Greengage

28 Redington Road Thomas Croft Architects
Bat Survey Report, September 2019

QA

28 Redington Road –Bat Survey Report

Issue/Revision:	Draft	Final
	September 2019	September 2019
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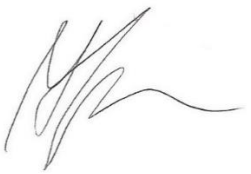
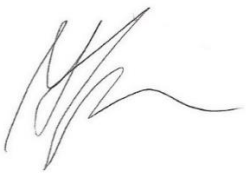
Signature:		
File Reference:	551312mtAug19DV01_Bats	551312mtAug19FV01_Bats

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1.0 EXECUTIVE SUMMARY

1.1 Greengage Environmental Ltd was commissioned by Thomas Croft Architects to undertake a Bat Survey of a property at 28 Redington Road, Hampstead in order to in order to determine the presence/likely absence of roosting bats and identify appropriate mitigation, compensation and enhancement measures for the proposed scheme.

1.2 This report has been produced to support a planning submission for the site which seeks renovation and refurbishment of the existing building including side and rear extension.

1.3 The site was previously surveyed in 2016 with bats confirmed as likely-absent at the time. Given the age of these data however updated surveys were undertaken to assess current usage of the site.

1.4 As before, given the presence of a range of potential features which may be of value for roosting bats, the building was classified as having moderate value, with two emergence/re-entry surveys recommended, in accordance with Bat Conservation Trust Guidelines.

1.5 The updated surveys, undertaken between late July and early September 2019, confirmed the presence of three roost locations in use by common pipistrelle (*Pipistrellus pipistrellus*) and soprano pipistrelle (*P. pygmaeus*) bats.

1.6 The roosts at site are therefore most likely to be summer day roosts used by a small number of individuals.

1.7 These locations will be subject to direct and indirect disturbance as a consequence of the proposed works. A European Protected Species Mitigation (EPSM) derogation licence will therefore be required from Natural England to enable legislative compliance during the refurbishment works at site. This will present measures to mitigate impacts upon the bats and their roosts, including:

- Erection of temporary alternative roosting space in bat boxes hung from nearby trees;
- Carefully timed works to avoid disturbance during the most sensitive periods;
- Careful removal of roosting features overseen by a licenced ecologist, with movement of any bats encountered into boxes;
- Supervision and monitoring visits by a licenced bat ecologist during further key stages of work after the removal of the roosting features; and
- Provision of compensatory roosting space in the new development for any areas disturbed/lost.

1.8 Best practice recommendations are also provided to ensure foraging and commuting bats are not impacted by proposals and aim to improve roosting conditions for bats. These include:

- No net increase in external lighting and provision of improved landscaping for invertebrate prey;
- Retention of trees, vegetation and habitats of value to local bat populations, where possible; and
- Wildlife-friendly landscaping to enhance the site as a foraging and commuting resource.

1.9 Measures relating to bat mitigation could be secured through planning condition, to be described within a detailed Bat Mitigation Strategy.

2.0 INTRODUCTION

2.1 Greengage Environmental Ltd was commissioned by Thomas Croft Architects to undertake a Bat Survey of a property at 28 Redington Road in order to confirm the presence/likely-absence of roosting bats in the building.

2.2 This report has been produced to support a planning submission for the site which seeks renovation and refurbishment of existing building including side and rear extension.

AIMS

2.3 The purpose of the survey was to further determine if there are any features or habitats on site that could potentially support bats, and to determine whether any bats are roosting in the buildings at the site. The surveys aimed to:

- Determine the presence/absence of bat species;
- Determine the intensity of bat activity both spatially and temporally to help estimate bat populations;
- Determine the type of activity, most usually
    - Roosting;
    - foraging (by feeding buzzes); or
    - commuting (by high directional pass rates); and

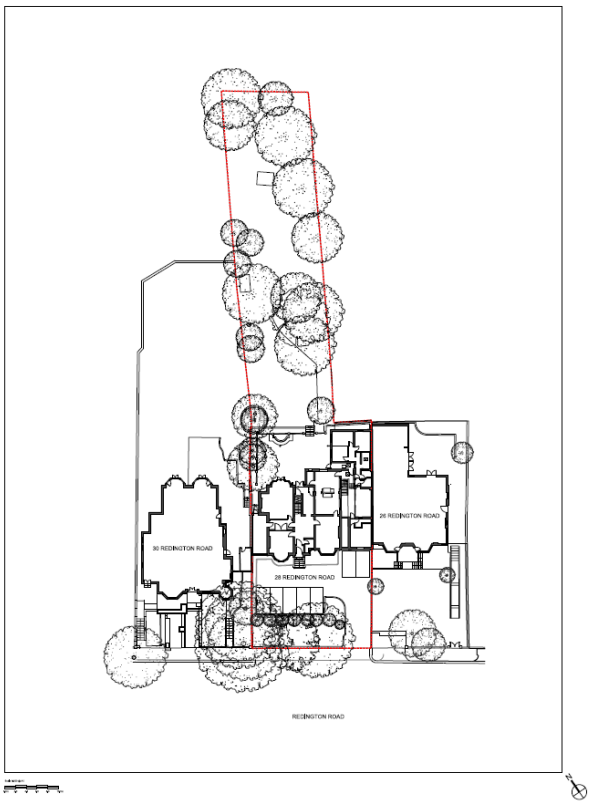
2.4 By using a collation of existing data for the area to support the survey, it is possible to determine the presence/likely-absence of bats across the site and in the wider area. This information can then be used to determine the form and extent of any mitigation, compensation or enhancement that may be appropriate.

