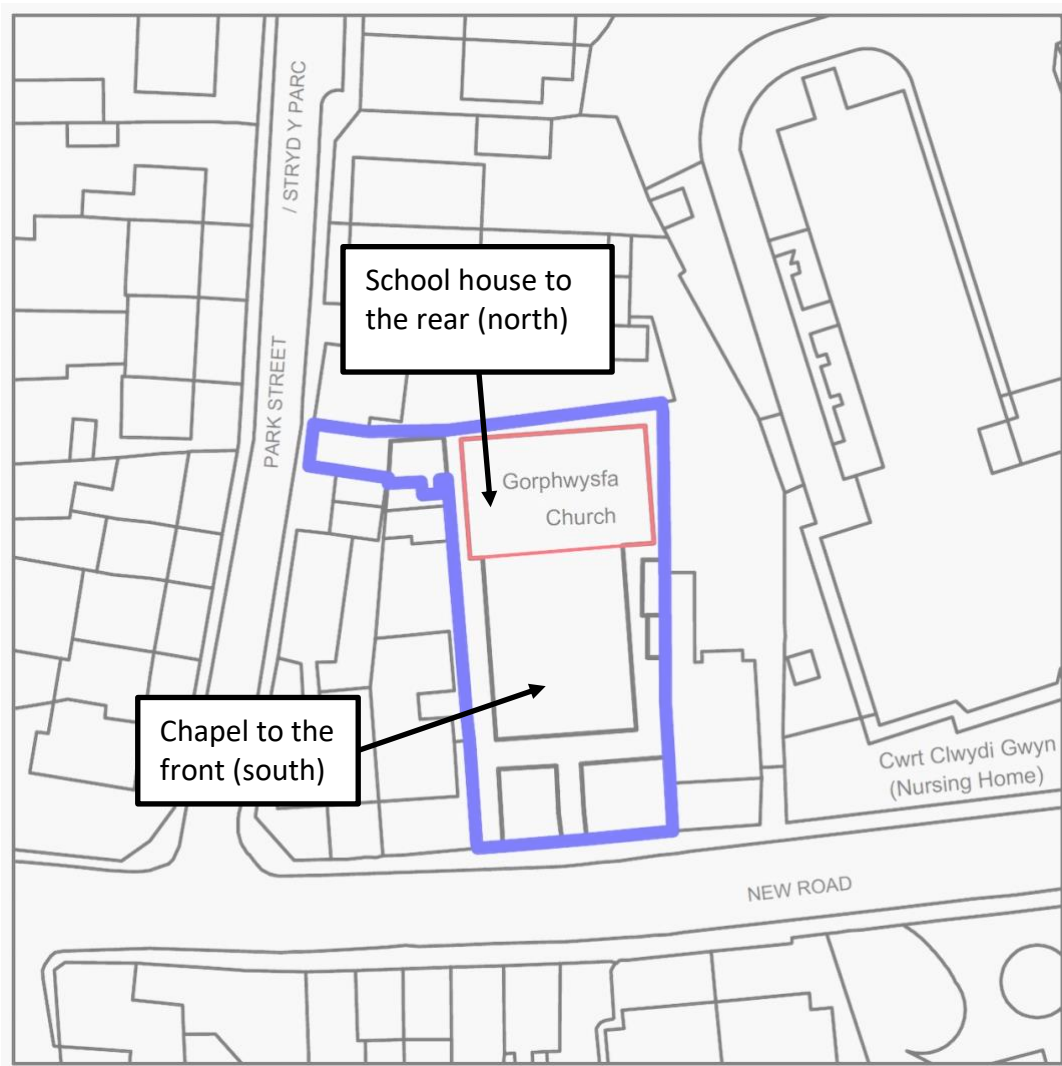
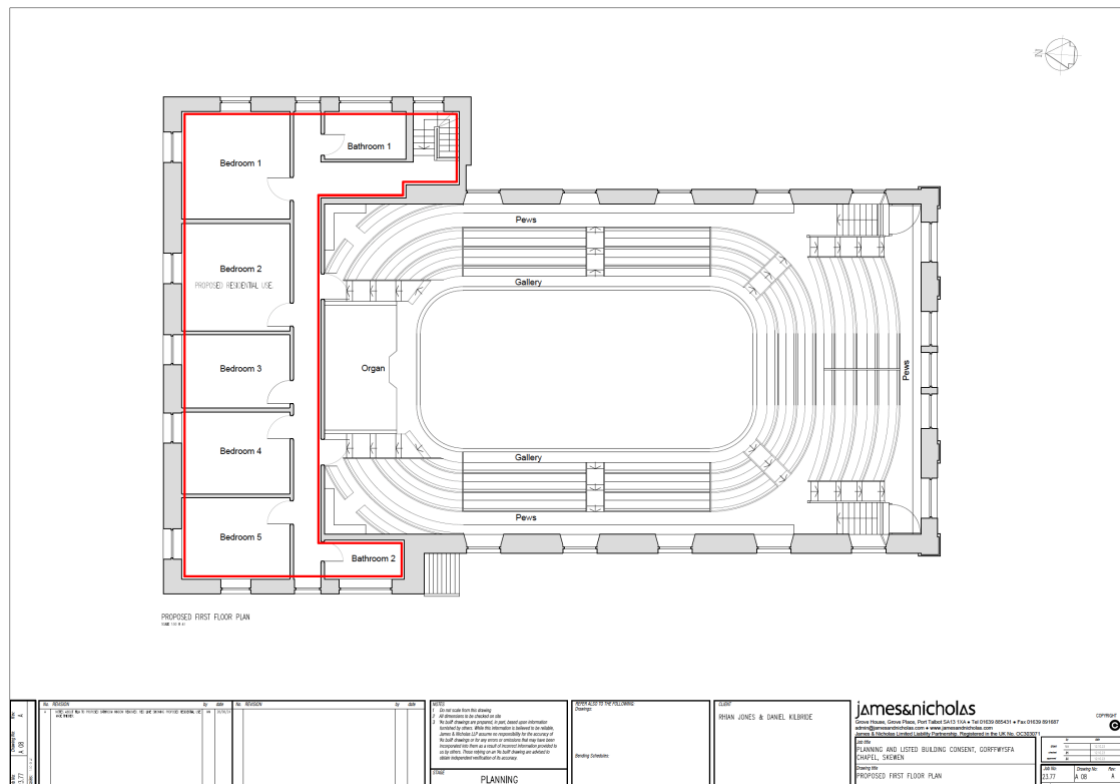


