



Bat Emergence and Re-entry Surveys

32 - 34 Laystall Street, Manchester, Greater Manchester, M1 2JZ

McCaul Group Ltd

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Executive summary

Arbtech Consulting Ltd was commissioned by McCaul Group Ltd to undertake Bat Emergence and Re-entry Surveys (BERS) at 32 - 34 Laystall Street, Manchester, Greater Manchester, M1 2JZ. The surveys were completed on 06/05/2021, 20/05/2021 and 03/06/2021. The aim of the assessment was to confirm the presence/likely-absence of a bat roost and to provide an assessment of the current status of all the survey features. This includes providing evidence for species, numbers and levels of activity, to identify any entrance and egress points, and to gain an understanding of the activity of bats using the site in the local landscape.

The development proposals are for “the erection of 9 storey residential building (Use Class C3) comprising 89 residential units (28 x 1 bed and 61 x 2 bed) and conversion of and 3 storey extension to 32-34 Laystall Street for use as offices (Class E) with associated external works following demolition of outrigger and associated structures along with other associated works including access, servicing, landscaping, and secure cycle parking”. A planning application has been submitted to Manchester City Council [ref: 128911/FO/2020].

Ref	Survey conclusions	Foreseen impacts	Recommendations / Mitigation
B1	No bats were seen emerging or re-entering the buildings during the 2021 surveys. It is possible that the roost is historical or that it is a transitory roost of one common pipistrelle, as one common pipistrelle was seen emerging from B2 or B3 (the surveyor could not determine the exact emergence point) during the single dusk survey in September 2020. Please refer to the Preliminary Roost Assessment and Bat Survey report (E3P) for full details.	A transitional roost for one common pipistrelle bats will be damaged and destroyed during works.	A European Protected Species Mitigation Licence (EPSML) will be required from Natural England prior to the commencement of works, once planning has been granted. As there is one bat roost of low numbers of common species present, the works can be completed under a Natural England Bat Mitigation Class Licence (Low Impact) – WML-CL21. <u>The licence application can be submitted within 3 months of the start of work. If more than 3 months elapses since the last survey, a material changes check will be required prior to licence submission. If more than 12 months elapses, updated dusk/dawn surveys will also be required to inform the licence application.</u> Full details of mitigation and compensation required will be included in the licence application. This will include a pre-inspection of the known roosting location directly prior to commencement of works, ecological supervision of the removal of the roof tiles by hand and the installation of a Schwegler 2FN (or similar Woodcrete) bat box on site prior to the start of work. There will be no restrictions on the timing of the works. Any additional lighting on site will follow Bat Conservation Trust lighting guidelines and will not cast any light on the tree lines to the north, or gardens to the east where bats were observed to be commuting and foraging during survey. Light spill will be directed away from any boxes. Lighting strategies will be adopted from the guidance outlined in the new Bats and Lighting Publication produced by the Institution of Lighting Professionals and the Bat Conservation Trust

			"Guidance Note 08/18 Bats and artificial lighting in the UK Bats and the Built Environment series publication: http://www.bats.org.uk/news.php/406/new_guidance_on_bats_and_lighting
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Contents

1.0 Introduction and Context	6
1.1 Background	6
1.2 Site Context	6
1.3 Scope of the report	6
1.4 Project Description	6
2.0 Methodology	7
2.1 Desk Study methodology	7
2.2 Site Survey methodology	7
2.3 Surveyors	8
2.4 Limitations	8
3.0 Results and Evaluation	8
3.1 Survey Results	8
4.0 Conclusions, Impacts and Recommendations	11
4.1 Informative guidelines	11
4.2 Evaluation	12
5.0 Bibliography	13
Appendix 1: Survey Plan	14
Appendix 2: Proposed Site Plan	15
Appendix 3: Legislation and Planning Policy related to bats	16

1.0 Introduction and Context

1.1 Background

Arbtech Consulting Ltd was commissioned by McCaul Group Ltd to undertake Bat Emergence and Re-entry Surveys (BERS) at 32 - 34 Laystall Street, Manchester, Greater Manchester, M1 2JZ. The surveys were completed on 06/05/2021, 20/05/2021 and 03/06/2021. The assessment is informed by the Bat Conservation Trust publication, *Bat Surveys for Professional Ecologists – Good Practice Guidelines* (Collins, J. (Ed) 2016).

These surveys were completed following recommendations made in the Preliminary Roost Assessment and Bat Survey report (E3P).

