

MKA
ECOLOGY

Nocturnal Bat Roost Survey

194 Goldhurst Terrace, London

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| Project number | 147323 |
| Client name / Address | 194 Goldhurst Terrace (Cowell) Limited, London, NW6 3HN |

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Declaration of compliance

This Nocturnal Bat Roost Survey has been undertaken in accordance with British Standard 42020:2013 “Biodiversity, Code of practice for planning and development”.



The information which we have provided is true and has been prepared and provided in accordance with the Chartered Institute of Ecology and Environmental Management’s (CIEEM) Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bona fide opinions.

We are a Chartered Institute of Ecology and Environmental Management (CIEEM) Registered Practice. All of our ecologists are members of CIEEM and between them carry licences for the majority of protected species.

Validity of data

For sites that require a European Protected Species Licence in respect of bats, the licensing authority in England (Natural England) will expect data from the most recent survey season. Where an absence of roosting bat is indicated, data will be valid for a maximum of 12 months (CIEEM, 2019).

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1. EXECUTIVE SUMMARY

In April 2024 MKA Ecology Ltd was commissioned to undertake a nocturnal bat survey of 194 Goldhurst Terrace, London. A Site visit were undertaken on 09 May 2024. The buildings at the Site were identified as having low bat roost suitability during a Preliminary Roost Assessment (PRA).

The Site is dominated by two buildings (buildings B1 and B2) with associated areas of modified grassland, a line of trees and planted borders of introduced shrubs. The development proposals are for the demolition and replacement of the single-storey side extensions on building B1 with a three-storey side extension and basement excavation, and the relocation and extension of the garage space in building B2. Four trees and a group of shrubs, including two semi-mature lime trees *Tilia sp.* are planned to be removed under the current development proposals. The surrounding area comprises urban residential buildings and urban gardens.

The purpose of the survey was to identify bat roosts or bat roost suitability associated with the development site, evaluate likely ecological impacts, assess requirements for further survey work, and describe likely mitigation and/or habitat enhancement requirements.

No bats were recorded to be roosting in buildings B1 and B2 during the Nocturnal Bat Roost Survey undertaken. No impacts on roosting bats within buildings are anticipated as a result of the development proposals. Works can proceed without the need for any further surveys or licences. Only low levels of bat activity relating to common pipistrelle and soprano pipistrelle were recorded during the Nocturnal Bat Roost Survey. The Site has been assessed to currently be of low value for bats.

Four trees and a group of shrubs are to be removed at the Site. Two of these (T19 and T20) were unable to be completely surveyed during the Ground Level Tree Assessment (GLTA). As such, these trees should be soft-felled under the supervision of an Ecological Clerk of Works (ECoW). This should also be preceded by a pre-works check.

Following the issue of the National Planning Policy Framework (NPPF), all planning decisions should aim to maintain, and enhance, restore or add to biodiversity conservation interests. It is recommended that the Site be subject to a number of enhancements in order to encourage bats to utilise the Site. Proposed enhancements include planting of native trees, shrubs and night-flowering plant species in the proposed landscape design and the erection of bat boxes. These measures should serve to encourage bats to the Site through the provision of increased foraging and roosting opportunities. It is further recommended that a sensitive lighting scheme be developed for the Site. This will serve to ensure that light levels remain suitable for bats.

2. INTRODUCTION

2.1. Aims and scope of the report

In April 2024 MKA Ecology Ltd was commissioned to undertake a nocturnal bat survey at 194 Goldhurst Terrace, London by 194 Goldhurst Terrace (Cowell) Limited in order to support a planning application for the development of buildings B1 and B2 at 194 Goldhurst Terrace into eight flats and a single detached house. The survey was commissioned following recommendations arising from a daytime bat inspection completed in September 2023 (MKA Ecology, 2023).

The aims of the nocturnal bat survey were to:

- Undertake one dusk emergence at buildings at the site to confirm the presence/likely absence of roosting bats;
- Where roosting bats are present, identify the species involved, and, where possible, the population size, the type of roost and access points used;
- Assess the need for a European Protected Species Licence;
- Outline a suitable mitigation strategy for bats at the site, if required; and
- Propose any suitable habitat enhancements for bat species, if required.