Figure 2. Proposed ground floor.





2.2 Study Aims

- 2.2.1 This report details the results of the PRA and assesses the likely impact of the proposals on bats. An assessment of likely impacts on breeding birds is also given.
- 2.2.2 Advice is given to help minimise impacts on bats and breeding birds, together with requirements for European Protected Species (EPS) mitigation licensing, where appropriate. In addition, where further survey work is required, this is also discussed.
- 2.2.3 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 Applicants 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.
3. DNA testing of droppings (if found).
4. A check of the building for signs indicating the presence of nesting birds.

3.1.6 All surveys were completed in accordance with current guidance (Collins, 2023).

3.2 Surveyor Qualifications and Experience

3.2.1 Diana Clark MSc MCIEEM completed all 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 S093858/1). 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 S091721/1).

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 noted in relation to this project, access was possible to all areas within the building including the entire loft void. However, it should be noted that the survey was completed after a period of sustained rainfall, and therefore some signs of bats (for example droppings on external walls and windowsills) may have been recently washed away and no longer be present. The time of year during which the survey was conducted, when bats are only just starting to become more active, may also have reduced the chance of droppings being present. Due to the lack of space between the Site and adjacent properties, visual inspection of the upper floor and roof externally was largely carried out from the other side of New Road, Park Street to the west and the rear of the adjacent nursing home to the east, with the aid of binoculars. This also meant that close and detailed inspection of window frames on the upper floor was not possible.

3.4 Desk Study and Other Existing Records

- 3.4.1 The 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 location of the Site (close to the edge of Skewen) and the type/age of the building, 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 of the Site was completed by Diana Clark on 16th April 2024. During the visit, both the rear schoolroom (which is the focus of this planning application) and the chapel to the front (not included within this planning application, but linked within the roof void) were assessed for their potential to support roosting bats in accordance with current guidance (Collins, 2023). The survey included both external and internal inspections of all accessible spaces, including under-stairs cupboards, a small boiler room and the voids within the organ. 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 and an endoscope was used to more closely examine cracks, holes and gaps in both external and internal wall structures, as required. Additionally, close-focusing binoculars were used to visually check any inaccessible parts of the external roof structure. Photographs and notes were taken of any features of interest.

3.6 Breeding and Roosting Birds

- 3.6.1 During the Preliminary Roost Assessment the Site was also searched 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, uric acid staining, 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 statutory sites designated due to the presence of bats are present within 10km of the Site.

4.1.2 SEWBRc returned eighty-one records of bats within 2km of the Site, which are summarised in Table 1 below.

Common name	Scientific name	Confirmed roost records	Other records
Unidentified bat species	Chiroptera	2	3
Serotine	<i>Eptesicus serotinus</i>	-	1
Myotis species	<i>Myotis</i> sp.	-	1
Daubenton's bat	<i>Myotis daubentonii</i>	-	1
Noctule	<i>Nyctalus noctula</i>	-	9
Pipistrelle species	<i>Pipistrelle</i> sp.	3	16
Common pipistrelle	<i>Pipistrellus pipistrellus</i>	4	20
Soprano pipistrelle	<i>Pipistrellus pygmaeus</i>	3	14
Brown long-eared	<i>Plecotus auritus</i>	1	3

4.1.3 Thirteen species of roof-nesting birds were highlighted by the desk study. These include swift *Apus apus*, jackdaw *Coloeus monedula*, blue tit *Cyanistes caeruleus*, peregrine *Falco peregrinus*, kestrel *F. tinnunculus*, herring gull *Larus argentatus*, lesser black-backed gull *Larus fuscus*, pied wagtail *Motacilla alba*, great tit *Parus major*, house sparrow *Passer domesticus*, starling *Sturnus vulgaris*, wren *Troglodytes troglodytes* and barn owl *Tyto alba*. With the exception of a single record of swift from 2010 (100m away), all of these records are located at least 400m from the Site.

