



35 Cockney Hill, Tilehurst, Reading, Berkshire RG30 4HF

Anthony Griemer

Bat Survey - Preliminary Roost Assessment

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Contents Page

Executive Summary.....	5
1.0 Introduction and Context.....	6
1.1 Background	6
1.2 Scope of the Report	6
1.3 Site Context.....	6
1.4 Project Description.....	7
2.0 Methodology.....	8
2.1 Desk Study.....	8
2.2 Site Survey.....	8
2.2.1 Breeding birds and other incidental observations.....	8
2.3 Suitability Assessment	8
2.3 Limitations.....	9
3.0 Results and Evaluation.....	10
3.1 Desk Study Results	10
3.1.1 Designated sites	10
3.1.2 Landscape.....	11
3.1.3 Historical records	12
3.2 Survey Results	12
3.2.1 Breeding birds and other incidental observations.....	12
3.3 Evaluation – Likelihood of bats being present.....	13
4.0 Conclusions and Recommendations	14
4.1 Conclusions and Impact Assessment	14
4.1.1 Breeding birds and other incidental observations.....	Error! Bookmark not defined.
4.2 Recommendations	14

4.2.1 Survey and assessment	14
4.1.1 Breeding birds	Error! Bookmark not defined.
5.0 Bibliography	16
Appendix 1: Survey Plan	18
Appendix 2: Proposed Site Plan	19
Appendix 3: Photographs.....	20
Appendix 4: Legislation and Planning Policy related to bats	22
LEGAL PROTECTION	22
Effect on development works:	22
NATIONAL PLANNING POLICY (ENGLAND).....	23
National Planning Policy Framework	23
The Natural Environment and Rural Communities Act 2006 and The Biodiversity Duty	23

Executive Summary

Arbtech Consulting Ltd. undertook a Preliminary Roost Assessment at 35 Cockney Hill, Tilehurst, Reading, Berkshire RG30 4HF on 13th January 2016. The aim of the assessment was to consider the value and suitability of the structures for roosting bats. The development proposals briefly comprise 'Part two storey and part single storey side and rear extensions, single storey front extension to the building line incorporating an entrance porch'.

Value of building for roosting bats	Recommendations for further survey and assessment
Negligible	No further surveys required.

The survey concluded that the building does not provide the necessary features to make it suitable for roosting bats. As such, no further surveys are recommended.

Although at the time of the survey there were damaged tiles present on the garage roof (suitable features for crevice dwelling bat species), the damage was very recent, caused by pressure washing of the roof. It is assessed that as the damage was caused in December, when bats would be hibernating, it is extremely unlikely that bats would have started using these features at this time of year. The tiles are due to be replaced within the next two weeks, after which the building will not be suitable for roosting bats. See Appendix 5 for the letter from Express Maintenance stating the work carried out.

1.0 Introduction and Context

1.1 Background

Arbtech were commissioned by Anthony Griemer to undertake a Preliminary Roost Assessment (PRA) at 35 Cockney Hill, Tilehurst, Reading, Berkshire RG30 4HF. The assessment is informed by the Bat Conservation Trust publication *Bat Surveys – Good Practice Guidelines* (Hundt, 2012).

No previous reports have been produced for this site by Arbtech Consulting Ltd.

1.2 Scope of the Report

This report provides a description of all structural features suitable for roosting bats, and evaluates those features in the context of the site and wider environment. It further documents any physical evidence collected or recorded during the site survey that establishes the presence of roosting bats. It provides information on constraints to the proposals as a result of roosting bats, and summarises the requirements for any further surveys, to inform subsequent mitigation proposals, achieve Planning or other statutory consent, and to comply with wildlife legislation.

The aim of the assessment was to determine the presence or evaluate the likelihood of presence of roosting bats, and to gain an understanding of how they could use the building or structure. To achieve this, the following steps have been taken:

- A desk study has been carried out, including a request for information from Thames Valley Environmental Records centre (TVERC).
- A field survey has been undertaken, including an external and internal inspection of the building
- 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 European Protected Species Mitigation Licensing if appropriate

A survey plan is presented in Appendix 1, the proposed Project Plan can be found in Appendix 2 and photographs taken during the site survey are included in Appendix 3. A summary of relevant legislation is included in Appendix 4, and full desk study records can be provided on request.