This report must be read in conjunction with the Preliminary Ecological Appraisal and Preliminary Roost Assessment (PEA&PRA) (MKA Ecology, 2023). With respect to bats, this report supersedes the findings and recommendations given in the PEA&PRA (MKA Ecology, 2023).

2.2. Site description and context

The survey area is shown on the map in Figure 1. Within this report this area is referred to as the Site or 194 Goldhurst Terrace, London. The Site is located in a heavily residential area of South Hampstead (central grid reference: TQ 25771 84089) and falls under the local authority of the London Borough of Camden. The Site comprises a three-storey building with single-storey extensions (building B1, Figure 1) along with a small area of hardstanding, introduced shrubs, grassland and a line of trees. On the eastern edge of the Site is a detached garage (building B2, Figure 1), which is included within the development proposals. The surrounding area comprises urban residential buildings and urban gardens. The gardens and mature trees in the area surrounding the Site are likely to hold foraging and commuting value to local bat populations. There are also six designated Sites of Importance for Nature Conservation (SINCs) within 1km of the Site, including parks, community gardens, small nature reserves and wooded rail sides.

2.3. Proposed development

The development proposals are for the demolition of the single-storey side extensions on building B1 and their replacement with the development of a three-storey side extension and basement excavation. The resulting building will contain eight flats. The proposals also include the relocation of the garage space contained in building B2, whilst adding extensions to the rear and side of the building, along with a basement excavation. The resulting building will be a single detached residential property. Four trees and a group of shrubs, including two semi-mature lime trees are planned to be removed under the current development proposals.

2.4. Previous survey effort

The previous PEA and PRA categorised buildings B1 and B2 as having low bat roost potential (MKA Ecology, 2023), due to the presence of potential roost features such as missing tiles and lifted flashing. The gardens and trees onsite were also assessed to provide good foraging habitat for bats.

2.5. Legislation and planning policy

This Nocturnal Bat Roost Survey has been undertaken with reference to relevant wildlife legislation and planning policy. Relevant legislation considered within the scope of this document comprised the following:

- The Conservation of Habitats and Species Regulations 2017 (as amended);
- The Wildlife and Countryside Act 1981 (as amended); and
- Natural Environment and Rural Communities (NERC) Act 2006.

In addition to obligations under wildlife legislation, the revised National Planning Policy Framework (NPPF) updated on 19 December 2023 requires planning decisions to act towards conserving and enhancing the local environment. Further details are provided in Appendix 1.

Camden Council has produced an adopted Local Plan which contains a single policy relating to biodiversity and habitat conservation (Policy A3) . Camden Council have produced a Biodiversity Action Plan (Camden Council, 2017), which includes targets for the installation of new bat roosting features such as bat boxes bricks and the retention of mature trees for their benefit to bats. Camden Council have also produced a Camden Planning Guidance document on Biodiversity (Camden Council, 2018). This key document sets out the guidance that developments within the Borough of Camden must adhere to with respect to biodiversity. There is also a Biodiversity Action Plan for Greater London (London Biodiversity Partnership, 2022), in which bats are identified as a Priority species.

Where relevant these are discussed in further detail in Section 5. Further details are provided in Appendix 1.

3. METHODOLOGY

3.1. Dusk emergence/dawn re-entry survey

Surveys were undertaken following guidance set out in *Bat Surveys for Professional Ecologists – Good Practice Guidelines (4th edition)* (Collins, 2023) and the *Bat Workers' Manual (3rd edition)* (Mitchell-Jones and McLeish, 2004).

Buildings B1 and B2 were assessed as having low potential to support roosting bats during the PRA (MKA Ecology Ltd, 2023). Best Practice Guidelines (Collins, 2023) state that buildings with a low roost suitability should be subject to a minimum of a single nocturnal survey.