1.2 Site Context

The site is located at National Grid Reference SJ 84979 98270 and has an area of approximately 0.1ha. There are three buildings within the site boundaries. Three buildings were surveyed as this will be affected by the proposed development.

1.3 Scope of the report

This report provides a description of the bat activity observed and recorded during each survey. The aim of the assessment was to characterise any roosts present including species, number of individuals, number and location of roost access points, and to gain an understanding of how bats use the site.

Robust data has been collected, following good practice guidelines, to inform an assessment of the potential impacts of the proposed development on bats, and inform mitigation and enhancements. This report provides information on constraints to the proposals as a result of roosting bats, and summarises any mitigation required to achieve planning permission, and statutory consent to comply with wildlife legislation.

To achieve the aims of the assessment, the following steps have been taken:

- A desk study has been carried out, including a request for information from the local bat group or records centre
- Field survey(s) has been undertaken, including an external survey and internal inspection.
- An outline of likely impacts on any known roosts has been provided, based on current development proposals.
- Recommendations for further survey and assessment have been made, along with advice on the requirements of a European protected species mitigation licence (EPSML) application if appropriate.

A survey plan is presented in Appendix 1 showing the location of each surveyor and the bat activity observed and recorded during each survey, proposed plans in Appendix 2 (where available), and a summary of relevant legislation is presented in Appendix 3.

1.4 Project Description

The development proposals are for *“the erection of 9 storey residential building (Use Class C3) comprising 89 residential units (28 x 1 bed and 61 x 2 bed) and conversion of and 3 storey extension to 32-34 Laystall Street for use as offices (Class E) with associated external works following demolition of outrigger and associated structures along with other associated works including access, servicing, landscaping and secure cycle parking”*. A planning application has been submitted to Manchester City Council [ref: 128911/FO/2020].

2.0 Methodology

2.1 Desk Study methodology

The desk study included a 2km radius review of statutory and non-statutory designated sites, biodiversity action plan (BAP) priority habitats and granted EPSML records for bats held on magic.gov.uk database. An assessment of the surrounding landscape structure was also completed using aerial images from Google Earth and OS maps.

Existing bat records relating to the site and a surrounding 2km radius are required to conform to national guidelines. The data search is confidential information that is not suitable for public release and was analysed and summarised in the Preliminary Roost Assessment Survey report (E3P). Please refer to the Preliminary Roost Assessment and Bat Survey report (E3P).

2.2 Site Survey methodology

The survey methods were informed by the recommendations presented in the Preliminary Roost Assessment and Bat Survey report (E3P). This survey identified the following survey requirements in line with best practice:

“Buildings 1 and 2 were assessed as having High bat roosting potential and Building 3 was assessed as having Low bat roost potential. The assessments were made due to a series of potential roosting features, identified externally. As such further nocturnal bat surveys were recommended. A single dusk survey was undertaken. An emergence of a single common pipistrelle was recorded; subsequently, low levels of foraging were recorded within proximity to the buildings. A full set of three bat surveys, undertaken between May to August (inclusive), will be required prior to the application of a NE EPSL. These surveys will characterise the roost present and inform further details of roost provisions within the proposed buildings”.

Please refer to the Preliminary Roost Assessment and Bat Survey report (E3P) for full details.

The surveys involved surveyors positioned around the building ensuring that all elevations and roof sections with suitable roosting features could be clearly observed. Particular attention was paid to the areas of the building identified as providing suitable access points to bat roosts. The location of each surveyor during each survey is shown in Appendix 1. Each surveyor was assigned an area of the building to observe for the duration of the survey. Surveyors used heterodyne and frequency division bat detectors, and Wildlife Acoustics EM3+ and Echo Meter Touch detectors connected to iPads. Bat echolocation calls recorded during the surveys were analysed using Wildlife Acoustics sound analysis software Kaleidoscope V3.1.7 when required. The Echo Meter Touch includes an auto ID function for bat species, however this is not 100% accurate and further post-survey sound analysis is often required to confirm species that could not be identified by the auto ID software during the survey. Surveyors also used head torches, survey record sheets and pens/pencils for recording all activity observed during the surveys. Each surveyor was also provided with a hand-held radio for communication between surveyors to assist with confirming ambiguous bat activity e.g. a bat emergence or a bat passing over the building.

In accordance with the latest bat survey guidelines (Collins, J. 2016) dusk emergence surveys commenced 15 minutes before sunset and continued for 1½ - 2 hours after sunset – depending upon bat activity and surveyor visibility. Dawn re-entry surveys commenced 2 hours before sunrise and continued until 15 minutes after sunrise.