SITE CONTEXT

2.5 The site is approximately 0.2 hectares and is approximately centred on National Grid Reference TQ257858 and OS Co-ordinates 525798, 185861.

2.6 The site supports a three storey residential property with associated driveway and garden space. The building is a brick built structure with a pitched and tiled roof which links to a small annex block. The garden, that extends some distance to the rear of the property, supports a number of mature trees and includes a patchwork of overgrown improved grassland and shrub beds.

Figure 2.1 Site red line boundary



2.7 The site is set in the urbanised area of Hampstead Village. A green part of north London, Hampstead is characterised by an abundance of large residential properties with gardens and tree lined streets, as well as the network of parks including Hampstead Heath (located just 350m from the site at its closest point); accordingly, there is an abundance of green space in the area, with well-defined green links to and from the site.

PREVIOUS SURVEY RESULTS

Desk based assessment

2.8 A number of records for bats were identified within the 2km search area around the assessment site including known roosts and field records for live bats and casualties.

2.9 Records of roosts and/or hibernation sites for the following species were identified:

- Common pipistrelle (Pipistrellus pipistrellus)
- Soprano pipistrelle (Pipistrellus pygmaeus)
- Brown long-eared (Plecotus auritus)
- Natterer's (Myotis nattereri); and
- Daubenton's (Myotis daubentonii).

2.10 In addition, field records from Greengage of the following species were identified:

- Nathusius's pipistrelle (Pipistrellus nathusii)
- Leisler's (Nyctalus leisleri);
- Noctule (Nyctalus noctula); and
- Serotine (Eptesicus serotinus).

2.11 According to Defra's Magic website there have been three recent European Protected Species Mitigation Licences granted for disturbance to bat roosts in the local area (within 2km), all for common and soprano pipistrelle roosts.

2.12 There is a single statutory designation within 2km, Hampstead Heath Woods Site of Special Scientific Importance (SSSI), and two Local Nature Reserves (LNRs) Belsize Wood and Westbere Copse.

2.13 The habitats directly present on site were deemed to provide moderate bat foraging potential, with overgrown garden areas supporting rough grassland, dense shrub planting and mature trees.

2.14 The surrounding area supports an abundance of green linkages, including direct links to the nearby Hampstead Heath.

Preliminary Roost Appraisal

2.15 Following the *Bat Conservation Trust's (BCT) Bat Surveys for Professional Ecologists Good Practice Guidelines*, a daytime Preliminary Roost Assessment was undertaken in July 2016 to support a previous planning submission for the site.

2.16 No direct field signs were observed externally or internally during the inspection, with no droppings, stains, scratch marks or other evidence that may suggest presence of roosting bats. Internal roof spaces were also in a good condition with no noticeable access points.

2.17 Features that may provide roosting opportunities for bats were however observed with gaps beneath the fascia's and soffits, and gaps beneath roof tiles. The building was accordingly classified as having moderate potential value for roosting bats.

2.18 Potential roosting value was defined as per BCT guidelines:

- Negligible – negligible habitat features on site likely to be used by roosting bats
- Low – a structure with one of more potential roost sites that could be used by individual bats opportunistically. However, these potential roosts sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity or hibernation)

- Moderate – a structure or tree with 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.
- High - a structure or tree with one or more potential roost sites that are obviously suitable for use by larger number of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.

Emergence/Re-entry surveys

2.19 Two emergence/re-entry surveys were therefore undertaken. These surveys observed low levels of commuting and foraging over the garden however no evidence of bat roosting.

2.20 Given the time since these previous surveys an updated assessment was recommended to confirm the status of the site and determine the current presence/likely-absence of roosting bats.

3.0 METHODOLOGY

PRELIMINARY ROOST APPRAISAL

3.1 The PRA comprised a systematic internal and external site inspection to look for potential ingress/egress points and search for evidence of bats.

3.2 The exteriors were searched for potential or actual bat access points and roosting places, and to locate any evidence of bats such as live or dead specimens, bat droppings, urine splashes, fur-oil staining and/or squeaking noises.

3.3 The interiors, where possible, were also searched systematically to identify potential or actual bat access points and roosting places, and to locate evidence of bats. Bat specimens (live or dead) and droppings are the most reliable type of evidence. Other evidence found can include urine splashes, fur-oil staining, feeding remains (moth wings), squeaking noises (which can sometimes alert an ecologist to an otherwise hidden roost), bat-fly (Nycteribiid) pupal cases or odour.