4.2 Site Context

4.2.1 The Site is located close to the edge of Skewen and not far from Neath Abbey to the east. The Site is on the north side of New Road (A4230), which is lined with residential properties to the west and east. A nursing home and a single dwelling house is present immediately adjacent to the Site. Further afield, to the north there are several areas of woodland (including Darran Wood and Stanley Wood) which extend out into open countryside. To the south, there are further residential properties and the Tennant Canal is located approximately 200m to the south east. The River Neath with associated wetland habitat is located 400m to the south east of the Site.

4.2.2 Figure 6 below shows the Site location within the context of the wider landscape.

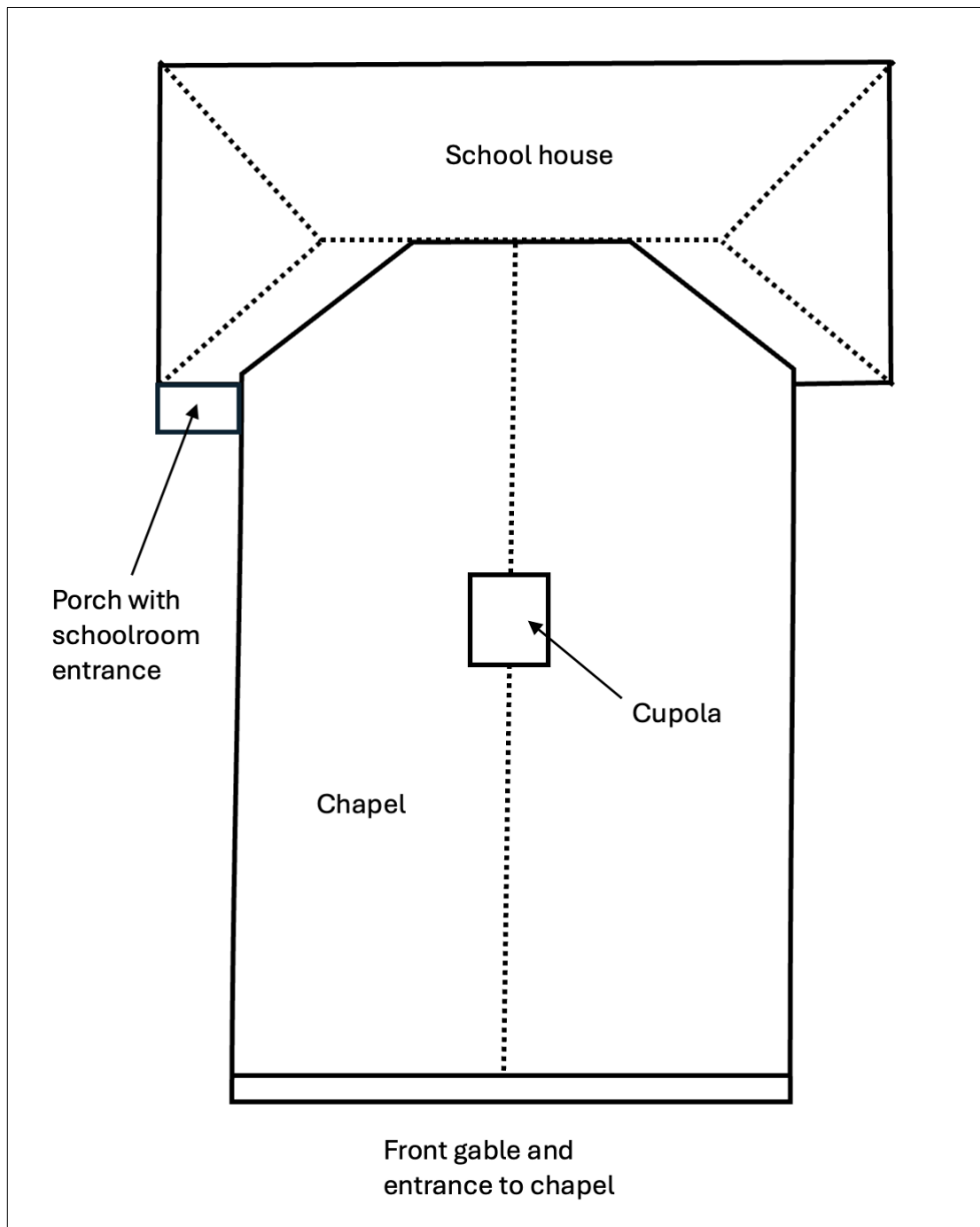
Figure 6. Site within the wider landscape.