Infrared cameras and lamps were positioned around buildings B1 and B2 so that all potential roosting features fell within the field of view. Cameras were set to record from 15 minutes before sunset and continued for 90 minutes after sunset. Bat detectors were used to record bat calls during the surveys and these were positioned around buildings B1 and B2. A map showing locations of cameras and bat detectors is shown in Figure 2. Screenshots taken from the footage of each camera from the darkest point of each of the surveys are provided in Appendix 4. These screenshots are provided as evidence that the infrared cameras were able to successfully capture clear images and that the potential roost features were highly visible.

Two ecologists were present on site to set up the recording equipment and monitor general bat activity levels. The ecologists recorded start and finish times of the survey visits were recorded, as well as the date, wind direction and force, temperature, precipitation, and cloud cover for each visit. A map of the area to be surveyed was used by each surveyor to show general bat activity, and locations of infrared cameras and associated equipment were noted.

3.2. Equipment and analysis

Infrared video recorders (Sony FDR AX53) were used in conjunction with Nightfox infrared torches to record bats emerging from the two potential roost features which were identified during the Preliminary Roost Assessment/Aerial Tree Inspection. Footage was reviewed following the survey on a desktop computer to identify emerging bats. Reviews lasted for 30-minute periods to avoid fatigue and lapses in concentration. Playback was at x1 to 1.5x speed to ensure that activity was not missed. Bat detectors were set up around the building/tree (Elekon BatloggerM, Anabat Express) to record activity. Surveyors also used bat detectors (Elekon BatloggerM) to record general activity around the Site. Sound recordings were later analysed using Batexplorer, Anabat Insight, and Kaleidoscope software. Identification of bat calls was undertaken using the parameters set out by Russ (2012).

3.3. Dates, times and weather conditions

The dates, times and weather conditions are given for each site visit, are given in Table 1, along with the buildings surveyed and the equipment used.

Table 1: Survey dates, times, weather conditions and equipment used

| Date of each survey visit | Start and end times, sunset/sunrise times | Building reference | Equipment used | Weather* |
|---|---|--------------------|---|---|
| 09/05/2024 (dusk emergence) | Start: 20:22 End: 22:07 Sunset: 20:37 | B1 and B2 | Bat detectors: Elekon BatloggerM Song Meter Infrared video recorder: Sony FDR AX53 with Nightfox infrared torches | Start temp:21 End temp:19 Precipitation:None Wind: 2 S Cloud cover: 0/8 |
| Comments: Two surveyors, five cameras, six bat detectors | | | | |

*Wind as per Beaufort Scale / Cloud cover given in Oktas.

3.4. Surveyors

The nocturnal bat surveys were undertaken by the following surveyors:

- Alisa Davies, Graduate Ecologist at MKA Ecology Ltd. Alisa has one season of experience in undertaking nocturnal bat surveys.
- Olivia Hine, Graduate Ecologist at MKA Ecology Ltd. Olivia has one season of experience in undertaking nocturnal bat surveys.

Analysis of video and audio data was carried out by ecologists at MKA Ecology Ltd and sub-contractors. All staff and sub-contractors have received in-house training in infrared footage review for Nocturnal Bat Roost Surveys, following best practice guidance (BCT, 2022).

The report was written by Alisa Davies and Olivia Hine. It has been reviewed and approved by Rory Roche ACIEEM, Senior Ecologist at MKA Ecology Ltd. Rory has eight years' experience undertaking Nocturnal Bat Roost Surveys and holds a Class 1 Natural England bat licence.

3.5. Constraints

The results taken from bat detector recordings are biased towards bats that use louder echolocation calls. Therefore quiet bats, such as brown long-eared bat, may be under-recorded due to the limited

recording range of the equipment. This was not considered to present a significant constraint as surveyors were vigilant to ensure that visual cues indicating the presence of quiet species were recorded.

In some circumstances it is not possible to confirm that species of bat with absolute confidence using sound analysis techniques. In particular some calls of common pipistrelle and soprano pipistrelle overlap making species identification difficult. In these circumstances the bat can be identified as a *Pipistrellus* sp. only. Within this report where *Pipistrellus* sp. is used this refers only to common pipistrelle and soprano pipistrelle. This should not be interpreted as other species of the *Pipistrellus* genus, such as Nathusius' pipistrelle *Pipistrellus nathusii* which, although it occurs relatively frequently within the UK is not commonly recorded. Where Pipistrelle species other than common or soprano pipistrelle are suspected this will be directly referenced and discussed within the report. Similarly calls of *Myotis* species can demonstrate a large number of overlapping parameters making identification difficult. Where this is the case, a bat has been identified as *Myotis* sp.

