Bat Survey

Of RE Block, St Cecilia's RC High School, Chapel Hill, Longridge, Preston PR3 2XA

On behalf of St Cecilia's RC High School

February 2023

Updated May 2023

HB Bat Surveys
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CONTENTS

SUMMARY

This report details the findings of bat surveys at a detached teaching building at St Cecilia's RC High School, Chapel Hill, Longridge, Preston PR3 2XA. The proposal is that this building has a single storey extension constructed on the north side. The local authority require an assessment relating to the possible presence of roosting bats.

Bat surveys are conducted in accordance with the *Bat Surveys for Professional Ecologists - Good Practice Guidelines,* published 2016 (the Guidelines). Strict adherence to these is not necessary, but where practice deviates from them, clear reasons and rationale must be given.

Checks were made for evidence of nesting birds such as starling, house sparrow, house martin and swift, as well as the presence of other wildlife, particularly protected species.

A preliminary roost assessment (PRA) was conducted on 1st February 2023. No bats or signs of bats were found, but potential bat roosting features (PRF) were identified on the affected elevations and within the structure of the roof. No bird nesting was seen inside or outside, and no other protected species are believed to be present.

The building was allocated **moderate** potential for roosting bats. A minimum of two nocturnal surveys were required during the active season for bats in accordance with the Guidelines,

Two dusk emergence survey were conducted on 2nd & 19th May 2023. Moderate bat activity was detected during these surveys, with no bats emerging or entering the RE Block. Common pipistrelle and noctule bats were detected at the site. No other protected species were detected. There were no signs of any nesting birds.

There are opportunities to enhance biodiversity in this area, and so comply with the direction given by the National Policy Planning Framework (updated July 2021), by the inclusion of bat roosting and bird nesting provision in any new building work.

The proposed development at RE Block, St Cecilia's RC High School, Chapel Hill, Longridge, Preston PR3 2XA is feasible and acceptable in accordance with ecological considerations, and the National Planning Policy Framework.

1. INTRODUCTION

1.1. HB BAT SURVEYS was commissioned to carry out bat surveys at the RE block, St Cecilia's RC High School, Chapel Hill, Longridge, Preston PR3 2XA (Grid reference SD 6020 3665) See Appendix 7.1 for the location of this site.

1.2. The survey was requested in connection with an application to add a single storey extension to the RE Block. See Appendix 7.4 for brief details of the proposed development.

1.3. All British bat species and their roosts are legally protected under the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2010 (as amended). Under this legislation it is an offence to intentionally kill, injure or capture bats, deliberately disturb bats and damage, destroy, or obstruct access to bat roosts. Since the introduction of the Countryside and Rights of Way (CROW) Act in 2000 it is also an offence to recklessly harm or disturb bats in their roosts.

1.4. For the purposes of roosting, UK bat species may be split into void dwelling (such as long eared and horseshoe bats) and crevice dwelling (such as pipistrelle and myotis species). All resident UK bats are insectivorous.

1.5. Pipistrelle bats are often found roosting in the cavities and gaps which exist in buildings, but such roosts often go largely unnoticed. It is rare for noctule bats to be found roosting in dwellings as they prefer larger voids such as those made in trees by woodpeckers. The myotis species, such as Daubenton's bats, are generally found roosting in either cavities or voids but are rarely found in buildings as they are more sensitive to light pollution and human interference. Brown long-eared bats tend to roost in voids and seem to be quite partial to tall loft areas but may also roost in gaps and crevices.

1.6. The following are definitions of the different types of bat roosts.

Day roost	Individuals or small groups of bats, rest or shelter in the day but are rarely found by night in the summer.
Night roost	A resting place or shelter in the night but are rarely found in the day. May be used by a single individual on occasion or it could be used regularly by the whole colony.
Feeding perch	One or more bats feed during the night but are rarely present by day. Identified by the presence of prey remains.
Transitional roost	Used by a few individuals or occasionally small groups for generally short periods of time on waking from hibernation or in the period prior to hibernation. (Also known as an occasional roost)
Swarming site	Areas where large numbers of males and females gather during late summer to autumn. Appear to be important mating sites
Mating sites	Areas where mating takes place from later summer and can continue through winter.
Maternity roost:	Where female bats give birth and raise their young to Independence.
Satellite roost:	An alternative roost found in close proximity to the main nursery colony used by a few individual breeding females or small groups of breeding females throughout the breeding season.
Hibernation roost:	Bats may be found individually or together during winter. They usually require a constant cool temperature and high humidity

1.7. A preliminary roost assessment (PRA) was undertaken on 1st February 2023, and this comprised of the following.

- A daylight bat survey by a suitably licensed bat worker of the building to determine its suitability for use by roosting bats.
- The identification of any further surveys or precautionary actions that may be required prior to the commencement of any development activities.