4.3 External Building Description

- 4.3.1 The Site comprises a large chapel to the front, with a school house set perpendicular to the chapel to the rear, extending outwards to the sides (west and east) (see Figures 7 and Figure 8 below) . The chapel was originally built in 1803 and re-built in 1897. It closed as a place of worship in 2022 and has been unoccupied ever since. The building is Grade II listed.

Figure 7. Building and roof arrangement (approximate).



- 4.3.2 The building is built of stone in the classical style, with dressed stone window surrounds. The arches of the two main doors have prominent keystones and there are four pilasters on this front elevation, set between the windows and doors (Figure 9 below). The chapel roof is pitched with one of the gables forming the front of the building, and a low parapet wall is present with flat coping stones on top. The apex of the front gable has a finial, as do the corners of the building at the front, and there is a molded cornice where the roof joins the front façade. A cupola, which forms part of the building's ventilation system, is present on the ridge of the chapel (see Figures 10 and 11 below).

Figure 8. Chapel to the front, schoolroom perpendicular to rear.



Figure 9. Front gable of the chapel, showing windows and doors.



Figure 10. Western elevation, note presence of cupola.

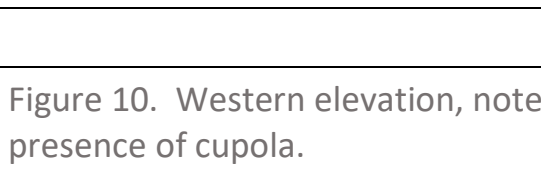
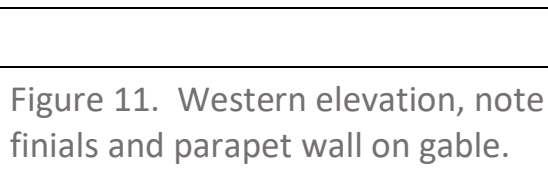


Figure 11. Western elevation, note finials and parapet wall on gable.





4.3.3 The school house roof is also pitched, with hips on the western and eastern elevations. Valleys are present either side of where the chapel roof joins the schoolroom roof.

4.3.4 The roof covering of both the schoolroom and the chapel is slate and there is lead flashing where this joins the parapet wall at the front, along with the valleys previously mentioned. Ridge tiles are likely clay with mortar between them. Soffits and fascias appear to be of wood, and some gaps are present (see Figure 12 below). The roof generally appears to be in reasonable condition, largely remaining weathertight, although there are a number of lifted tiles with a few that are broken or slipped in places, and some gaps under lead flashing (see Figure 13 below). Mortar between and under ridge tiles is missing in places.

Figure 12. Example of gaps between walls and soffits.

Figure 13. Example of gaps under lead flashing, missing/slipped tiles.



4.3.5 Windows on the western and eastern elevations of the chapel and the rear of the school room, are in two tiers. Window frames are wooden and there are a gaps between the frames and the stone work in places (see Figure 14 below). Guttering and downpipes appear to be a mix of metal and uPVC.

4.3.6 A small lean-to porch is present on the western elevation of the building, allowing access to the rear schoolroom (see Figure 15 below). uPVC cladding is present on the front gable.

Figure 14. Example of gaps between stone & window frames.



Figure 15. Lean-to porch on western elevation.



- 4.3.7 Although no signs of bats were noted during the survey, multiple opportunities for potential access by bats are present within this building.

4.4 Internal Building Description

- 4.4.1 Internally, the main front lobby area of the chapel has two stair cases, one on either side of the building, with cupboards underneath (see Figure 16 below). The main chapel is on two levels, with rows of pews on the ground floor and a gallery in a 'U' shape above (see Figures 17 and 18 below). A pulpit is present on an elevated platform at the northern end of the chapel, and an organ is present behind this (see Figure 19 for example of inside of organ).

Figure 16. Example of under-stairs cupboard.

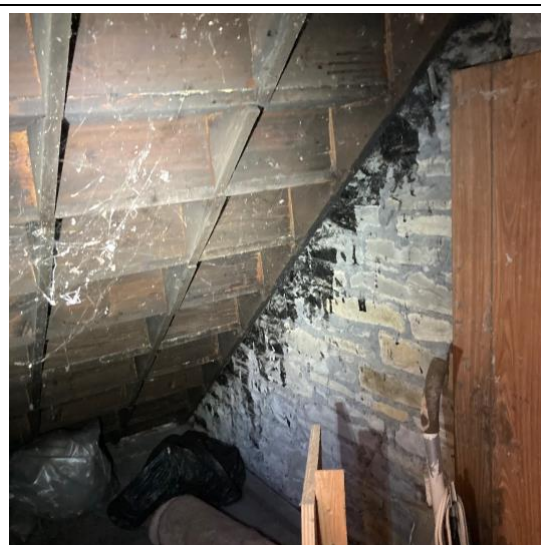


Figure 17. Chapel showing pews and gallery (facing south).