For camera 16, visibility to the left of the roof was dark towards the end of the survey despite being lit by a torch. This is not considered to be a significant constraint to the survey; lighting was good for the majority of the survey and no potential roost features were identified in this specific location. Whilst it is possible that bat activity was missed, this is the case for all bat surveys, and it is never possible to guarantee that all emergences are identified. In this case, given that the majority of bats observed (and all of the roosts identified) were of pipistrelle bats, which generally emerge around sunset, it is not likely that any significant information went undetected.

Some footage was lost from camera 18 from approximately 21:43 to 21:56 due to file corruption. However, this is not expected to be a significant limitation as the features covered by camera 18 were also partly covered by camera 16 on the left and camera 17 on the right (Figure 2, Appendix 2). The footage was also for the period after significant common pipistrelle bat activity had begun at the Site, which makes it likely that any emergence would have occurred before this time

3.6. Assessment

The guidelines for categorisation of bats in England by distribution and rarity (adapted from Wray *et al.*, 2010) are shown in the tables below.

Table 2: Categorising bats by rarity (London is South-East England)

| Rarity within England | Species |
|---------------------------------------|--|
| Rarest Annex II species and very rare | <ul style="list-style-type: none"> Alcathoe's bat <i>Myotis alcathoe</i> Barbastelle <i>Barbastella barbastellus</i> |

| Rarity within England | Species |
|---|---|
| Rarer or restricted distribution | <ul style="list-style-type: none"> Whiskered bat <i>Myotis mystacinus</i> Brandt's bat <i>Myotis brandtii</i> Leisler's bat <i>Nyctalus leisleri</i> Nathusius' pipistrelle <i>Pipistrellus nathusii</i> Serotine <i>Eptesicus serotinus</i> |
| Widespread in many geographies, but not abundant in all | <ul style="list-style-type: none"> Noctule <i>Nyctalus noctula</i> Daubenton's bat <i>Myotis daubentonii</i> Natterer's bat <i>Myotis nattereri</i> |
| Widespread | <ul style="list-style-type: none"> Common pipistrelle <i>Pipistrellus pipistrellus</i> Soprano Pipistrelle <i>Pipistrellus pygmaeus</i> Brown long-eared bat <i>Plecotus auritus</i> |

Table 3: Level of importance of roost type

| Geographic frame of reference | Roost type |
|---------------------------------|---|
| Site, District, Local or Parish | Feeding perches Non-breeding day roosts Mating sites (excluding individual trees and swarming sites) Small numbers of hibernating bats Larger transitional roosts Maternity sites (for widespread species, unless colony atypically large) |
| County | Hibernation sites (excluding rarest Annex II species) Maternity sites (for widespread but not abundant in all geographies species unless colony atypically large) Autumn swarming sites (can reach regional importance depending on assemblage) |
| Regional | Maternity sites (depending on rarity and value of assemblage) Hibernation sites (for rarest Annex II species, depending on assemblage and size) |
| National/UK | Sites meeting SSSI guidelines* |
| International | SAC sites |

*Sites meeting SSSI (Sites of Special Scientific Interest) selection guidelines include Barbastelle maternity roosts and mixed species hibernacula assemblages

4. RESULTS

4.1. Results summary

Common pipistrelle were recorded foraging and commuting during the survey visit.

No bats were observed emerging from buildings B1 and B2 during the surveys, although a bat was seen potentially emerging from an offsite building behind building B2 at 21:26. Raw survey data are provided in Appendix 2.

4.2. Dusk emergence survey

The first dusk emergence survey was completed on 09 May 2024. Sunset was at 20:22. No bats were recorded emerging from buildings B1 or B2. The first bat activity was that of a common pipistrelle was recorded at 21:08.