If bats are detected to be roosting in the RE block or potential roosting features are identified in the areas to be affected by the proposed development, additional surveys will be required, and a licence will be necessary to make the development lawful.

1.8. Dusk emergence surveys were conducted on 2nd May 2023 and 19th May 2023. Under the Guidelines, nocturnal surveys must be sufficient to be able to identify the species and number of any roosting bats, the roost location and roost type.

2. SURVEY METHODOLOGY

Preliminary Roost Assessment (PRA)

2.1. On 1st February 2023, the RE block was assessed in respect of its suitability for roosting bats by a licensed bat surveyor, John Harrison-Bryant. (Licence number 2015-10251-CLS-CLS).

2.2. Weather conditions during this PRA were 8 degrees Celsius, occasional showers with light winds.

2.3. The surveyor's qualifications and experience meet the criteria as defined in the *Technical Guidance Series Competencies for Species Survey: Bats,* prepared by the CIEEM (August 2011).

2.4. The PRA was carried out in accordance with standard methodology included in the following: *Bat Mitigation Guidelines*, *Bat Workers Manual* and *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edition).*

2.5. An inspection of the RE block was carried out to locate and identify both bat roosting and potential roost features (PRF). PRF are identified by documenting access points and where roosts may be present within buildings, structures, and trees. Evidence of bat presence may include droppings, urine staining, feeding signs and grease marks.

Equipment List

2.6. The following list of the equipment was available for use in this survey.

- Olympus 8x25 PC I Binoculars.
- Explorer Premium Recording Endoscope
- Canon IXUS 185 digital camera
- Telescopic ladder
- Clulite high power focussed LED beacon.
- Seek Thermal XR thermal imaging camera.
- Personal Protective Equipment (PPE)

Survey limitations and constraints

2.7. All areas of the RE block were accessible, and the loft was entered through a hatch. The survey was conducted under favourable conditions in late winter when bats were in torpor or hibernation, depending on the prevailing weather conditions.

2.8. There were no constraints on this survey.

Nocturnal Surveys

2.9. The Guidelines advise the minimum number of nocturnal surveys for the given level of roosting potential. For moderate roosting potential, a minimum of two nocturnal surveys are required.

2.10. In general, surveys conducted in April or September to October may detect transitional roosts and those conducted in the active season from May to August may detect day and maternity roosts.

2.11. The Guidelines require that nocturnal surveys must be conducted in suitable weather conditions, at least two weeks apart, from April to September.

2.12. Nocturnal surveys are generally conducted in two ways.

• Dawn re-entry survey starting 1½ to 2 hours before sunrise and ending 15 minutes after sunrise.

• Dusk emergence survey starting 15 minutes before sunset and ending 1 ½ to 2 hours after sunset.

2.13. A decision as to whether to conduct dusk emergence or dawn re-entry surveys is made close to the time when they are required. Dawn surveys tend to give more reliable results than those conducted at dusk, but weather conditions are usually more suitable for dusk than dawn surveys, particularly at the start of the season. Where bats are found to be roosting at a site, further surveys may be required to support a licence application.

Survey limitations and constraints

2.14. The nocturnal surveys were conducted at a time of year favourable for finding evidence of roosting bats. In May, bats are fully active and are outside of the hibernation period. Maternity colonies may start to form as the month ends, and the bats bear their young around the start of July. Baby bats may start to fly in mid-July and maternity colonies then start to disperse but could still have larger numbers of bats into August.

2.15. The nocturnal surveys were conducted under favourable weather conditions.

2.16. Two dusk emergence surveys were completed. A dawn re-entry survey was considered for the second survey, but it was decided that a dusk emergence survey would give more precise results given the lower numbers of bats encountered in the first survey and the prevailing cooler temperatures being encountered before dawn.