Surveys were completed during optimal weather conditions i.e. when temperatures were above 10°C, with no rain or strong winds, as these adverse weather conditions can impact upon bat emergence and foraging behaviour.

2.3 Surveyors

The lead surveyor is Louise Sawrey (Natural England Protected Species Licence Numbers: Bats - 2019-43813-CLS-CLS and was assisted by two other experienced surveyors with several years of bat survey experience. Three surveyors were used to provide sufficient cover of the building during each survey. The designated position of each surveyor during each survey is detailed in the tables in Section 3.1 below and shown on the plan in Appendix 1.

2.4 Limitations

These surveys follow best practice guidance to confirm presence/likely-absence of roosting bats and where present, characterise the roost. However, this information is collected at finite dates and times, and provides an indication of the conditions on site only. The use of the building and the site as a whole by bats, at all times cannot be established based on this information. There were no specific limitations to the survey.

3.0 Results and Evaluation

3.1 Survey Results

The results of each survey are provided in the tables below.

Table 1: Survey results

Date		06/05/2021
Start and End Times		20:30 – 22:15 Sunset: 20:45
Weather Conditions		Start: Temp: 13°C Relative Humidity: 86% Cloud Cover: 100% Wind: 3mph Rain: None End: Temp: 10°C Relative Humidity: 95% Cloud Cover: 95% Wind: 2mph Rain: None
Surveyor (position) As shown in Appendix 1		Louise Sawrey - Louise Sawrey (Natural England Protected Species Licence Numbers: Bats - 2019-43813-CLS-CLS - (Position 1 – observing the southwestern elevation and roof structure of B1-B3) Robert Hughes - Two years of experience carrying out bat emergence and re-entry surveys (Position 2 – observing the northern and western elevations and roof structure of B1-B3) Anthony Carr – Nine years of experience carrying out bat emergence and re-entry surveys (Position 3 – observing the northeastern elevations and roof structure of B1-B3)
Building Reference	Surveyor Position	Notes/observations:
B1 – B3	1	A faint call by a common pipistrelle bat at 21:12. The bat was heard but not seen. The direction of the call indicated it came from behind the surveyor. No bat activity. No bats were observed emerging from the building.
B1 – B3	2	No bat activity. No bats were observed emerging from the building.

B1 – B3	3	<i>No bat activity. No bats were observed emerging from the building.</i>
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Table 2: Survey results

Date		20/05/2021
Start and End Times		03:30 – 05:15 Sunrise: 05:00
Weather Conditions		Start: Temp: 12°C Relative Humidity: 86% Cloud Cover: 30% Wind: 2mph Rain: None End: Temp: 8°C Relative Humidity: 90% Cloud Cover: 20% Wind: 3mph Rain:
Surveyor (position) As shown in Appendix 1		Louise Sawrey - Louise Sawrey (Natural England Protected Species Licence Numbers: Bats - 2019-43813-CLS-CLS - (Position 1 – observing the southwestern elevation and roof structure of B1-B3) Robert Hughes - Two years of experience carrying out bat emergence and re-entry surveys (Position 2 – observing the northern and western elevations and roof structure of B1-B3) Anthony Carr – Nine years of experience carrying out bat emergence and re-entry surveys (Position 3 – observing the northeastern elevations and roof structure of B1-B3)
Building Reference	Surveyor Position	Notes/observations:
B1	1	<i>No bat activity. No bats were observed re-entering the building.</i>
B1	2	<i>No bat activity. No bats were observed re-entering the building.</i>
B1	3	<i>No bat activity. No bats were observed re-entering the building.</i>