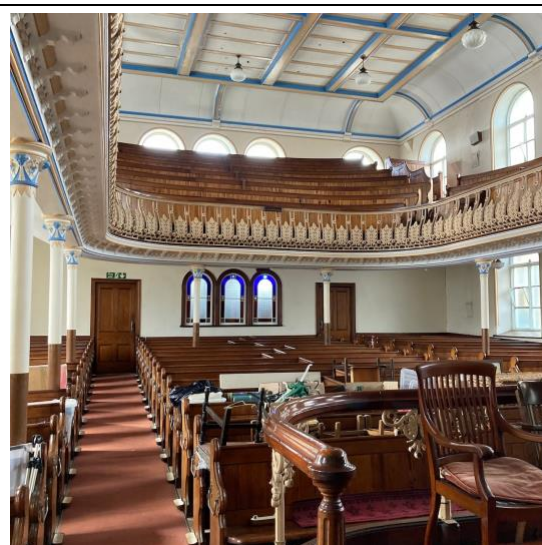
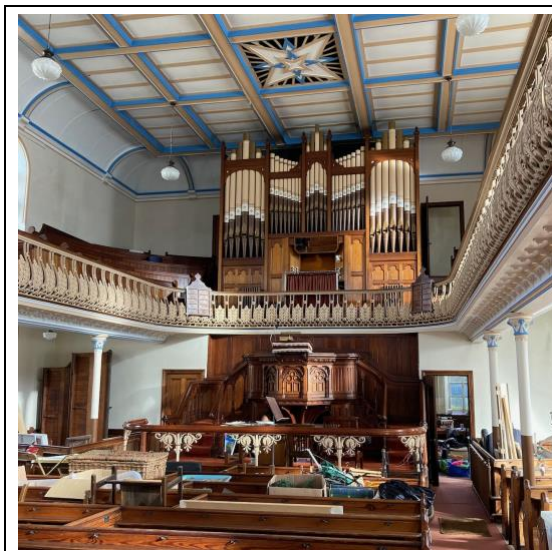


Figure 18. Chapel showing pews, gallery and organ (facing north).

Figure 19. Part of the inside of the organ.



4.4.2 The school room to the rear is built on two levels, with the ground floor largely being open and currently used for storage (Figures 20 and 21). A stage is present at the eastern end of the building, and a small kitchen with a false ceiling is present in the north west corner (Figure 22).

Figure 20. Ground floor of schoolroom (west).

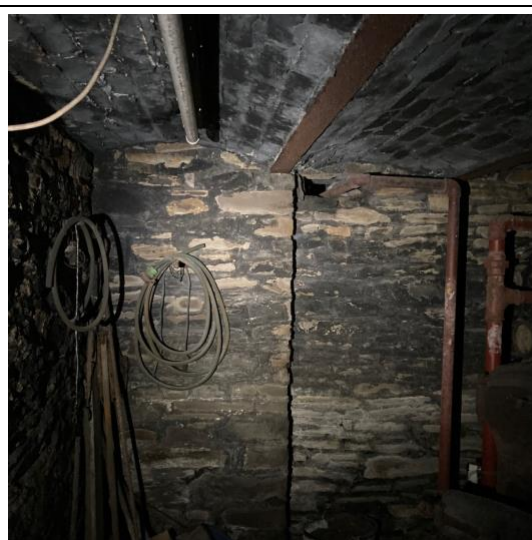
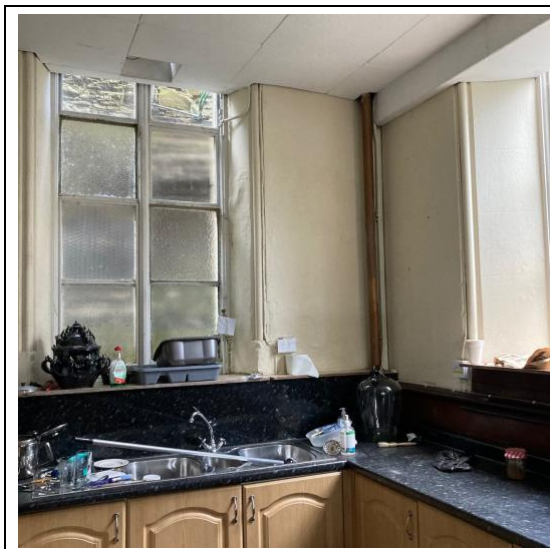


Figure 21. Ground floor of schoolroom (east).



Figure 22. Existing kitchen with false ceiling.

Figure 23. Below-ground room with old heating system.



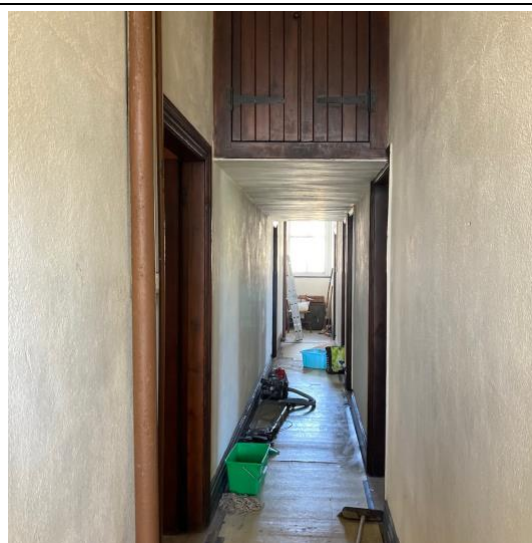
4.4.3 A small cellar-like space is present below ground level at the south eastern corner of the schoolroom (see Figure 23 above). This is stone/brick lined and was previously used to house the original heating system, and is not accessible externally.