EMERGENCE/RE-ENTRY SURVEY

3.4 Three emergence/re-entry surveys were undertaken between late July and early September 2019. Each survey was undertaken in clear, still and warm conditions with sunset temperatures between 12°C and 21°C, in accordance with Bat Conservation Trust (BCT) guidelines[1].

3.5 Emergence surveys commenced 15 minutes prior to sunset and continued for two hours after sunset. Re-entry surveys commenced 2 hours before sunrise and ran up to sunrise. Three observation points were employed to enable full coverage of the buildings.

3.6 Surveyors were equipped with a Batbox Duet Heterodyne bat detector and Echometer Touch bat detector to hear, visualize and record bat calls and identify bats to species level.

LIMITATIONS

3.7 The surveys were undertaken at a suitable time of year and in generally suitable weather conditions. The size of the assessment site meant that the survey effort employed met the recommended level according to best practice guidance.

3.8 Sufficient periods (2 weeks) between each bat survey was allowed, in accordance with best practice. This is a short period and does not allow for assessment of the site's usage earlier in the summer, although the survey period will have allowed for an assessment of the site's use for maternity and transient summer day roosts. The relatively short period covered by the surveys is therefore not considered to have constrained any conclusions drawn in this report.

3.9 It was not possible to access all internal space within the buildings with some areas and roof void inaccessible. Potential access routes into these locations by bats were considered to be limited and they appeared to be unsuitable for roosting.

3.10 Given the height of the building and close proximity of neighbouring properties it was not possible to directly observe all elevations. Close attention was therefore paid to potentially suspicious bat activity around these sections of roof that may have indicated emergence or re-entry behaviour.

3.11 As discussed in chapter 4 of this report no bat activity was observed near these sections of roof and this limitation is not considered to form a major constraint over the assessment or conclusions made within this report.

SURVEYORS

3.1 The surveys were completed by a team of experienced bat surveyors. Key personnel including lead surveyor and reviewer are as follows:

3.2 Morgan Taylor, who reviewed this report, has a bachelors and masters degree in Marine Biology (MSci Hons) and a Natural England CL17 Bat Survey Level 2 Class Licence (2015-7369-CLS-CLS). Morgan is a Full member of CIEEM, a Chartered Environmentalist (CEnv), and has over 8 years' experience in ecological surveying and has undertaken assessments of numerous development sites of this type. He leads the Ecology team at Greengage.

3.3 James Bumphrey, who undertook the surveys, has an undergraduate degree in Environmental Sciences (BSc Hons), a Master's degree in Environmental Consultancy, a Natural England Great Crested Newt Licence (2018-35160-CLS-CLS) and is a Graduate member of CIEEM. James has 6 years' experience surveying bats on sites like this.

3.4 Laura Thomas, who undertook the surveys and prepared this report, has an undergraduate degree in Biology (BSc Hons) and a Master's degree in Evolutionary and Behavioural Ecology and is a Graduate member of CIEEM. Laura has over 3 years' experience in the commercial sector.

3.5 This report was written by Laura Thomas and reviewed and verified by Morgan Taylor who confirms in writing (see the QA sheet at the front of this report) that the report is in line with the following:

- Represents sound industry practice;
- Reports and recommends correctly, truthfully and objectively;
- Is appropriate given the local site conditions and scope of works proposed; and
- Avoids invalid, biased and exaggerated statements.

4.0 RESULTS

UPDATED PRELIMINARY ROOST ASSESSMENT

4.1 The updated internal inspection found no evidence of bats. Roosting opportunities and roosting value was considered to remain the same at site as per those observed during the 2016 survey.

4.2 Most notably this included gaps beneath the fascia's and soffits, and gaps beneath roof tiles. Several mature/veteran trees within the rear garden feature cavities and crevices which were also noted as having the potential to provide roosting opportunities.

4.3 Internal roof spaces were in a good condition with no noticeable access points, meaning the value at site would most likely be for crevice dwelling species.

4.4 It was judged that the building would still be classified as being of moderate value for roosting bats.

EMERGENCE/RE-ENTRY SURVEYS

4.5 Three positions around the buildings were used to observe any evidence of bats emerging/returning from features identified as being of potential value. The location of surveyors can be found in the plan at Figure 1.

4.6 Auxiliary survey data is available at Appendix 1.

4.7 The first emergence survey undertaken on the 31st July 2019 identified two bat roosts on the front elevation. Emergence by common pipistrelle was observed at 20:53 on the southern side of the chimney where it meets the roof. Another emergence was observed at 21:00, this bat did not echolocate however the pattern and size were consistent with that of a pipistrelle. It appeared to emerge from the southern corner of the roof and fly towards the garden.

4.8 Two bats were observed re-entering the building at 05:40 and 05:50 during the second survey on the 22nd August 2019. Again, the bats were not echolocating but behaviour was consistent with that of pipistrelle species. The bats re-entered under some tiles on the most southern corner of the rear elevation.

4.9 Relatively low levels of activity were otherwise observed with one or two passes by soprano pipistrelle and noctule as well as common pipistrelle bats recorded of foraging around trees and vegetation around the front and rear garden.