Table 3: Survey results

Date		03/06/2021
Start and End Times		21:15 – 23:00 Sunset: 21:30
Weather Conditions		Start: Temp: 17°C Relative Humidity: 67% Cloud Cover: 25% Wind: 3mph Rain: None End: Temp: 15°C Relative Humidity: 73% Cloud Cover: 30% Wind: 5mph Rain: None
Surveyor (position) As shown in Appendix 1		Louise Sawrey - Louise Sawrey (Natural England Protected Species Licence Numbers: Bats - 2019-43813-CLS-CLS - (Position 1 – observing the southwestern elevation and roof structure of B1-B3) Robert Hughes - Two years of experience carrying out bat emergence and re-entry surveys (Position 2 – observing the northern and western elevations and roof structure of B1-B3) Anthony Carr – Nine years of experience carrying out bat emergence and re-entry surveys (Position 3 – observing the northeastern elevations and roof structure of B1-B3)
Building Reference	Surveyor Position	Notes/observations:
B1	1	The first activity was a pass by a common pipistrelle at 21:52. The bat flew from the northeast and headed southwest from the position of surveyor 3. The same common pipistrelle was observed throughout the remainder of the survey flying between the buildings and also foraging around the trees. <i>No bats were observed emerging from the building.</i>
B1	2	Two distant passes were heard by a common pipistrelle at 22:23 and 22:32. The bat was heard but not seen. The bat is likely to be the same common pipistrelle observed by survey 1 and 2. <i>No bats were observed emerging from the building.</i>
B1	3	The first activity was a pass by a common pipistrelle at 21:53. The bat flew from the northeast and headed southwest over B3 towards surveyor 1. Further passes was observed from the same common pipistrelle at 21:55, 22:03, 22:05, 22:39 and 22:48. The bat was flying back and to over B3 and between the alley. <i>No bats were observed emerging from the building.</i>

4.0 Conclusions, Impacts and Recommendations

4.1 Informative guidelines

When bat roosts are present, the bat surveys undertaken at a site facilitate the characterisation of the roost type. This allows for appropriate mitigation and compensation to be designed to inform a European protected species mitigation licence (EPSML) application to Natural England.

The definitions of bat roost types are provided below, taken from the *Bat Mitigation Guidelines* (English Nature, 2004) and the Bat Conservation Trust publication *Bat Surveys for Professional Ecologists – Good Practice Guidelines* (Collins, J. (Ed) 2016).

Day roost: a place where individual bats, or small groups of males, rest or shelter in the day but are rarely found by night in the summer.

Night roost: a place where bats rest 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 roost: a place where individual bats or a few individuals rest or feed during the night but are rarely present by day.

Transitional / occasional 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.

Swarming site: where large numbers of males and females gather during late summer to autumn. Appear to be important mating sites

Mating sites: sites 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.

Hibernation roost: where bats may be found individually or together during winter. They have a constant cool temperature and high humidity. Sites where hibernating bats have been confirmed by appropriate survey effort should be classed as 'hibernation confirmed'.

Satellite roost: an alternative roost found in close proximity to the main nursery colony used by a few individual breeding females to small groups of breeding females throughout the breeding season.

Other: roost types are interchangeable and not always easy to classify according to the nuances of certain species.

The surveys undertaken to date in and around B1 provide sufficient information to inform a planning application. A European protected species mitigation licence (EPSML) **will not be required** to enable the proposed works to be lawfully undertaken. Appropriate justification for this assessment is provided in Section 3 of this report.

4.2 Evaluation

The following recommendations are provided taking the desk-based assessment and site survey results into account.