4.4.4 The first floor of the school room includes a row of five rooms to the rear (north) of the building, with a corridor linking them (see Figure 24 above and 25 below). Two further rooms are present at either end and to the south of this corridor.

Figure 24. Example of room on first floor.



Figure 25. First floor corridor.



- 4.4.5 The loft of the building was accessed via a hatch in the first floor corridor. The roof void over the schoolroom is around 2.5m to the top of the ridge board and is supported by timbers of modified queen post construction, with additional steel posts and wooden timbers in places (see Figure 26 below). The loft over the chapel is of similar construction, with additional collar beams present, and the height to the top of the ridge board is around 3.5m. Large metal pipework that forms part of the heating/ventilation system is present in this area (see Figure 27 below).

Figure 26. Loft void above the school room. Note light at eaves.

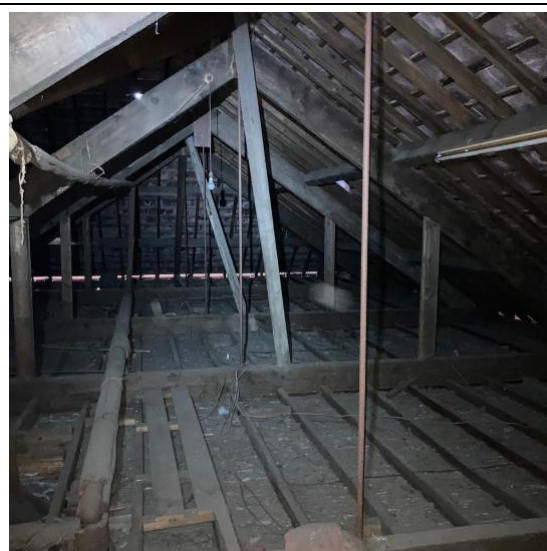
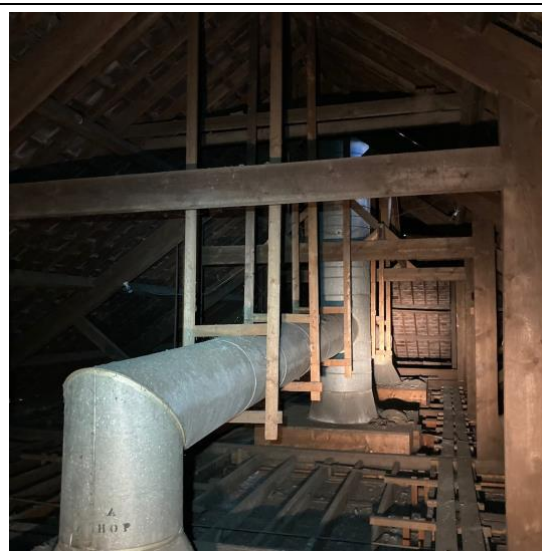


Figure 27. Loft void above chapel, showing ventilation pipework.



- 4.4.6 No insulation is present anywhere on the floor of the loft, leaving tie beams and ceiling supports visible. Walk-boards are present throughout the loft void, making it easy to access the majority of the space. No felt is present underneath any of the tiles (see Figure 28 below), and in places light is visible around slipped, lifted and missing tiles, as well as at the eaves.

Figure 28. There is no felt underneath any of the tiles.

Figure 29. Old bird nest in corner of loft void over schoolroom.



- 4.4.7 No evidence of bats was noted anywhere in the under-stairs cupboards, the chapel, the organ, the schoolroom ground floor and first floor, or the loft void.

4.5 Breeding Birds

- 4.5.1 A single old nest (likely jackdaw or similar sized bird) was noted in the eastern corner of the schoolroom loft void, close to the eaves (see Figure 29 above) and there are multiple opportunities for future colonisation, in particular via gaps at the base of eaves and at the bottom of hip ridges.

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, 2023) state that habitats of moderate suitability for commuting and foraging bats include '*continuous habitat connected to the wider landscape that could be used by bats for flight-paths such as lines of trees and scrub or linked back gardens*', and/or '*could be used by bats for foraging such as trees, scrub, grassland or water*'.
- 5.2.2 The Site is located close to the edge of Skewen, and whilst it is largely surrounded by residential properties and the nearby care home, suitable habitat for bats is present within a few hundred metres of the Site, in particular to the north east. A railway line runs east-west around 80m to the north of the Site, and whilst this vegetated corridor is narrow, it does link to the wider countryside. An area of woodland is present around 200m to the north east of the Site.
- 5.2.3 Taking the above into account, the suitability of commuting and foraging habitats for bats close to the Site is considered to be **moderate**.