4.10 Location of observed roosts can be found on the plan at Figure 1.

ROOST CHARACTERISATION

4.11 Given the confirmed presence of at least three roosts in the building a roost characterization survey was undertaken on the 5th September 2019.

4.12 An emergence by soprano pipistrelle was observed at 19:30, 9 minutes before sunrise. The bat emerged from the same location bats were observed roosting on the re-entry survey, under roof tiles on the most southern corner of the rear elevation.

4.13 It was determined the building has three roosts used by at least four bats. Therefore, the roosts was characterised as a summer day roosts used by individual/small numbers of soprano and common pipistrelle bats.

5.0 IMPACT ASSESSMENT AND MITIGATION STRATEGY

DISCUSSION

5.1 All bat species are protected by UK legislation (see full context at Appendix 2), under which it is an offence to:

- Deliberately capture, injure or kill a bat;
- Intentionally or recklessly disturb a bat in its roost or deliberately disturb a group of bats;
- Damage or destroy a bat roosting place (even if bats are not occupying the roost at the time); and
- Intentionally or recklessly obstruct access to a bat roost.

5.2 A European Protected Species Mitigation (EPSM) licence from Natural England is required to undertake works that would otherwise result in an offence.

5.3 Proposals include the following actions which may stand to result in direct or indirect disturbance to bats and/or their resting place:

- Rear of building to be raised one storey,
- Existing chimney to be repaired and repointed;
- Roofing works such as repairs, redecorations and insulating roof;
- Scaffolding; and
- Internal attic works.

5.4 In the absence of mitigation the works described above may therefore stand to disturb, kill and/or injure individual bats, destroy roosts or modify the characteristics of retained roosts.

5.5 An EPSM licence will therefore be required to enable the proposed works to proceed lawfully. Mitigation actions will be required, secured through this licence, to minimise the direct impact upon individual bats and their roosts, ensuring the conservation status of bats at the site and in the surrounding area is not impacted.

EPSM LICENCE

5.6 Further details relating to the proposed mitigation approach should be detailed in the Natural England EPSM licence.

5.7 The EPSM licence application should include a Method Statement and Licence Application Form. The Reasoned Statement must address the three derogation tests set out in the

Conservation of Habitat and Species Regulations 2017 required to secure a successful EPSM Licence:

In determining whether or not to grant a licence, Natural England must apply the requirements of Regulation 535 of the Regulations and, in particular, the three tests set out in sub-paragraphs (2)(e), (9)(a) and (9)(b)6

(1) Regulation 53(2)(e) states: a licence can be granted for the purposes of "preserving public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment".

(2) Regulation 53(9)(a) states: the appropriate authority shall not grant a licence unless they are satisfied "that there is no satisfactory alternative".

(3) Regulation 53(9)(b) states: the appropriate authority shall not grant a licence unless they are satisfied "that the action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range.''

5.8 With respect to planning it is recommended that further details relating to the mitigation approach are secured through condition via production of a Bat Mitigation Strategy.

5.9 Greengage however understand that architectural measures discussed in this chapter have already been integrated into drawings and proposed approach.

5.10 A detailed application has not been produced at this time, however mitigation and compensation actions have been considered and are provided below, roughly following the format of Natural England's Method Statement Template.

STATUS OF SPECIES FOUND AT SITE

5.11 The pipistrelle summer day roosts at site would be classified as being of low conservation significance as per table 6.1 of the *Bat Mitigation Guidelines*[2].

PREDICTED IMPACTS IN ABSENCE OF MITIGATION AND COMPENSATION

Initial impacts

5.12 Without consideration and in the absence of mitigation, works may stand to directly disturb the roosts through human presence, modification of temperature and humidity regimes, noise from internal and external construction works, vibration from internal works and external works such as dust creation, lighting or obstruction through scaffolding, all resulting in moderate negative impacts at a site level. The works will likely prevent the use of the roosts during works.

5.13 Albeit unlikely, proposals may directly stand to impact bats through crushing during removal or roofing elements, cladding or tiling. This would result in the death of bats, considered a major negative impact at a site level.

5.14 Bats may also be prevented from using the roosts through lighting, changes to site conditions or obstruction, causing disturbance to the roost and bats themselves, resulting in minor negative impacts at a local scale.

Long term impacts

5.15 Without consideration and in the absence of mitigation, proposals may prevent continued use of the site by bats. The proposals may therefore stand to result in the long-term destruction and loss of low conservation value roosts resulting in permanent low negative impacts at a local scale.

5.16 Proposals are not predicted to result in significant fragmentation or isolation impacts, although increased lighting and reduction of surrounding foraging/commuting resource within the wider site could stand to occur without appropriate planning during construction works. This would result in further low to moderate negative impacts at a site scale.

PROPOSED MITIGATION STRATEGY

5.17 Actions taken at the site should follow the mitigation hierarchy:

- Proposals should first avoid impacts through design and approach;
- If not possible then proposals should seek to minimise impacts;
- Next, proposals should incorporate on-site compensatory actions; and
- Failing this, proposals should provide off site compensation for unavoidable residual impacts (offsetting).