1.3 Site Context

The site is located at National Grid Reference SU678726. There is one building within the survey area.

The site is situated in a residential area in Tilehurst, Reading. There is woodland, parkland and a golf course in the local area which provide resources for bats. The site is connected to these areas by back gardens and woodland edges.

1.4 Project Description

This report is prepared in support of a planning application. Reference number 151628.

Planning description: 'Part two storey and part single storey side and rear extensions, single storey front extension to the building line incorporating an entrance porch'. All works areas, storage and haul routes will be included within the site boundaries; access will be provided by existing roads and as such, no additional working footprints are anticipated.

2.0 Methodology

2.1 Desk Study

Existing bat records relating to the site and a surrounding 500m radius were requested from Thames Valley Environmental Records Centre (TVERC). The data search is confidential information that is not suitable for public release.

A review of the following information sources has also been undertaken to inform the assessment:

- Landscape structure using aerial images from Google Earth
- Designated sites, habitat and species data held on Magic.gov.uk.
- Designated sites information found on Natureonthemap.naturalengland.org.uk
- Information on the surrounding area using OS Opendata 2010

2.2 Site Survey

The survey was undertaken by Natalie Evans bat licence -England: 2015-11257-CLS-CLS, on 13th January 2016.

All buildings that will be impacted by the project proposals (the survey area) were assessed for their potential to support roosting bats. The surveyor systematically searched for features suitable for roosting bats and signs of bat activity, by conducting a non-intrusive visual appraisal from the ground using binoculars, inspecting the external features of the buildings for potential access/egress points, and for signs of bat use. An internal inspection of the building was also made, including the living areas of derelict or abandoned buildings and the roof spaces of all buildings, using an endoscope, torch and ladders. The surveyor paid particular attention to the floor and flat surfaces, window shutters and frames, lintels above doors and windows, and carried out a detailed search of numerous features within the roof space.

2.2.1 Breeding birds and other incidental observations

The surveyor also made note of any other ecological constraints observed during the survey, notably the likelihood of presence or signs of breeding birds, and the suitability of the site for breeding barn owls *Tyto alba*.

2.3 Suitability Assessment

The buildings were categorised according to the likelihood of bats being present, in line with best practice guidelines (Hundt, L., 2012); the features of the building that dictate the likelihood of roosting

bats are summarised in Table 1. Roost suitability is classified as high, moderate, low and negligible and dictates any further surveys required before works can proceed.

Table 1: Features of a building that are correlated with use by bats during the summer

Likelihood of bats being present	Feature of building and its context
Higher	Buildings/structures with features of particular significance for roosting bats e.g. mines, caves, tunnels, icehouses and cellars. Habitat on site and surrounding landscape of high quality for foraging bats e.g. broadleaved woodland, tree-lined watercourses and grazed parkland. Site is connected with the wider landscape by strong linear features that would be used by commuting bats e.g. river and or stream valleys and hedgerows. Site is proximate to known or likely roosts (based on historical data).
Lower	A small number of possible roost sites/features, used sporadically by more widespread species. Habitat suitable for foraging in close proximity, but isolated in the landscape. Or an isolated site not connected by prominent linear features. Few features suitable for roosting, minor foraging or commuting.

2.3 Limitations

It should be noted that whilst every effort has been made to describe the features on site in the context of their suitability for roosting bats, this does not provide a complete characterisation of the site.

Where only four figure grid references are provided for bat records, it is not possible to determine their precise location as they could be present anywhere within the given 1km x 1km National Grid square.

This survey provides a preliminary view of the likelihood of bats being present. This is based on suitability of the habitats on the site and in the local area, the ecology and biology of bats as currently understood, and the known distribution of bats as recovered during the desk study.

3.0 Results and Evaluation

3.1 Desk Study Results

A summary of desk study results are provided below; full records can be provided on request.

3.1.1 Designated sites

There are no statutory designated sites and four non-statutory sites within the study area.

Table 2 provides details of the designated sites including their reasons for notification; these habitats are all high value for bats.