2.17. All parts of the site were accessed during the nocturnal surveys.

2.18. There were therefore no constraints on these nocturnal surveys.

3. SURVEY RESULTS

Preliminary Roost Assessment

3.1. Location maps may be viewed **in Appendix 7.1** Site photographs may be seen in **Appendix 7.2** and examples of PRF may be viewed in **Appendix 7.3.**

3.2. St Cecilia's RC School consists of linked one and two storey buildings, with the exception of this building which sits to the west of the main complex.

3.3. The building is of brick / block with a tile covered pitched roof. Windows and doors are of timber.

3.4. External surfaces such as windowsills and walls were checked for bat droppings with a negative result. There were no signs of bat occupation inside the loft.

3.5. The UPVC roofline is well sealed against the bricks but the dry verge on both the east and west elevations has a gap at the bottom where it meets the gutter.

3.6. There are some lifted tiles on the roof creating gaps and crevices which could be used by cavity dwelling bats with some potential access points at the base of the rooflines.

3.7. The detached teaching block at St Cecilia's RC High School was allocated overall **MODERATE** potential for roosting bats.

3.8. There were no signs of nesting birds.

Foraging and commuting bats

3.9. This site is in a semi-rural area on the south side of the village of Longridge near Preston, Lancashire.

3.10. The area to the north consists of playing fields with Longridge High School to the north-west, and a light industrial estate to the east. Alston reservoirs are across Chapel Hill to the south with a new housing estate being built between the school and these water bodies. Beyond Longridge village there are agricultural fields.

3.11. Within 2Km from this site, the mosaic of farmland and fields continues with no other villages. There are a number of small watercourses with tree lined banks, a few small areas of woodland, but no larger areas of woodland. There are more reservoirs at Spade Mill to the north-east.

3.12. The area around the school has moderate potential for foraging bats and the presence of water bodies close by may enhance this. Commuting into and out of the site would be easy for bats.

Bat Records

3.13. An ecological record enquiry was conducted by LERN, the local record centre for the Lancashire in May 2023 for a 2Km radius around this site. The following is a summary and analysis of these records.

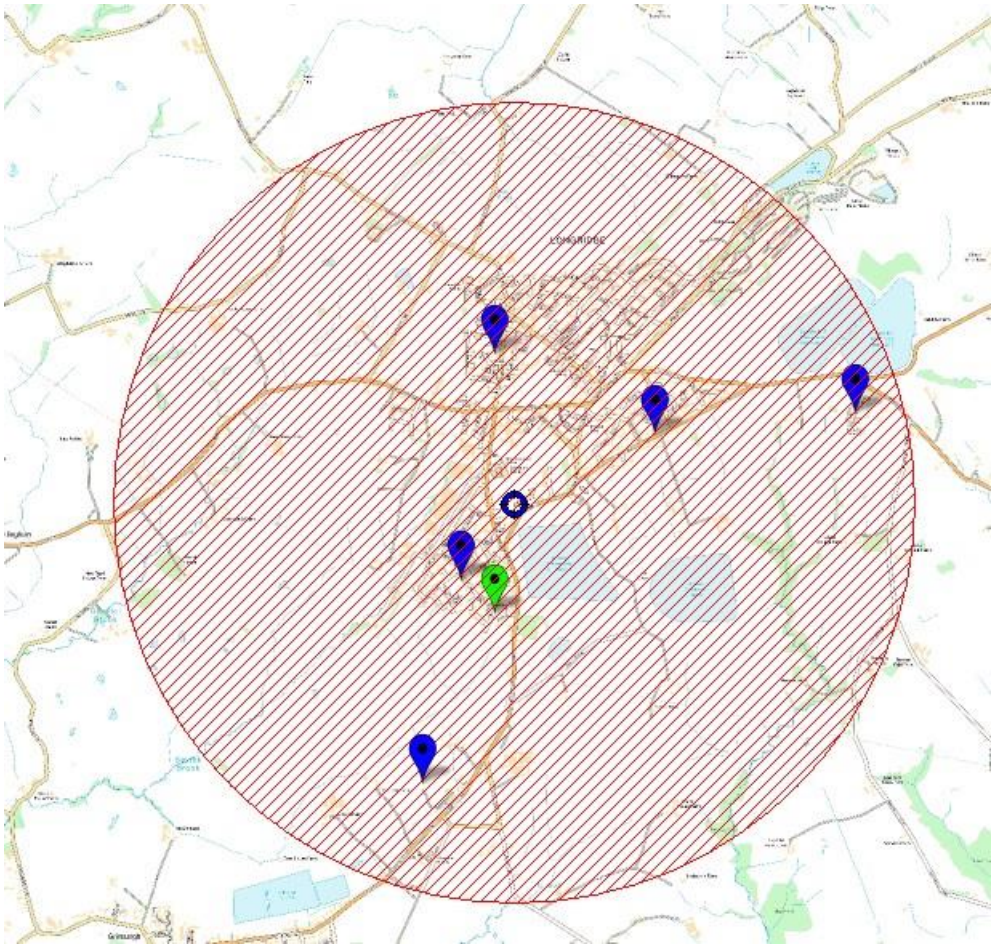
3.14. There are four species of bat recorded within 2 Km of the site as follows.