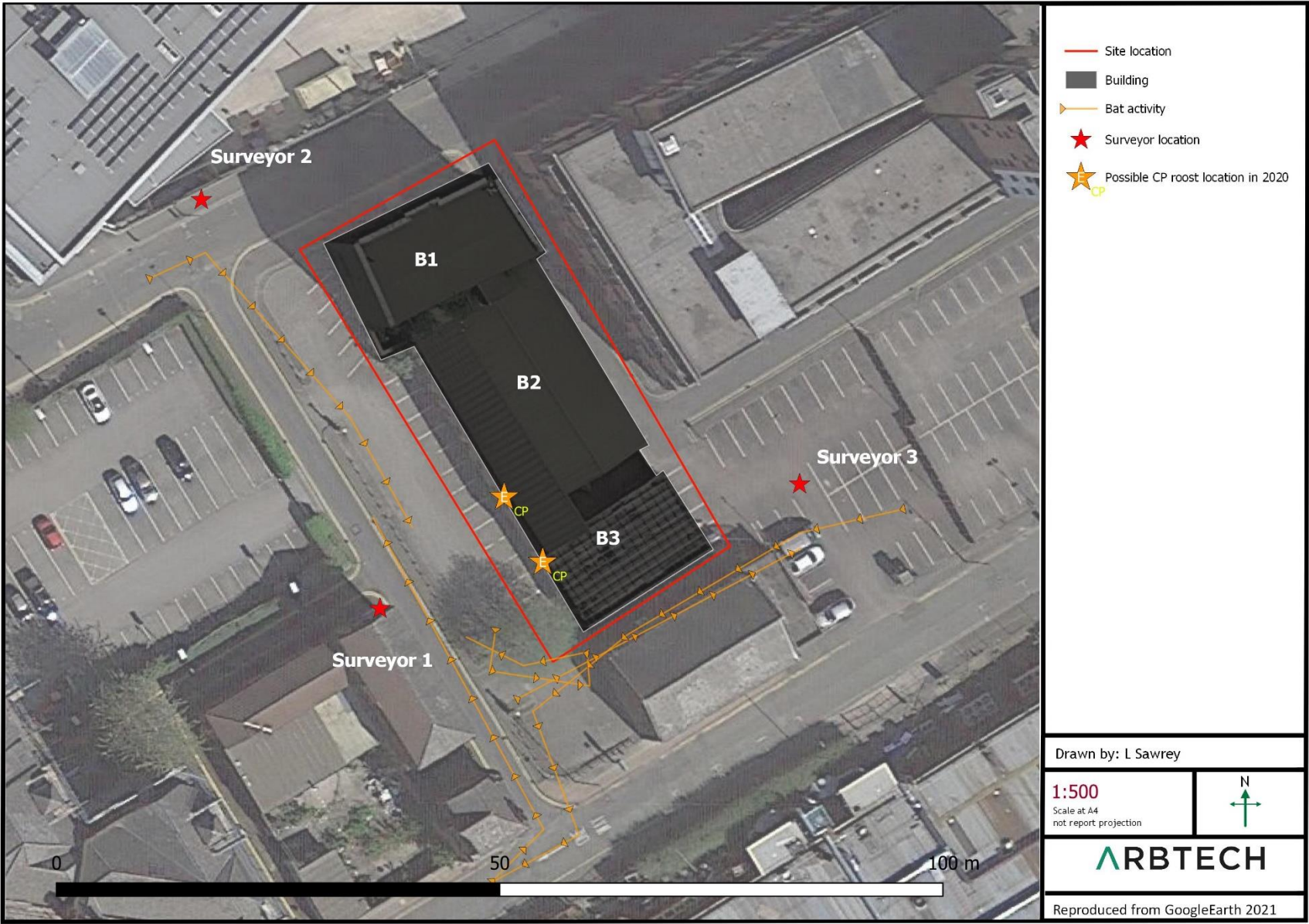
Table 4: Evaluation of the buildings on site

Ref	Survey conclusions	Foreseen impacts	Recommendations / Mitigation
B1	No bats were seen emerging or re-entering the buildings during the 2021 surveys. It is possible that the roost is historical or that it is a transitory roost of one common pipistrelle, as one common pipistrelle was seen emerging from B2 or B3 (the surveyor could not determine the exact emergence point) during the single dusk survey in September 2020. Please refer to the Preliminary Roost Assessment and Bat Survey report (E3P) for full details.	A transitional roost for one common pipistrelle bats will be damaged and destroyed during works.	A European Protected Species Mitigation Licence (EPSML) will be required from Natural England prior to the commencement of works, once planning has been granted. As there is one bat roost of low numbers of common species present, the works can be completed under a Natural England Bat Mitigation Class Licence (Low Impact) – WML-CL21. <u>The licence application can be submitted within 3 months of the start of work. If more than 3 months elapses since the last survey, a material changes check will be required prior to licence submission. If more than 12 months elapses, updated dusk/dawn surveys will also be required to inform the licence application.</u> Full details of mitigation and compensation required will be included in the licence application. This will include a pre-inspection of the known roosting location directly prior to commencement of works, ecological supervision of the removal of the roof tiles by hand and the installation of a Schwegler 2FN (or similar Woodcrete) bat box on site prior to the start of work. There will be no restrictions on the timing of the works. Any additional lighting on site will follow Bat Conservation Trust lighting guidelines and will not cast any light on the tree lines to the north, or gardens to the east where bats were observed to be commuting and foraging during survey. Light spill will be directed away from any boxes. Lighting strategies will be adopted from the guidance outlined in the new Bats and Lighting Publication produced by the Institution of Lighting Professionals and the Bat Conservation Trust “Guidance Note 08/18 Bats and artificial lighting in the UK Bats and the Built Environment series publication: http://www.bats.org.uk/news.php/406/new_guidance_on_bats_and_lighting

5.0 Bibliography

- Collins, J. (ed.) (2016). Bat Surveys for Professional Ecologists —Good Practice Guidelines, 3rd edition, Bat Conservation Trust, London.
- E3P. (2020) – Preliminary Roost Assessment and Bat Survey Report.
- Garland & Markham (2008) Is important bat foraging and commuting habitat legally protected?
- Google Earth (2021) accessed on 05/06/2021.
- Magic database (2021) <http://www.magic.gov.uk/MagicMap.aspx> accessed on 05/06/2021.
- Mitchell-Jones, A.J. (2004). Bat Mitigation Guidelines. English Nature, Peterborough.