5.18 Actions for this scheme will therefore first seek to mitigate impacts directly through avoidance (e.g. through changing designs or specifying timing) then compensate for unavoidable impacts (e.g. through provision of alternative roosting space where it is not possible to directly mitigate through avoidance) before seeking to provide enhancements which result in residual net gains.

5.19 The building is to be retained as are the clay roof tiles confirmed as being used by pipistrelles. However, modifications and extensions to the roof and repairs will result in the soprano roosts being permanently destroyed and common pipistrelle roosts temporarily destroyed. Furthermore, construction works may also stand to disturb crevice dwelling bats when using these features. As such, it will be impossible to retain the roosts (avoiding impacts), which is the preferred option detailed in the Bat Mitigation Guidelines.

5.20 Therefore, works will be carried out under an EPSM licence which is to be obtained from Natural England. Mitigation will be required during construction works and compensatory roost spaces must be provided in the roof and fabric of the new constructed extensions.

5.21 The overall objectives of the actions outlined below are to minimise disruption to bats during works and to provide/retain roosting spaces so that following the works the population of bats recorded during the surveys remains at a favourable conservation status.

Timing

5.22 As set out in the Bat Mitigation Guidelines, the most common and effective way of avoiding disturbance of a roost is to complete works outside of the time or season when bats are likely to be using the roost. This varies between species and roost types.

5.23 With regards to the roosts at 28 Redington Road, current observations suggest these are likely to be used as day roosts by a small number of common pipistrelle and soprano pipistrelle bats. Accordingly, timings for works that affect the roosts can be timed to take place outside of the main summer active season when these crevice roosts are likely to be most frequently used (works timed 1st November – 1st March). Although given the small number of individuals and the fact these roosts are likely to be transient, then cautionary clearance during summer may be acceptable under observation by a class licenced ecologist under an EPSM licence.

5.24 Care should be taken to reduce general disturbance during the summer months during non-licensable works (e.g. internal works), including timing works in daylight hours when bats are inactive, and keeping noise disturbance to a minimum. No additional artificial lighting should be left on overnight. As such, light, noise and general disturbance through construction activity will be limited to within hours that bats are not active.

Roofing

5.25 Following receipt of an EPSM, an ecologist should undertake an updated internal inspection prior to the ceiling removal.

5.26 The removal of tiles should be undertaken by hand, under the supervision of a licenced ecologist. Bat boxes should be installed in appropriate places surrounding the building (in trees) so that these can be used for shelter in the event that a bat is found during these works.

5.27 During replacement of tiles, opportunities for crevice dwelling bats and access will be retained throughout through the leaving of gaps in mortar and beneath tiles so that potential future opportunities are not lost.

Ecological Clerk of Works

5.28 Four 2F Schwegler Bat Box[3] (General Purpose) or similar and a 1FW Hibernation Box[4] or similar should be erected in mature trees surrounding the buildings prior to any works so that they can be used for shelter in the event that a bat is found while features are being disturbed. These boxes should be placed approximately 5m from the ground facing between south and west.

Figure 5.1 General purpose bat box

5.29 Prior to any work commencing, on-site workers should be briefed by an experienced ecologist in an Ecological Clerk of Works (ECoW) role during a 'tool box talk' on the mitigation strategy and legislation relating to bats.

5.30 The ECoW should be present during sensitive activities (i.e. works around the identified roost) and if bats are encountered during any works, the ECoW should be contacted and a licenced bat handler should capture the bat with thin gloved hands or a hand net, place the bat in a drawn-string cloth bag and then place into one of the bat boxes hung on adjacent trees.

5.31 Injured bats should be immediately taken into care. Details of a local well experienced 'bat hospital' should be known by the bat handler and provided to site managers.

5.32 A copy of this document and the licence should remain available on site at all times, a summary sheet of guidance should be given to each of the builders and contractors working on the structures.

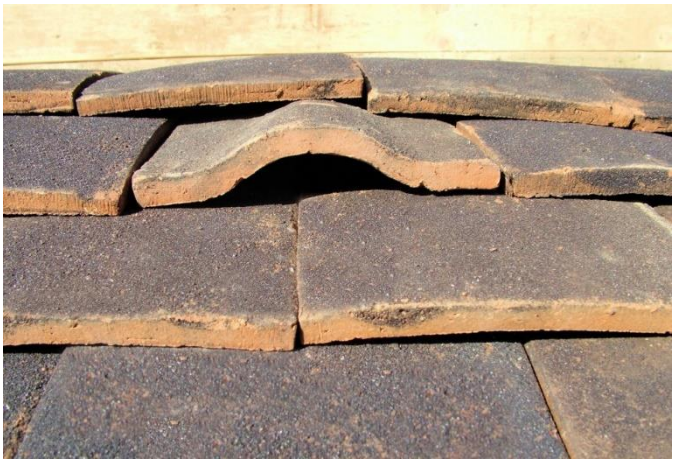
Provision of compensatory roosting features

5.33 Although time of works should stand to mitigate direct impacts upon the bats themselves, proposals should compensate for the loss of roosting features through the restoration works and extension.