- Soprano pipistrelle bat - *Pipistrellus pygmaeus*
- Common pipistrelle bat - *Pipistrellus pipistrellus*
- Myotis species bat – *Myotis sp.*

• Noctule bat - *Nyctalus noctula*

There are also records of pipistrelle species bats.

3.15. There are six recorded roosts within 2 Km of St Cecilia's RC High School, all of which are pipistrelle species. The following map shows the location of these.



3.16. The green dropped pin icon is a roost of common and soprano pipistrelle bats in a tree. The blue pin to the north of St Cecilia's is a maternity colony of common pipistrelle bats within a school, numbering over a hundred in July 2005. The blue pin to the north-east is a roost of common pipistrelle bats within an agricultural college. The other blue pins are common pipistrelle roosts at dwelling houses.

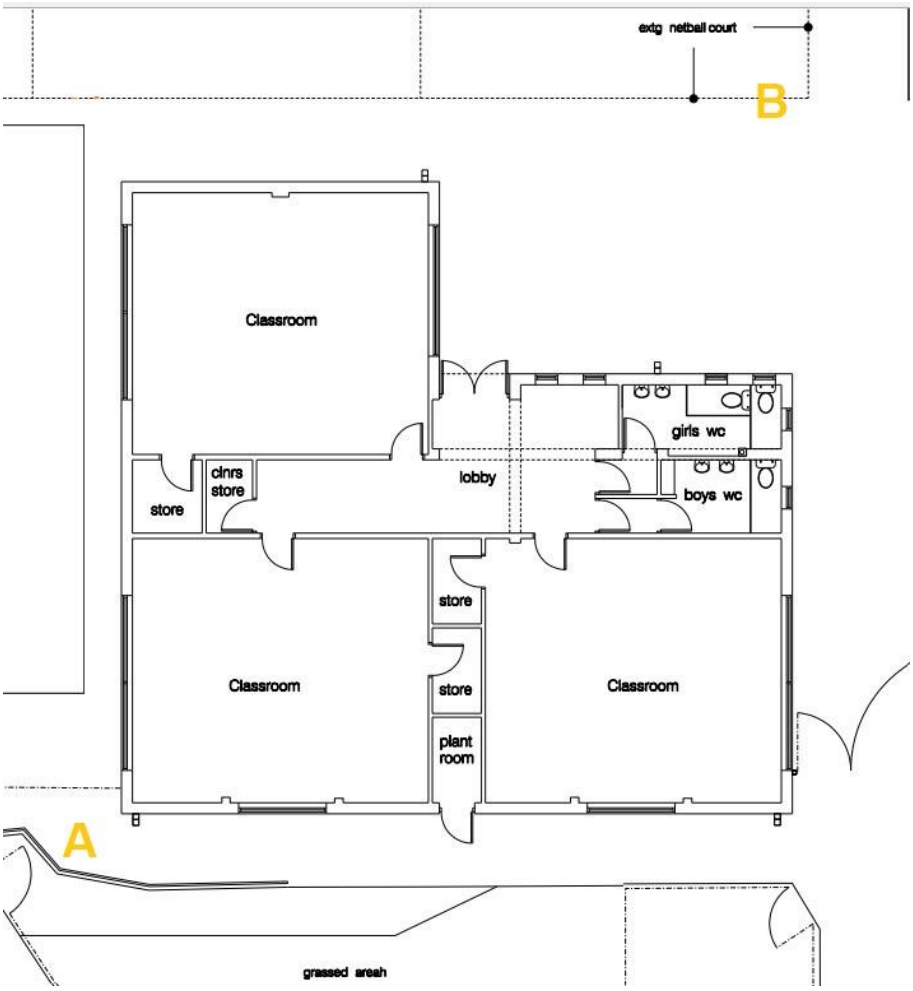
3.17. Soprano pipistrelle and common pipistrelle bats were only recorded as different species in the 1990s and are therefore often recorded as pipistrelle species.