Table 2: Designated sites within 2km of the site

Designated Site Name	Distance from Site (approx)	Reasons for Notification and integral value
Non-statutory Sites		
Lousehill Copse LNR	700m north east	Semi-ancient woodland surrounded by housing. Mature oak and hazel woodland with some coppice. There are many bluebells and other spring flowers, streams, relics of old ponds and boggy areas. The site is on sand and gravel. There is an open meadow with gorse and broom in the northern section. (Natural England)
Blundells Copse LNR	880m north west	Ancient woodland with a stream. There are large alder trees, cherry, willow and coppiced willow, alder and hazel with oak and ash standards. There is opposite leaved golden saxifrage, marsh marigold, yellow archangel and fools water cress along the stream. Animals include bats, hedgehogs, muntjac deer, field mice and frogs. (Natural England)
Round Copse LNR	1.2km north	Adjacent to and joining Mcilroy Park, Round Copse is a dense woodland with a variety of birdlife, with the chance for the patient observer of seeing all three species of Woodpecker, as well as Nuthatch, Treecreeper, Thrushes and Blackbirds. (Natural England)

Designated Site Name	Distance from Site (approx)	Reasons for Notification and integral value
McIlroy Park LNR	1.4km north	An extensive natural park with good views over the River Thames. It is mostly grassland with heather and broom. The semi-ancient woodland, mostly around the edges of the site, has bluebells, wood anenomes and butchers broom. The site has a sunken ancient track "Gypsy Lane" lined with beech trees. Romany Lane bounds the eastern side. There are old chalk pits in the west woodland area from the old clay extraction industry. A possible Saxon mound is at the entrance from Weald Way. (Natural England)

3.1.2 Landscape

The Magic database shows the following habitats close to the site; woodpasture and parkland habitat, deciduous woodland habitat, and ancient woodland. These habitats are likely to be classified as Priority habitats of principle importance, and are of particular value to bats.

A review of aerial photographs (Figure 1) and OS maps shows the site forms part of a garden habitat corridor for bats. The woodland at the end of the back garden forms part of a larger wooded area of approx. 0.35ha.

Figure 1: Aerial photo of site, showing landscape structure



3.1.3 Historical records

TVERC has provided bat records for within 500m of the site. These can be provided on request and are summarised below.

A single bat record was found within 500m; a brown long eared bat *Plecotus auritus* roost was recorded in a residential loft in 2012 approx. 140m away from the site.

3.2 Survey Results

The buildings within the survey area comprised a detached residential dwelling with attached garage to the side and conservatory to the rear.

Residential dwelling:

Building description

- The building is of brick construction with a hipped, clay tiled roof. (Photo 1)
The roof tiles are generally undamaged and tight fitting apart from recent damage where the roof has been pressure washed in December 2015. This has caused tiles to be chipped and displaced, creating potential roosting crevice for bats. (Photo 3 and 4) With the use of binoculars, no evidence of bat use could be found around the broken tiles such as scratching, droppings or urine staining. The garage sub roof wraps around the side and rear of the building. This roof is where the majority of tile damage has occurred. The timber soffit boards are tight fitting leaving no roosting access for bats. Window frames are tight fitting leaving no roosting access for bats. There is a timber and glass conservatory at the rear of the building with a sloped plastic roof. There are no features on this part of the building that would allow bat roosting access. (Photo 6)
- The loft is bitumen lined which appears to be in excellent condition with no damaged areas that could allow bat roosting access. The floor is mostly boarded apart from around the eaves where mineral wall insulation is in place between ceiling joists. Modern timber rafters, trusses, purlins and ridge beam are present with no evidence of bat use such as urine staining or scratches. The ridge height is approx. 10f. (Photo 5) The temperature was approx. 9% and humidity approx. 74%.
- The garage interior is vaulted and bitumen lined which is damage free and would not provide access for bats. Modern timber rafters, trusses, purlins and ridge beam are present with no evidence of bat use such as urine staining or scratches. The window and door are tight fitting leaving no potential access points. (Photo 2)

3.2.1 Breeding birds and other incidental observations

No evidence of nesting birds was found and no suitable nesting opportunities were present

3.3 Evaluation – Likelihood of bats being present

Taking the desk based assessment and site survey results into account, the following value for roosting bats has been placed on each building.

Table 3: Evaluation of buildings/structures on site

Value for / Likelihood of bats using the building for roosting	Brief summary of justification
Negligible habitat value	The survey concluded that the building does not provide the necessary features to make it suitable for roosting bats. Although at the time of the survey there were damaged tiles present on the garage roof, the damage was very recent, caused by pressure washing of the roof. As the damage was caused in December, when bats would be hibernating, it is extremely unlikely that bats would have started using these features at this time of year (within 2 months). The tiles are due to be replaced within the next two weeks, after which the building will not be suitable for roosting bats. See Appendix 5 for the letter from Express Maintenance stating that the work was carried out by them in December 2015 and that the tiles are due to be replaced.