Low levels of foraging and commuting activity by common pipistrelle through the garden between the house and the trees was observed throughout the survey.

5. EVALUATION AND MITIGATION PROPOSALS

The following evaluation is based on the combined information from the daytime bat inspection on 26 September 2023 and the dusk emergence survey undertaken on 09 May 2024.

5.1. Evaluation

During the Preliminary Ecological Appraisal and Preliminary Roost Assessment of the Site, a number of potential bat roosting features were identified on buildings B1 and B2 in the form of missing tiles and lifted flashing. Buildings B1 and B2 were assessed to support low bat roost potential.

In line with Best Practice Guidelines (Collins, 2023), buildings B1 and B2 were subject to one nocturnal survey visit each. No emergence or re-entry events were recorded during the Nocturnal Bat Roost Surveys. As such, no impacts on roosting bats are anticipated resultant from the proposed development.

Low levels of common pipistrelle foraging and commuting activity were observed in the garden at the Site. This habitat is situated in the context of surrounding residential buildings and urban gardens, with some open green spaces. This suggests that the habitat at the Site is currently of low value to foraging and commuting bats.

5.2. Ecological impacts in absence of mitigation

The development proposals are for the demolition of the single-storey side extensions on building B1 and their replacement with the development of a three-storey side extension and basement excavation. The resulting building will contain eight flats. The proposals also include the relocation of the garage space contained in building B2, whilst adding extensions to the rear and side of the building, along with a basement excavation. The resulting building will be a single detached residential property. As no bat roosts were identified in the buildings during the survey work undertaken, there are no anticipated impacts of the proposed building development on bats.

Four trees and a group of shrubs are proposed to be removed in the development. Whilst a GLTA was undertaken, the upper five meters of two of these trees (T19 and T20) could not be confidently surveyed due to leaf cover. In the absence of sufficient mitigatory measures, there is a risk of disturbance, injuring and/or killing of roosting bats during the proposed tree felling works. As such, these trees should be subject to precautionary soft felling under the supervision of an EcOW.

6. RECOMMENDATIONS

The following evaluation is based on the combined information from the daytime bat inspection on 26 September 2023 and the dusk emergence survey undertaken on 09 May 2024.

The proposed development at 194 Goldhurst Terrace, London will likely involve the partial demolition and creation of new extensions impacting buildings B1 and B2.

Following the issue of the NPPF (see Appendix 1), all planning decisions should aim to maintain, and enhance, restore or add to biodiversity conservation interests. In addition, Camden Council have produced a Biodiversity Action Plan (Camden Council, 2017) which includes recommendations for the provision of bat boxes within developments. To provide improved provisions for roosting bats on Site, it is recommended that roosting provisions be made for bats across the Site through three wall-mounted bat boxes, integrated bat bricks or tree-mounted bat boxes. Given that the Site is situated in an urban area, boxes should be targeted towards light tolerant bats such as pipistrelle bats *Pipistrellus* sp., as these are the most likely species to utilise the Site for foraging and commuting. Examples of suitable boxes are presented in Appendix 4.

Recommendation 1

A minimum of three bat boxes are mounted on or integrated into the new extensions, or existing trees. Examples of suitable bat boxes and bat bricks are given in Appendix 4.

Artificial lighting is known to have detrimental impacts on bat roosting behaviour, commuting and foraging activity (ILP, 2023). The creation of the new extensions may involve lighting alterations to the present conditions. Therefore, it is strongly recommended that any proposed exterior lighting across the Site is designed and managed to ensure the area provides suitable habitat for foraging bats. A sensitive lighting scheme should be developed as part of the design scheme. Advice on lighting can be found in Guidance Note 8 (ILP, 2023). Specifically, excess lighting, including from inside the property, should be avoided on the line of trees where possible.

Recommendation 2

A sensitive lighting scheme should be developed to allow for suitable roosting and foraging areas for bats within the Site. No retained or newly planted trees or new roosting features should be directly lit.

Several trees are to be removed under the proposed development scheme. Whilst the GLTA didn't identify any potential roost features, the upper five meters of the trees could not be accurately surveyed due to leaf cover and height. As such a number of precautionary measures will need to be implemented.