3.18. There are no regionally important geodiversity sites, statutory sites, or other sites of conservation interest within 2 Km of this site.

3.19. Further details of the above records may be viewed in the report from LERN, which is attached to the end of this report.

Nocturnal Surveys

3.20. The first nocturnal survey was a dusk survey on 2nd May 2023 with two surveyors to cover all the elevations of the RE building (Position A and Position B).



3.21. The following table contains the details and results of this nocturnal survey.

Date	Times	Structure ref / location	Equipment used	Weather
02/05/2023	Start 20:26 End 21:56 Sunset 20:41	RE Building	Pos A EM touch Pos B EM touch	Start 13C, 8/8 cloud, Wind BF1, dry. End 12C, 8/8 cloud, Wind BF1, dry
Surveyors	Position A Helen Taylor-Boyd (SE corner) Position B Danny Boyd (NW corner)			
RESULTS	There was no emergence from the RE building. Common pipistrelles and noctules were detected.			

3.22. The second nocturnal survey was a dusk survey on 19th May 2023 with two surveyors to cover all elevations of the RE Building.

3.23. The following table contains the details of the second nocturnal survey.

Date	Times	Structure ref / location	Equipment used	Weather
19/05/2023	Start 20:50 End 22:27 Sunset 21:12	RE Building	Pos A EM touch Pos B EM touch	Start 15C, 8/8 cloud, Wind BF2, dry. End 12C, 8/8 cloud, Wind BF2, dry
Surveyors	Position A Helen Taylor-Boyd (SE corner) Position B Danny Boyd (NW corner)			
RESULTS	There was no emergence from the RE Building. Common pipistrelles were detected and seen foraging and commuting and there was some social behaviour (chasing)			

4. EVALUATION AND ASSESSMENT

4.1. The PRA revealed PRF within the structure of the RE block which could accommodate small numbers of crevice dwelling bats in day or transitional roosts. (See Appendix 7.3) The possibility of bats forming maternity roosts or using this building for hibernation is discounted. Void dwelling species, such as brown long-eared bats could enter and roost within the loft.

4.2. There is an overall **moderate** potential for roosting bats and a minimum of two nocturnal surveys were required to ascertain if these PRF are being used.

4.3. There was no bird nesting activity seen during the PRA or the nocturnal surveys.

4.4. The desk top study suggested there was likely to be a good population of bats in the immediate vicinity of this site. Moderate foraging opportunities exist close to the site with more suitable areas close by. Commuting would be easy for bats flying in and out of the site.

4.5. The record search from LERN revealed that myotis species, common pipistrelle, soprano pipistrelle and noctule bats were present within 2 Km of the site.

4.6. There are several pipistrelle species roosts within 2 Km of this site, including an important maternity colony of common pipistrelle bats 750 metres to the north.

4.7. All ecological records from these surveys will be sent to LERN in accordance with the Guidelines and the requirements of John Harrison-Bryant's personal licence.

4.8. Two nocturnal surveys were sufficient to confirm the absence of roosting bats at RE Block, St Cecilia's RC High School, Chapel Hill, Longridge, Preston PR3 2XA.

4.9. Common pipistrelle bats were recorded during both the two nocturnal surveys, commuting over the site with some foraging and social behaviour. There was no interaction or emergence by bats from any buildings, structures, and trees.

4.10. Some noctule bat activity was detected on the first survey, but these bats were not seen.

4.11. No other bat species or other protected species were detected, nor are they considered to be present. There was no bird nesting seen.

4.12. The recommendations in **Section 5** aim to ensure that the development is implemented in accordance with all wildlife legislation, Natural England guidance, principles of the National Planning Policy Framework (NPPF), local planning policy and best practice.

5. RECOMMENDATIONS

5.1. No bats were found to be roosting at RE Block, St Cecilia's RC High School, Chapel Hill, Longridge, Preston PR3 2XA. Common pipistrelle and noctule bats were found to be active in the area around the site. There were no nesting birds at the site.

5.2. Bats could utilise the PRF identified during these surveys at any time, and it is therefore recommended that a cautious approach should be adopted to the proposed works.