4.0 Conclusions and Recommendations

4.1 Conclusions and Impact Assessment

The PRA concludes that the building supports negligible value for roosting bats. It is therefore assessed that the development will not impact bat roosts.

Although the building does currently provide potential roosting features due to slipped and broken roof tiles, it is highly unlikely that these will have been used by bats since the start of December when the damage was caused. The tiles are due to be fixed before the end of January, and will therefore no longer be suitable for bat use by the time bats come out of hibernation in the spring.

Bats are protected under the Wildlife and Countryside Act and Conservation Regulations; see Appendix 3 for a summary of legislation protecting bats in the UK.

4.2 Recommendations

4.2.1 Survey and assessment

Best practice survey guidelines (Hundt, 2012) recommends additional surveys for all buildings assessed as having low to high suitability for roosting bats. The survey effort recommended at this stage is iterative and if bats are recorded emerging from the buildings, the survey effort should be adjusted to provide sufficient information to inform European Protected Species Mitigation licensing (EPSML). Buildings assessed as comprising negligible suitability for roosting bats do not normally require further surveys. Appropriate justification for this assessment is provided in Section 3.0 and Table 4 of this report.

If bats are found during any stage of the development, work should stop immediately and a suitably qualified ecologist should be contacted to seek further advice.

Recommendations for further survey or assessment associated with each building are provided in Table 5.

Table 4: Survey recommendations

Value for / Likelihood of supporting roosting bats	Recommendations
Negligible	No further surveys are required. As a precautionary measure, care will need to be taken when removing the roof tiles and if bats are found, work must cease and further advice must be sought from an ecologist or suitably qualified person. As an enhancement to the site, bat boxes can be erected on the trees in the wooded area at the end of the garden. This will increase bat habitat on site and encourage bats to roost. Bat boxes should be erected on trees at least 3m off the ground and facing in a south or south westerly direction.

5.0 Bibliography

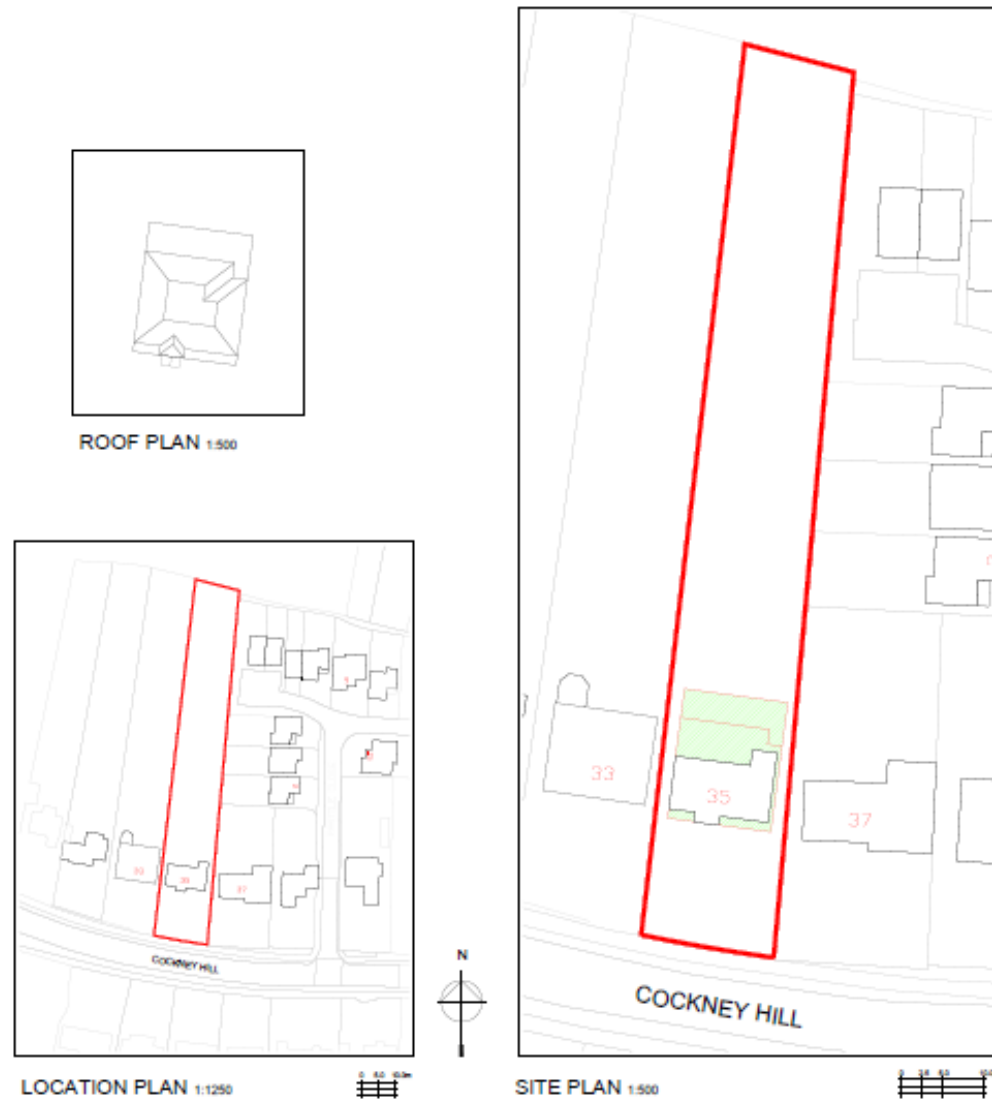
- Hundt, L. (2012). Bat Surveys—Good Practice Guidelines, 2nd edition, Bat Conservation Trust, London.
- Mitchell-Jones, A.J. (2004). Bat Mitigation Guidelines. English Nature, Peterborough.