The two large lime trees (T19 and T20) which are to be impacted by pruning or felling works should be subject to precautionary mitigation measures in order to avoid harm to any bats or impacts to roosts that maybe present at the time of the works. Such measures should be detailed within a Precautionary Working Method Statement (PWMS), and should include, but are not limited to, pre-works checks by the ecologist, soft-felling, where works are supervised by a licenced bat ecologist, and safe sectioning and gentle lowering of the tree or limbs are undertaken to avoid cutting through PRFs, where sections with deep cavities are left on the ground overnight to allow any bats to escape any potential roost features (Collins, 2023).

Recommendation 3

The two semi-mature lime trees (T19 and T20) should be soft-felled under the supervision of an Ecological Clerk of Works (ECoW). This should also be preceded by a pre-works check.

Existing vegetation could be enhanced with native planting to create higher quality foraging habitat for bats. It is recommended that native planting is incorporated into the design scheme, to provide foraging and commuting habitat for bats in the area. This should include native tree and shrub species as well as night-flowering species to support foraging.

Recommendation 4

Native planting should be incorporated into the design scheme, including additional planting of native trees, shrubs and night-flowering species.

Summary of recommendations

Table 4 below summarises the requirement for further work at the Site in relation to bats and the stage of development at which the work should be undertaken.

Table 4: Summary of further work required at 194 Goldhurst Terrace, London

| Species | Pre-planning action required? | Pre-construction action required? | Construction phase mitigation required? | Enhancements proposed? |
|---------|-------------------------------|---|--|------------------------------------|
| Bats | None | Design a sensitive lighting scheme Produce a Precautionary working Method Statement (PWMS) | Sensitive lighting scheme during construction Soft felling and pre-works check of trees T19 and T20 | Bat boxes and habitat enhancements |

7. CONCLUSIONS

Buildings B1 and B2 at 194 Goldhurst Terrace, London do not currently support bat roosts. The gardens are used at low levels by common pipistrelle for foraging and commuting.

The development proposals are for the demolition and replacement of the single-storey side extensions on building B1 with a three-storey side extension and basement excavation, and the relocation and extension of the garage space in building B2. Four trees and a group of shrubs, including two semi-mature lime trees are planned to be removed under the current development proposals. As no bat roosts were identified in the buildings during the survey work undertaken, there are no anticipated impacts of the proposed building development on bats. Precautionary measures, in the form of soft felling, are to be implemented on trees T19 and T20 at the Site.

In order to provide biodiversity enhancements in line with local and national planning policy, it is recommended that the provision of bat boxes and the incorporation of native planting within the Site are included within the proposals. The creation of a sensitive lighting scheme would also enhance the Site for bats and ensure any enhancement measures provided are suitable for use by bats.

8. REFERENCES

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9. APPENDICES

9.1. Appendix 1: Relevant legislation and planning policy

Please note that the following is not an exhaustive list and is solely intended to cover the most relevant legislation pertaining to species commonly associated with development sites.

| Subject | Legislation (England) | Relevant criminal offences |
|---------------------------|---|--|
| <p>Bats (all species)</p> | <p>The Conservation of Habitats and Species Regulations 2017 (as amended)</p> <p>All bat species are listed on Schedule 2, which designates them as European Protected Species. European Protected Species are subject to the provisions of Part 3, Regulation 41 (Protection of certain wild animals).</p> | <ul style="list-style-type: none"> • Deliberate capture, injury or killing of a bat; • Deliberate disturbance of a bat; • Damage or destruction of a bat roost; • To possess, control, transport, sell or exchange, or to offer for sale or exchange, any live or dead bat or part of a bat, or anything derived from a bat or any part of a bat. <p>Notes</p> <p>In this interpretation, a bat roost is “a <i>breeding site or resting place of a bat</i>”.</p> <p>Because bats tend to reuse the same roosts, bat roosts are considered to be protected whether or not the bats are present at the time.</p> <p>In this interpretation, disturbance of animals includes <i>in particular</i> any disturbance which is likely –</p> <p>(a) to impair their ability:</p> <ul style="list-style-type: none"> • to survive, to breed or reproduce, or to rear or nurture their young, or |