5.3. It is recommended that the roofs and any roofline timbers should be dismantled carefully and by hand, using hand tools only. If a bat, or signs of bats (usually droppings), are discovered at any point during the removal of any of the roofing materials from this site, all works must cease, and contact must be made with the consulting ecologist.

5.4. The survey data will be valid until **31st March 2024**. If the removal of the areas of roosting potential is incomplete on this date, an additional PRA will be required to ensure the nature of the site or surrounding area hasn't materially changed. This additional PRA will guide the need for further nocturnal surveys.

5.5. The following was sent to me from a Planning Officer in relation to bats surveys conducted on a property in Tameside . *"**The NPPF (2021 para 174d and 179b) and the recently assented Environment Act (November 2021) guide decision takers to achieve biodiversity enhancement via the planning system. I would recommend that any submission includes enhancement measures commensurate with the features in the locality**."*

5.1. Roosting features for bats and nesting opportunities for birds could be included in the roofs and eaves. Details and suggestions for incorporating roosting and nesting for bats and birds may be found in *Designing for Biodiversity: A technical guide for new and existing buildings (2nd Edition) (2013) K Gunnell, B Murphy, C Williams. RIBA Publishing*. A copy will be made available by HB Bat Surveys to the consulting architect if desired.

5.7. If there is to be any additional tree planting at the site, it is recommended that British native species are planted wherever possible to increase the availability of insects and therefore attract a range of other animals including birds and bats. Examples include Hawthorn, Rowan, Wild Cherry, Guelder Rose and Crab Apple. These tree species have been chosen for their attractive blossom and fruits.

5.8. The proposed development at this site is feasible and acceptable in accordance with ecological considerations of this section and the National Planning Policy Framework

6. REFERENCES

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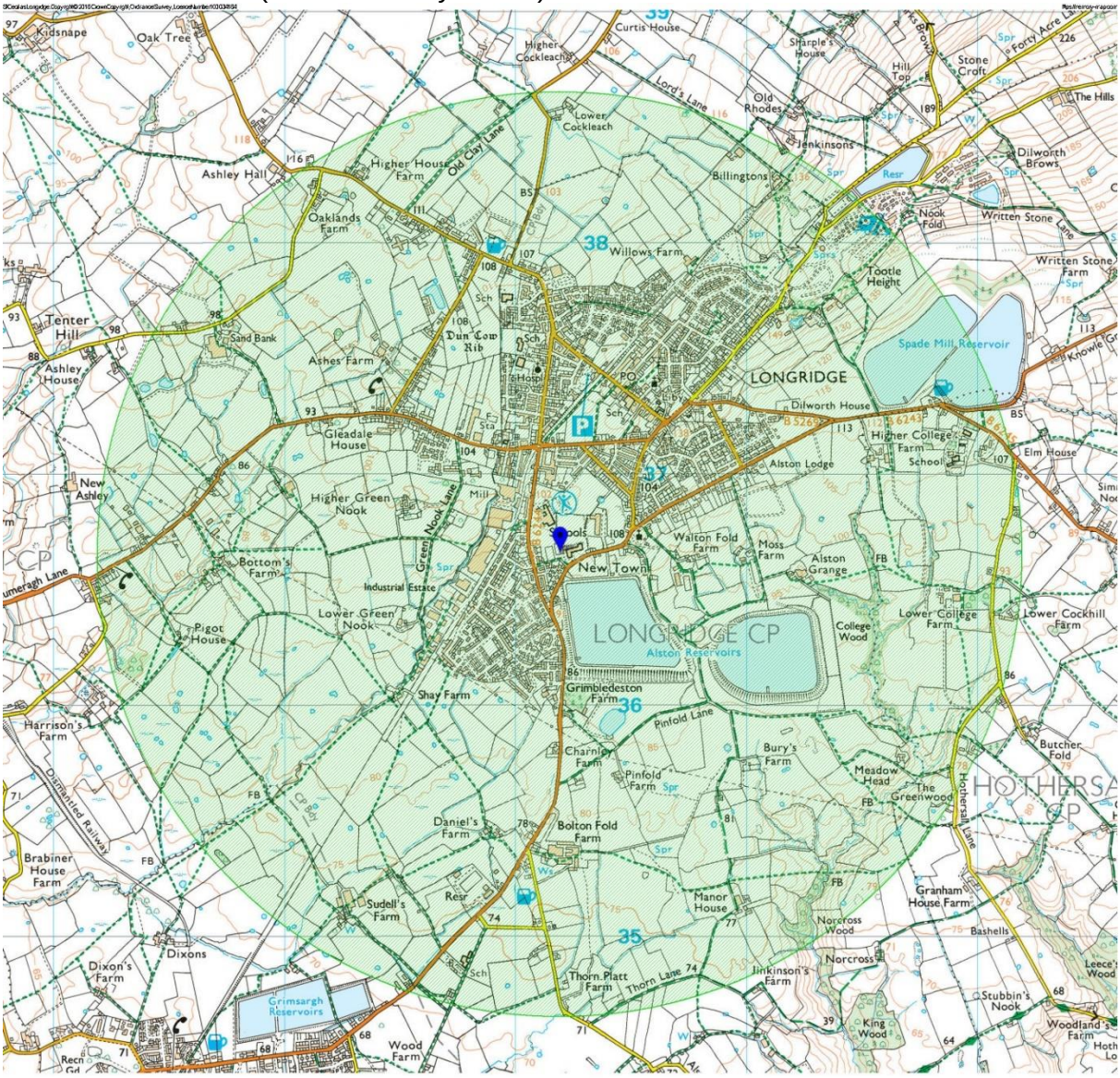
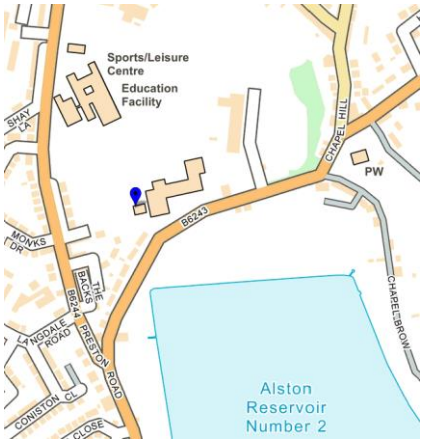
7 APPENDICES