5.34 Pipistrelle bats favour crevices and do not require open roof spaces for 'light testing', feeding or roosting.

5.35 The one storey extension to the rear of the house should include an integrated bat box into the brick course. There should also be 5 bat tiles installed when re-instating the tiles across the roof, in the areas where roosting was observed.

Figure 5.2 Bat access tile[5] (top) and Habibat box [6] (bottom)



5.36 No breathable roofing membrane should be used when insulating the roof.

Additional Actions

5.37 Bats were recorded foraging and commuting across the site. As such, the following best practice recommendations are made to minimise impacts upon local bat populations, in line with local policy drivers:

- Bat-sensitive lighting incorporated into the scheme to minimise any potential impacts of increased lighting levels on foraging and commuting bats observed as present;
- Retention of trees, vegetation and habitats of value to local bat populations, where possible; and
- Wildlife-friendly landscaping to enhance the site as a foraging and commuting resource.

Lighting

5.38 Artificial lighting can cause disturbance to bat species' roosting, foraging and commuting activity[7]. The proposed development may have lighting elements associated with the new buildings.

5.39 Any lighting associated with the proposals should be designed following appropriate guidance described in the *Institute of Lighting Engineers and Bat Conservation Trust joint guidance document for the reduction of obtrusive light*[8]. This should include directional lighting, appropriate luminescence and protection from light spill and should ensure that all lighting is designed, operated and maintained under best practice conditions. No uncontrolled lighting should occur and light spill should be minimised; this would enable the continued use of the site as a roosting and foraging resource.

5.40 No light sources such as security lights should be positioned near artificial roost entrances and neither should any light sources be directed towards any roost entrances i.e. no up-lighting of the building. Additionally, no light should fall on any areas of vegetation in the garden, as this would impair the value of the trees as foraging resources.

Landscape Management

5.41 It is important that any suitable foraging habitat on site is retained or replaced, and, where possible, enhanced, to prevent any net loss in bat foraging habitat. Vegetation clearance, particularly of trees, shrubs and scrub, should also be kept to a minimum to protect the commuting routes provided by these green corridors.

5.42 Floral diversity should be encouraged in the new landscaping, to encourage a richer assemblage of invertebrate prey. This can be achieved through the sowing of native

wildflower seeds, as well as the augmentation of the boundary tree lines/hedgerows with native shrub species such as blackthorn, hawthorn, hazel, oak, hornbeam, buckthorn or wild cherry.

Monitoring

5.43 In accordance with guidance on proportionate mitigation (Figure 4, Bat Mitigation Guidelines), as the surveys confirmed the presence of individual/small numbers of pipistrelles, the confirmed roosts are considered to be of low conservation significance at this stage and no monitoring is required.

RESIDUAL IMPACT

5.44 The mitigation actions described above are considered suitable to fully mitigate potential impacts upon bats with compensatory roosting space providing future roosting opportunity for bats. The common pipistrelle existing roosts will be retained, with limited modifications. Temporary impacts will likely occur throughout construction given the fact that bats may use the site throughout the year, although these impacts will be reduced through sensitive and seasonal approach overseen by a licenced ecologist.

5.45 These design elements should be secured through planning condition and EPSM licencing requirements.

5.46 Assuming the mitigation measures are followed and improved roosting opportunities are provided then the proposals may stand to result in improved conditions for roosting bats at site.

6.0 SUMMARY AND CONCLUSIONS

6.1 Greengage Environmental Ltd was commissioned by Thomas Croft Architects to undertake a Bat Survey of 28 Redington Road, Hampstead in order to assess the presence/likely-absence of roosting bats and identify appropriate mitigation, compensation and enhancement measures for the proposed scheme.

6.2 This report has been produced to support a planning submission for the site which seeks the renovation and refurbishment of existing building including side and rear extension.

6.3 Three roost spaces by at least four bats, soprano and common pipistrelles, were confirmed present during the surveys, with these roosts characterised as most likely being summer day roosts used by individual/small numbers of bats.