5.3 Impact Assessment on Known Nearby Roosts

- 5.3.1 The desk study identified the presence of a number of known roosts within 2km of the Site, all of which are over 450m away. The proposals will not have any direct impact on any of these roosts due to the distance from the Site and the nature of the proposals.

5.4 Building Suitability Assessment

- 5.4.1 The Bat Survey Guidelines state that structures of moderate suitability for roosting bats have '*one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat, but unlikely to support a roost of high conservation status*'.
- 5.4.2 Multiple potential access points for bats have been highlighted within this survey report, however no evidence of a likely maternity colony has been observed. Whilst it is possible that external evidence has been washed away due to recent rainfall, most maternity roosts for bats usually display at least some signs of being present. In addition, the complete lack of felt underneath the tiles, together with lack of any evidence of bats in the loft void, further limits the chances of a maternity colony being present and having been missed.
- 5.4.3 Whilst the presence of low numbers of hibernating bats within this property is possible, there are no features that provide a '*classic cool/stable hibernation site*' (as per the description of structures of high suitability for bats within the survey guidelines), for example a cellar or French drain that is accessible by bats from the outside of the building. The small cellar where the old heating system was located is fully blocked off from the outside of the building by well-sealed doors.
- 5.4.4 Key areas where bats are considered most likely to be found in this building include a) under ridge tiles between mortar, b) behind soffits and fascias, c) behind uPVC cladding on the single-storey porch, d) under lifted lead flashing and e) within gaps around window frames.
- 5.4.5 Taking all the above into account, the suitability of the building for bats is considered to be **moderate**.

5.5 Impact Assessment: Bats

- 5.5.1 **None of the proposals within the planning application will have an impact on any of the features listed in paragraph 5.4.4.** All of the proposed works to allow change of use to residential will affect the internal areas of the ground floor and first floor only; the loft void and roof will be unaffected. As a result, it is considered unlikely that the proposed change of use will impact bats, and for the purposes of this application, no further surveys in relation to bats are necessary.
- 5.5.2 It is understood that in the future the Applicants intend to carry out minimal additional work to the building, outside of this planning application. Recommendations are given in Section 6 of this report to advise the Applicant of situations where further survey work may be required, **regardless of whether planning consent for that work is necessary**, since bats are protected by law entirely outside of the planning system.

5.6 Impacts on Breeding Birds

- 5.6.1 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.
- 5.6.2 A number of roof-nesting bird records were identified within the vicinity of the Site, although none of them relate to the Site itself.
- 5.6.3 Historical evidence of nesting birds was noted within the loft void of the schoolroom and there are multiple opportunities for future colonisation of the building by birds, in particular around eaves and the base of hip ridges. Whilst no works in relation to these features are proposed as part of this planning application, appropriate precautions

should be taken in relation to nesting birds if any future works in relation to these features in particular are planned. These are described further in Section 6 of this report.

6 Recommendations

6.1 Minor Future Works

6.1.1 It is understood that the Applicants intend to carry out minimal future works to the building, other than making it more comfortable internally. They are also constrained significantly with regards to changes they can make due to the building being Grade II Listed. However, they are concerned about the possibility of bats being present in the building and wish to ensure they approach any future works in a sensitive way to wildlife. As a result, they have asked to be provided with an indication of situations that may require additional survey work in relation to bats, **outside of this current planning application**, and these are summarised in the following bullet points.

1. **Painting fascias and soffits, clearing out gutters and downpipes.** These activities are unlikely impact bats even if they are present, therefore can be completed without further survey work in relation to bats.
2. **Repairs to windows.** It is understood that window repairs may be completed gradually by way of a scaffolding tower that is moved around the building. No evidence of bats was found around any of the windows inspected during the survey, and in most cases it was possible to see to the back of the gaps between the frames and the stone walls with a powerful torch. However, bats using shallow spaces like these may be individuals or in low numbers and very transient, i.e. using the space for only the odd night here and there, and the windows on the upper floors were not inspected in detail during the PRA due to the visual constraints already described. It is recommended that when window repairs take place, these features are inspected/re-inspected by a suitably competent ecologist prior to works commencing. If any signs of bats are found, or if their presence cannot be conclusively ruled out (for example if gaps extend further into the fabric of the

building and cannot be fully inspected by torch/endoscope) measures outlined in Section 6.2 may be necessary.

3. **Replacement of individual broken/missing tiles.** The roof covering is largely in good condition, with some broken/missing tiles noted in places. At some point in the future, the Applicants intend to carry out minor repairs to the roof, including replacing individual broken/missing tiles. Full roof covering replacement is not required (see bullet 5 below). Given that a) there is no evidence of bats being present in the loft void, b) there is no felt under the tiles, c) other features have been identified as being more suitable for bats, and d) there are many other entrance points to the loft void, this work is unlikely to impact bats even if they are present. Further survey work prior to the replacement of a few individual broken/missing tiles is therefore considered unnecessary.
4. **Replacement of sections of lead flashing, soffits/fascias and ridge/hip ridge tiles.** Full close-visual inspection by an appropriately competent ecologist using a torch and endoscope of any such features is recommended. It may be possible to rule out the presence of bats by way of these inspections alone, however if that is not possible and/or if any evidence of bats is found, measures outlined in Section 6.2 may be necessary.
5. **Significant/full roof replacement.** It should be noted that the roof is largely weatherproof and full replacement is not currently required or intended. However, if this changes in the future, full bat surveys will be necessary, as per Section 6.2 below.