7.1 Location of site (2 Km boundary shown)





7.2 PRA: Photographs of Building

East and north facing elevations

North facing entrance and north facing elevation

North and west facing elevations

West facing elevation

Inside loft facing west

Inside loft facing north

North facing exit

Inside, facing west

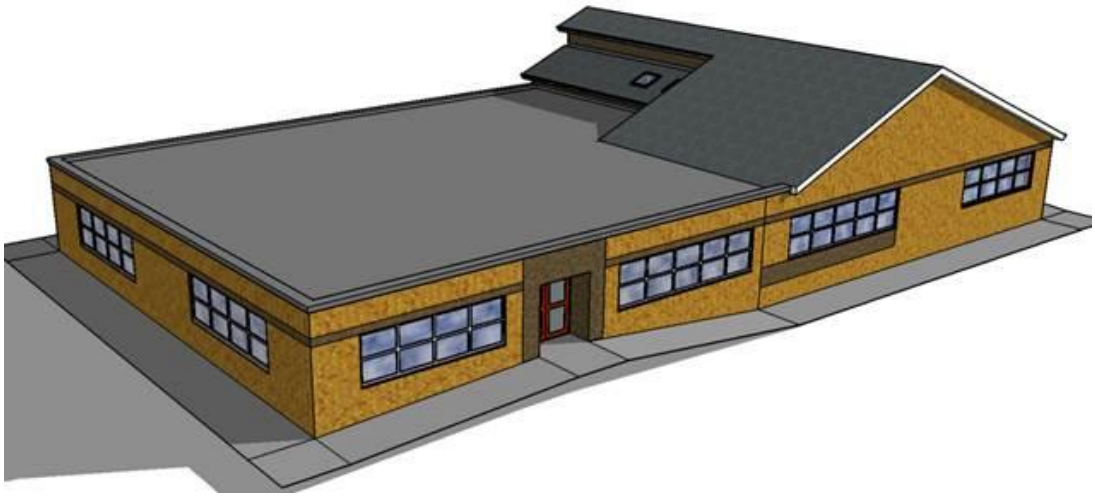
7.3 Examples of PRF

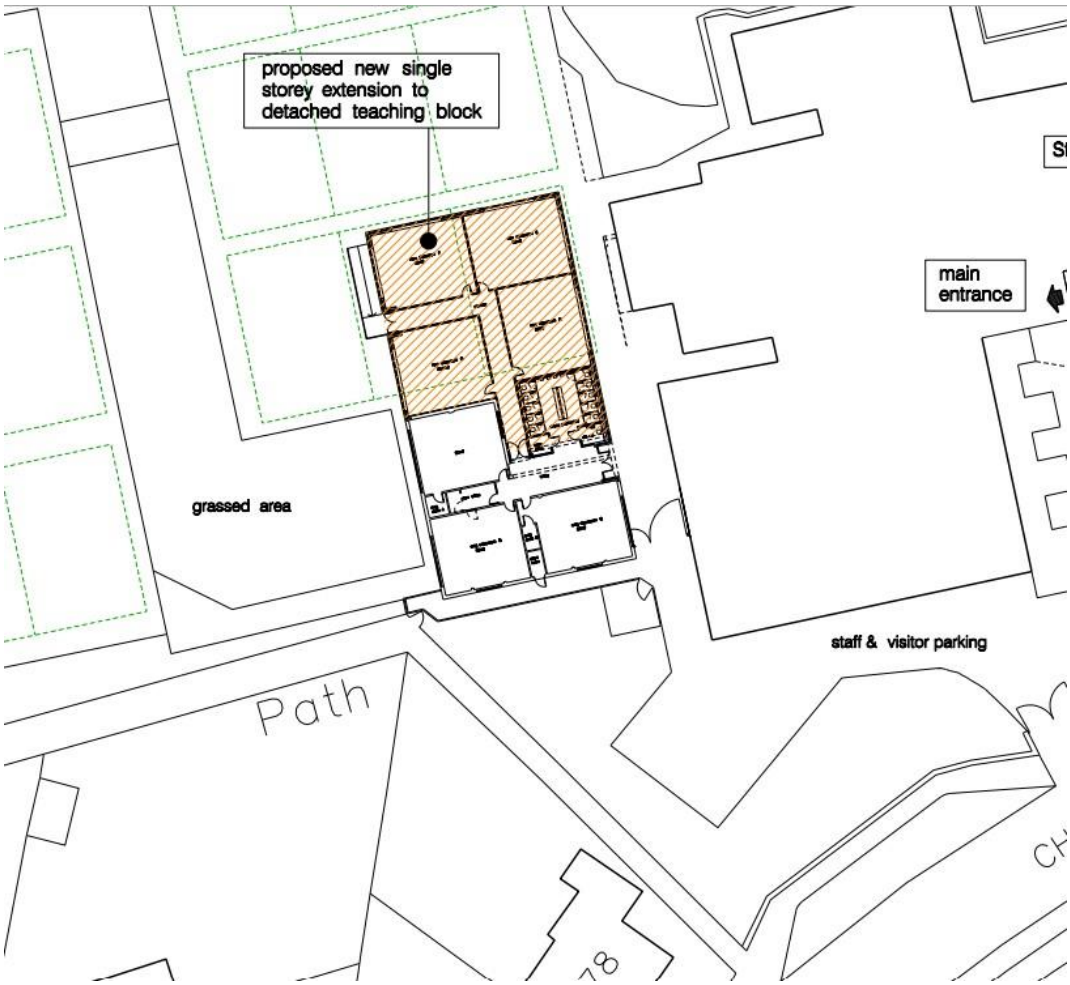
Area of lifted and dislodged tiles

Gap at lower end of dry verge on north-east corner of roof.

Gap at lower end of dry verge on north-west corner of roof.

7.4 Proposed plans and drawings.





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http://www.lancashire.gov.uk/lern.aspx

Project:
St Cecilia
Client:
HB Bat Surveys
Grid Ref: 360200 436650

250 m Buffer
500 m Buffer
1 km Buffer
2 km Buffer
Bat Roost or Possible Roost
Other Bat Record
SLBG Bat Roost or Possible Roost
SLBG Other Bat Record

N.B. THIS IS AN INTERACTIVE PDF LAYERS CAN BE TURNED ON OR OFF TO AID CLARITY.

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Metres
0 1,000
1:15,000

Boundaries of statutory designations (Natura 2000, SSSI etc) are included for information only. <ITA> Definitive, information for these designations should be obtained from Natural England.

Lancashire Key Species records are plotted at the centre of the area to which they relate (the precision of each record is given in the accompanying attribute data and spreadsheet).