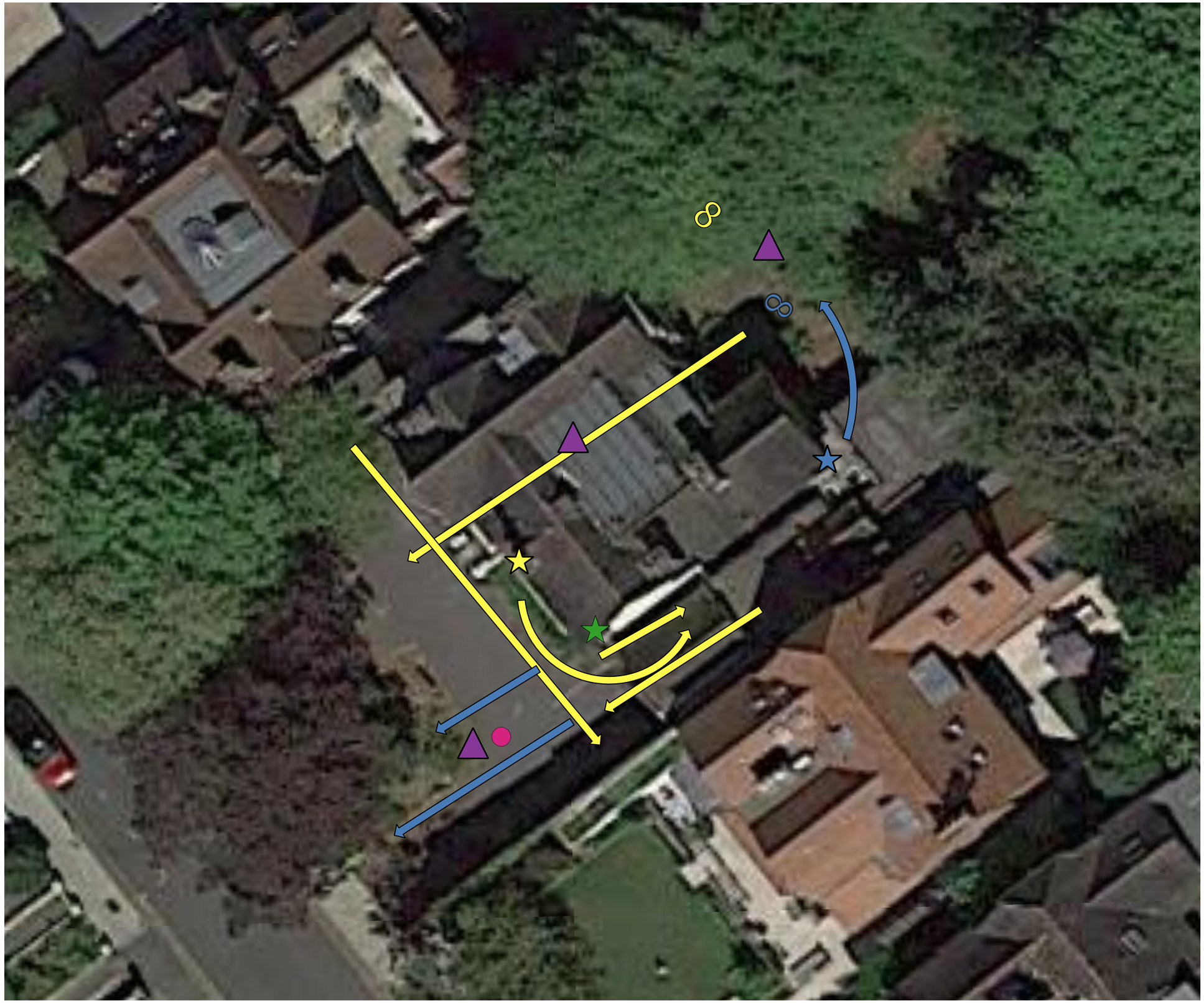
6.4 Without mitigation, proposals may stand to result in disturbance to these roosts and the bats using the roosting features. All bats are protected by UK legislation, and therefore a licence from Natural England will be required for these works.

6.5 Mitigation actions are described in this report. A licenced ecologist will be required to supervise works with proposals resulting in the long term retention of all roosting features, with only minor modifications in some instances.

6.6 Measures could be secured through planning condition to be described in a Bat Mitigation Strategy. This document should also be used to support the EPSM Licence submission with Natural England.

FIGURE 1 BAT SURVEY PLAN

Redington Road



- SP flight path
- Surveyor locations
- Common pipistrelle (CP) bat roost
- CP foraging
- CP flight path
- Soprano pipistrelle (SP) bat roost
- SP foraging
- Pipistrellus sp roost
- Leisler's

Google Satellite

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Figure 1 Bat Activity Plan

Project Number 551312
September 2019
1 to 200 at A3
[Map data: Google satellite]

APPENDIX 1: AUXILIARY SURVEY DATA

Survey	Surveyor	Date	Sunset / Sunrise Time	Weather Conditions	Temp °C
Emergence	Laura Thomas/ Andy Selman	31/07/2019	20:51	Cloudy 7/8, warm, light rain before sunset, warm and dry throughout rest of survey	21°C
Re-entry	Laura Thomas/James Bumphrey/Jess Cole	22/08/2019	05:57	0/0 cloud, 5mph wind SW	12°C
Roost Characterisation	Laura Thomas/ Sara Morris	05/09/2019	19:39	Light cloud, 11km breeze	17°C

APPENDIX 2: LEGISLATION AND POLICY

All UK bats and their roosts are protected by law. Since the first legislation was introduced in 1981, which gave strong legal protection to all bat species and their roosts in England, Scotland and Wales, additional legislation and amendments have been implemented throughout the UK.

Six of the 18 British species of bat have Biodiversity Action Plans (BAPs) assigned to them, which highlights the importance of specific habitats to species, details of the threats they face and proposes measures to aid in the reduction of population declines.

The Wildlife & Countryside Act 1981 (WCA)[9] was the first legislation to provide protection for all bats and their roosts in England, Scotland and Wales (earlier legislation gave protection to horseshoe bats only.)