Appendix 1: Survey Plan



Appendix 2: Proposed Site Plan



Appendix 3: Legislation and Planning Policy related to bats

LEGAL PROTECTION

All species of bat are fully protected under *The Conservation of Habitats and Species Regulations 2017* through their inclusion on Schedule 2.

Regulation 43: Protection of certain wild animals - offences

(1) A person is guilty of an offence if they:

- (a) Deliberately captures, injures or kills any wild animal of a European protected species,
- (b) Deliberately disturbs wild animals of any such species,
- (c) Deliberately takes or destroys the eggs of such an animal, or
- (d) Damages or destroys a breeding site or resting place of such an animal,

(2) For the purposes of paragraph (1) (b), disturbance of animals includes in particular any disturbance which is likely—

- (a) To impair their ability:
 - (i) To survive, to breed or reproduce, or to rear or nurture their young; or
 - (ii) In the case of animals of a hibernating or migratory species, to hibernate or migrate; or
- (b) To affect significantly the local distribution or abundance of the species to which they belong.

Bats are also protected under the *Wildlife and Countryside Act 1981 (as amended 01.04.1996)* through their inclusion on **Schedule 5**. Under this Act, they are additionally protected from:

- Intentional or reckless disturbance (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection
- Selling, offering or exposing for sale, possession or transporting for purpose of sale

NATIONAL PLANNING POLICY (ENGLAND)

National Planning Policy Framework 2017

The National Planning Policy Framework promotes sustainable development. The Framework specifies the need for protection of designated sites and priority habitats and species. An emphasis is also made on the need for ecological infrastructure through protection, restoration and re-creation. The protection and recovery of priority species (considered likely to be those listed as UK Biodiversity Action Plan priority species) is also listed as a requirement of planning policy.

In determining a planning application, planning authorities should aim to conserve and enhance biodiversity by ensuring that: designated sites are protected from harm; there is appropriate mitigation or compensation where significant harm cannot be avoided; opportunities to incorporate biodiversity in and around developments are encouraged; and planning permission is refused for development resulting in the loss or deterioration of irreplaceable habitats including aged or veteran trees and also ancient woodland.

The Natural Environment and Rural Communities Act 2006 and the Biodiversity Duty

Section 40 of the Natural Environment and Rural Communities (NERC) Act 2006, requires all public bodies to have regard to biodiversity conservation when carrying out their functions. This is commonly referred to as the 'biodiversity duty'.

Section 41 of the Act requires the Secretary of State to publish a list of habitats and species which are of 'principal importance for the conservation of biodiversity'. This list is intended to assist decision makers such as public bodies in implementing their duty under Section 40 of the Act. Under the Act these habitats and species are regarded as a material consideration in determining planning applications. A developer must show that their protection has been adequately addressed within a development proposal.

Effect on development works:

A European Protected Species Mitigation (EPSM) Licence issued by Natural England will be required for works likely to affect a bat roost or for operations likely to result in a level of disturbance which might impair their ability to undertake those activities mentioned above (e.g. survive, breed, rear young and hibernate). The licence is to allow derogation from the relevant legislation but also to enable appropriate mitigation measures to be put in place and their efficiency/success to be monitored. The legislation may also be interpreted such that, in certain circumstances, important foraging areas and/or commuting routes can be regarded as being afforded *de facto* protection, for example, where it can be proven that the continued usage of such areas is crucial to maintaining the integrity and long-term viability of a bat roost (Garland & Markham, 2008).

There are 17 species of bat breeding in England and Natural England issues licences under Regulation 55 of the Habitats Regulations to allow you to work within the law.

Licences are issued for specific purposes stated in the Regulations, if the following three tests are met:

- The purpose of the work meets one of those listed in the Habitats Regulations (see below);
- That there is no satisfactory alternative;
- That the action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status (FCS) in their natural range

The Habitats Regulations permits licences to be issued for a specific set of purposes including:

- ***include preserving public health or public safety or other imperative reasons of over-riding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment;***
- scientific and educational purposes,
- ringing or marking
- conserving wild animals

Development works fall under the first purpose and Natural England issues bat mitigation licences for developments.