6.2 If Bats Are Confirmed Or Cannot Be Ruled Out

- 6.2.1 If it is not possible to rule out the presence of bats based on pre-works inspections as noted above, or where relevant works described in Section 6.1 above indicate, further survey work is likely to be necessary. This may include evening emergence surveys, which must be completed by appropriately competent ecologists using Night Vision Aids (NVAs). All affected areas with suitability for bats should be visible during the survey, so

multiple surveyors may be required. Due to the building being of moderate suitability for bats, two surveys spaced at least three weeks apart and completed between May and August would be necessary.

- 6.2.2 Once this survey work has been completed, a fuller assessment of impacts on roosting bats can be made, and appropriate advice given in order to minimise impacts on bats that may be using the property. It is likely that if any evidence of bats is identified, a European Protected Species (EPS) derogation licence with respect to bats and development will be required in order to avoid committing an offence. **This must be in place prior to the commencement of any works that may affect a roost, and would be necessary even if additional planning consent was not required for the works.** Alternatively, it may be possible to modify the proposed works and/or time them appropriately so that they are completed in such a way that no impacts on bats or the roost will occur, usually by way of seasonal timing (i.e. works completed when bats are not present in the roost) and by replacing features on a like-for-like basis. In that case, a licence would not be required, with a non-licensed method statement approach being more appropriate.
- 6.2.3 If a licence application is necessary, this is usually prepared by a suitably competent ecologist and comprises an application form and a method statement, which will explain how the works will proceed. This would include details of seasonal timing, methods of working (such as a 'soft-strip' of roof covering under the supervision of an ecologist), interim roost provision and details of permanent post-works provision suitable for the roost in question. Recommendations in relation to lighting may also be made and post-development monitoring will also be a requirement.
- 6.2.4 Any licence application will require the results of all surveys in relation to bats, which must be two years old (or less) at the time of application. If planning consent is subsequently required for the works, this must be in place prior to an NRW licence being applied for, and it should be noted that once submitted NRW may take up to forty working days to turn the application around.

6.3 Breeding Birds

- 6.3.1 Birds are mobile creatures and may move into areas where they have previously been absent. Any works to the building that may affect the eaves and the base of the hip ridges should therefore proceed with caution in relation to breeding birds, particularly between the months of March to August inclusive. If any signs of breeding birds are noted, all works must stop immediately and an appropriately experienced ecologist consulted. In such circumstances, the ecologist may recommend that works be suspended until young birds have fledged the nest, or the nest is no longer viable. Alternatively, works may be suspended within an appropriate exclusion zone.

6.4 Enhancements

- 6.4.1 The Applicant has indicated that they are keen to support wildlife on the Site, therefore the enhancement recommendations listed below are made. Where the applicant is happy for these to proceed, **and where these do not conflict with the building being listed**, these can be incorporated into the drawings that are submitted as part of the planning application.

1. **New roost features for bats.** These would be in the form of externally mounted bat boxes, ideally made of woodcrete (or similar) in order to ensure longevity. Bat boxes should be installed appropriately at the correct height, orientation and in such a way that they are likely to be used by bat species in the area.
2. **Nesting features for birds.** Nest boxes could be externally mounted to the walls of the building, and again should be of woodcrete construction in order to ensure longevity. In particular, swift/sparrow boxes would be appropriate, although other types of boxes may also be suitable. Any bird boxes should be installed appropriately at the correct height, orientation and in such a way that they are likely to be used by bird species in the area.

3. **Creation of a wildflower meadow from existing front lawn.** The diversity of the small sections of lawn to the front of the chapel could be improved by some simple measures including reducing the cutting regime (a single early spring cut followed by a late summer cut) and the addition of seed from plants such as yellow-rattle and eyebrights. These species are semi-parasitic and can reduce the vigour of coarser grass species, thereby allowing finer-leaved grasses and a wider range of forbs to colonise. In turn, this increased diversity can increase the range of food plants for invertebrates.
4. **Increase shrub/hedgerow habitat.** The existing hedge could be extended and/or additional shrubs could be planted to the front of the chapel. Ideally these should be of native species and of local provenance, however non-native species that produce nuts, seeds and berries may also be appropriate.
5. **Bee/bug hotels.** Simple bee and bug hotels could be attached to the building in order to provide opportunities for invertebrates to nest and shelter.

6.5 Repeat Surveys

- 6.5.1 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) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edn). The Bat Conservation Trust, London.

HMSO (1981) Wildlife and Countryside Act 1981 (as amended). London: HMSO.

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

HMSO (2006) Natural Environment and Rural Communities Act 2006 (as amended). London: HMSO.

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