Appendices

Appendix 1: Survey Plan



Appendix 2: Proposed Site Plan



Appendix 3: Photographs

Photo 1: front of the building.



Photo 2: internal garage roof structure.



Photo 3: missing tile under lead flashing on the side of the garage roof.



Photo 4: missing tile on the front of the garage roof.



Photo 5: loft.



Photo 6: rear of the building.



Appendix 4: Legislation and Planning Policy related to bats

LEGAL PROTECTION

All species of bat are fully protected under The Conservation of Habitats and Species Regulations 2010 (as amended) through their inclusion on Schedule 2.

Regulation 41 prohibits:

- Deliberate killing, injuring or capturing of Schedule 2 species (e.g. all bats)
- Deliberate disturbance of bat species as:
 - a) to impair their ability:
 - (i) to survive, breed, or reproduce, or to rear or nurture young
 - (ii) to hibernate or migrate
 - b) to affect significantly the local distribution or abundance of the species
- Damage or destruction of a breeding site or resting place

Bats are also protected under the Wildlife and Countryside Act 1981 (as amended) 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

Effect on development works:

A European Protected Species Mitigation (EPSM) Licence issued by the relevant statutory authority (e.g. 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)

NATIONAL PLANNING POLICY (ENGLAND)

National Planning Policy Framework

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 (Section 42 in Wales) 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.

Appendix 5: letter of confirmation from roof contactors.***EXPRESS MAINTENANCE***

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58 SUMMERWOOD ROAD – ISLEWORTH - TW7 3QD

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Email: john.zcasay@europa.com

With Compliments

TO: WHOM IT MAY CONCERN
REF: 35 COCKNEY HILL – TILEHURST
CLIENT: Mr.Griemer
DATE: 14/01/16

We confirm that works to pressure wash the roof tiles of main house as well as garage roof at right side were carried out by us on Saturday, Monday Tuesday, December 5th, 7th & 8th 2015.

The customer was pre advised that due to high pressure of water jet there is risk of fracture to the lower half of the tile whereas the upper part is completely shielded by the overlap of the tile in the row above.

We additionally installed a replacement water tank overflow pipe through the soffit at the right hand side.

We are proposing to return to site within the next 14 days to replace tiles where the lower half was fractured and fell away and also to apply silicone sealant around the overflow extrusion.

Express Maintenance

BACK PAGE

Arbtech Consultant's Contact details:

Natalie Evans HND, BA (Hons), MA
07860951397
ne@arbtech.co.uk

Arbtech Consulting Ltd
<https://arbtech.co.uk>