All eighteen British bat species are listed in Schedule 5 of the Wildlife and Countryside Act, 1981 and under Annexe IV of the Habitats Directive[10], 1992 as a European protected species. They are therefore fully protected under Section 9 of the 1981 Act and under Regulation 43 of the Conservation of Habitats and Species Regulations 2017[11], which transposes the Habitats Directive into UK law. Consequently, it is an offence to:

- Deliberately capture, injure or kill a bat;
- Intentionally or recklessly disturb a bat in its roost or deliberately disturb a group of bats;
- Damage or destroy a bat roosting place (even if bats are not occupying the roost at the time);
- Possess or advertise/sell/exchange a bat (dead or alive) or any part of a bat; and
- Intentionally or recklessly obstruct access to a bat roost.

This legislation applies to all bat life stages.

The implications of the above in relation to the proposals are that where it is necessary during construction to remove trees, buildings or structures in which bats roost, it must first be determined that work is compulsory and if so, appropriate licenses must be obtained from Natural England. Additionally, although habitats that are important for bats are not legally protected, care should be taken when dealing with the modification or development of an area if aspects of it are deemed important to bats such as flight corridors and foraging areas.

Planning Policy

National Planning Policy Framework (NPPF)

The National Planning Policy Framework (NPPF) 2018 sets out the Government's planning policies for England, including how plans and decisions are expected to apply a presumption in favour of sustainable development. Chapter 15 of the NPPF focuses on conservation and enhancement of the natural environment, stating plans should 'identify and pursue opportunities for securing measurable net gains for biodiversity'.

It goes on to state: 'if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused'. Alongside this it acknowledges that planning should be refused where irreplaceable habitats such as ancient woodland are lost.

Particular focus is given to the protection and enhancement of designated sites and priority habitats and species. It acknowledges the importance of protecting and improving green corridors and ecological connectivity, providing strategic, multifunctional green infrastructure gains.

Local Policy: Camden Local Plan

Policy A3 Biodiversity

The Council will protect and enhance sites of nature conservation and biodiversity. We will:

a. designate and protect nature conservation sites and safeguard protected and priority habitats and species;

b. grant permission for development unless it would directly or indirectly result in the loss or harm to a designated nature conservation site or adversely affect the status or population of priority habitats and species;

c. seek the protection of other features with nature conservation value, including gardens, wherever possible;

d. assess developments against their ability to realise benefits for biodiversity through the layout, design and materials used in the built structure and landscaping elements of a proposed development, proportionate to the scale of development proposed;

e. secure improvements to green corridors, particularly where a development scheme is adjacent to an existing corridor;

f. seek to improve opportunities to experience nature, in particular where such opportunities are lacking;

g. require the demolition and construction phase of development, including the movement of works vehicles, to be planned to avoid disturbance to habitats and species and ecologically sensitive areas, and the spread of invasive species;

h. secure management plans, where appropriate, to ensure that nature conservation objectives are met; and

i. work with The Royal Parks, The City of London Corporation, the London Wildlife Trust, friends of park groups and local nature conservation groups to protect and improve open spaces and nature conservation in Camden.

Trees and vegetation

The Council will protect, and seek to secure additional, trees and vegetation. We will:

j. resist the loss of trees and vegetation of significant amenity, historic, cultural or ecological value including proposals which may threaten the continued wellbeing of such trees and vegetation;

k. require trees and vegetation which are to be retained to be satisfactorily protected during the demolition and construction phase of development in line with BS5837:2012 'Trees in relation to Design, Demolition and Construction' and positively integrated as part of the site layout;

l. expect replacement trees or vegetation to be provided where the loss of significant trees or vegetation or harm to the wellbeing of these trees and vegetation has been justified in the context of the proposed development;

m. expect developments to incorporate additional trees and vegetation wherever possible.

Policy CC2 Adapting to climate change

The Council will require development to be resilient to climate change. All development should adopt appropriate climate change adaptation measures such as:

a. the protection of existing green spaces and promoting new appropriate green infrastructure;

b. not increasing, and wherever possible reducing, surface water runoff through increasing permeable surfaces and use of Sustainable Drainage Systems;

c. incorporating bio-diverse roofs, combination green and blue roofs and green walls where appropriate; and

d. measures to reduce the impact of urban and dwelling overheating, including application of the cooling hierarchy.

Any development involving 5 or more residential units or 500 sqm or more of any additional floorspace is required to demonstrate the above in a Sustainability Statement.

Sustainable design and construction measures

The Council will promote and measure sustainable design and construction by:

e. ensuring development schemes demonstrate how adaptation measures and sustainable development principles have been incorporated into the design and proposed implementation;

f. encourage new build residential development to use the Home Quality Mark and Passivhaus design standards;

g. encouraging conversions and extensions of 500 sqm of residential floorspace or above or five or more dwellings to achieve "excellent" in BREEAM domestic refurbishment; and

h. expecting non-domestic developments of 500 sqm of floorspace or above to achieve "excellent" in BREEAM asses

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[4] 1FW Hibernation Box https://www.nhbs.com/1fw-bat-hibernation-box

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[9] HM Government, (1981); Part I and Part II of Wildlife and Countryside Act (as amended). HMSO

[10] CEC (Council of the European Communities), (1992); Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora

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