| | | |
|--|--|--|
| | | <ul style="list-style-type: none"> • 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. |
| | <p>Wildlife and Countryside Act 1981 (as amended)</p> <p>All bat species are listed on Schedule 5 and are therefore subject to parts of the provisions of Section 9 (Sections 9(4)(b) and (c) and Section 9(5)).</p> | <ul style="list-style-type: none"> • Intentional or reckless disturbance of a bat while it is occupying a roost; • Intentional or reckless obstruction of access to a roost; • To sell, expose for sale, possess or transport for the purpose of sale, any live or dead bat or any part of, or anything derived from a bat; or • Publishing or causing to be published any advertisement likely to be understood as conveying that an individual buys or sells, or has an intention to buy or sell bats. <p>In this interpretation, a bat roost is "<i>any structure or place which any wild [bat]...uses for shelter or protection</i>". Because bats tend to reuse the same roosts, bat roosts are considered to be protected whether or not the bats are present at the time.</p> |

The Wildlife & Countryside Act 1981 (as amended)

Full legislation text available at: <http://www.legislation.gov.uk/ukpga/1981/69>

Conservation of Habitats and Species Regulations 2017 (as amended)

Full legislation text available at: <https://www.legislation.gov.uk/uksi/2017/1012/contents/made>

Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006

Full legislation text available at: <http://www.legislation.gov.uk/ukpga/2006/16/contents>

Several bat species are listed as species of principal importance for the purpose of conserving biodiversity under Section 41 of the NERC Act 2006.

The NERC Act 2006 places a legal obligation on public bodies, including those considering planning applications, to maintain, and where possible enhance, the conservation status of any Section 41 species found on a site. Species included on Section 41 were also included on the UK Biodiversity Action Plan (BAP) and remain an integral part of the Post-2010 Biodiversity Framework.

These species are:

- Barbastelle *Barbastella barbastellus*;
- Bechstein's bat *Myotis bechsteinii*;
- Brown long-eared bat *Plecotus auritus*;
- Greater horseshoe bat *Rhinolophus ferrumequinum*;
- Lesser horseshoe bat *Rhinolophus hipposideros*;
- Noctule *Nyctalus noctula*; and
- Soprano pipistrelle *Pipistrellus pygmaeus*.

National Planning Policy Framework (NPPF)

Full text is available at: <https://www.gov.uk/government/publications/national-planning-policy-framework--2>

The revised NPPF was updated on 19 December 2023 setting out the Government's planning policies for England and the process by which these should be applied. The policies within the NPPF are a material consideration in the planning process. The key principle of the NPPF is a presumption in favour of sustainable development, with sustainable development defined as a balance between economic, social and environmental needs.

Policies 170 to 183 of the NPPF address conserving and enhancing the natural environment, stating that the planning system should:

- Contribute to and enhance the natural and local environment by protecting and enhancing valued landscapes;
- Recognise the wider benefits of ecosystem services; and

- Minimise impacts on biodiversity and provide net gains in biodiversity where possible, contributing to the Government’s commitment to halt the overall decline in biodiversity.

Furthermore, there is a focus on re-use of existing brownfield sites or sites of low environmental value as a priority, and discouraging development in National Parks, Sites of Specific Scientific Interest, the Broads or Areas of Outstanding Natural Beauty other than in exceptional circumstances.

Where possible, planning policies should also

“Promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity”.

Local Planning Policy

Given that the Site is located within London, consideration of the policies relating to biodiversity within the London Plan 2021 has also been given. These include policies G1 and G5 to G8, as detailed below:

- Policy G1 Green infrastructure
 - a) *London’s network of green and open spaces, and green features in the built environment, should be protected and enhanced. Green infrastructure should be planned, designed and managed in an integrated way to achieve multiple benefits.*
 - b) *Boroughs should prepare green infrastructure strategies that identify opportunities for cross-borough collaboration, ensure green infrastructure is optimised and consider green infrastructure in an integrated way.*
 - c) *Development Plans and area-based strategies should use evidence, including green infrastructure strategies, to:*
 1. *identify key green infrastructure assets, their function and their potential function*
 2. *identify opportunities for addressing environmental and social challenges through strategic green infrastructure interventions.*
 - d) *Development proposals should incorporate appropriate elements of green infrastructure that are integrated into London’s wider green infrastructure network.*
- Policy G5 Urban greening
 - a) *Major development proposals should contribute to the greening of London by including urban greening as a fundamental element of site and building design, and by incorporating measures such as high-quality landscaping (including trees), green roofs, green walls and nature-based sustainable drainage.*
 - b) *Boroughs should develop an Urban Greening Factor (UGF) to identify the appropriate amount of urban greening required in new developments. The UGF should be based on the factors set out in within the London Plan, but tailored to local circumstances. In the interim, the Mayor recommends a target score of 0.4 for developments that are*

predominately residential, and a target score of 0.3 for predominately commercial development (excluding B2 and B8 uses).

- c) *Existing green cover retained on site should count towards developments meeting the interim target scores set out in (B) based on the factors set out in the London Plan*

- **Policy G6 Biodiversity and access to nature**
 - a) *Sites of Importance for Nature Conservation (SINCs) should be protected.*
 - b) *Boroughs, in developing Development Plans, should:*
 1. *use up-to-date information about the natural environment and the relevant procedures to identify SINCs and ecological corridors to identify coherent ecological networks*
 2. *identify areas of deficiency in access to nature (i.e. areas that are more than 1km walking distance from an accessible Metropolitan or Borough SINC) and seek opportunities to address them*
 3. *support the protection and conservation of priority species and habitats that sit outside the SINC network, and promote opportunities for enhancing them using Biodiversity Action Plans*
 4. *seek opportunities to create other habitats, or features such as artificial nest sites, that are of particular relevance and benefit in an urban context*
 5. *ensure designated sites of European or national nature conservation importance are clearly identified and impacts assessed in accordance with legislative requirements.*
 - c) *Where harm to a SINC is unavoidable, and where the benefits of the development proposal clearly outweigh the impacts on biodiversity, the following mitigation hierarchy should be applied to minimise development impacts:*
 1. *avoid damaging the significant ecological features of the site*
 2. *minimise the overall spatial impact and mitigate it by improving the quality or management of the rest of the site*
 3. *deliver off-site compensation of better biodiversity value.*
 - d) *Development proposals should manage impacts on biodiversity and aim to secure net biodiversity gain. This should be informed by the best available ecological information and addressed from the start of the development process.*
 - e) *Proposals which reduce deficiencies in access to nature should be considered positively.*

- **Policy G7 Trees and woodlands**
 - a) *London's urban forest and woodlands should be protected and maintained, and new trees and woodlands should be planted in appropriate locations in order to increase the extent of London's urban forest – the area of London under the canopy of trees.*
 - b) *In their Development Plans, boroughs should:*

1. *protect 'veteran' trees and ancient woodland where these are not already part of a protected site*
 2. *identify opportunities for tree planting in strategic locations.*
- c) *Development proposals should ensure that, wherever possible, existing trees of value are retained. If planning permission is granted that necessitates the removal of trees there should be adequate replacement based on the existing value of the benefits of the trees removed, determined by, for example, i-tree or CAVAT or another appropriate valuation system. The planting of additional trees should generally be included in new developments – particularly large-canopied species which provide a wider range of benefits because of the larger surface area of their canopy.*
- **Policy G8 Food growing**
 - a) *In Development Plans, boroughs should:*
 1. *protect existing allotments and encourage provision of space for urban agriculture, including community gardening, and food growing within new developments and as a meanwhile use on vacant or under-utilised sites*
 2. *identify potential sites that could be used for food production.*

Camden Council has produced an adopted Local Plan, which contains one policy specifically relating to biodiversity and habitat conservation:

- **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.*

Additional considerations have been given to the information provided in the Camden Planning Guidance on Biodiversity (Camden Council, 2018).

9.2. Appendix 2: Figures

Figure 1: Site location plan and preliminary ecological appraisal map



Target Notes

- TN1: Missing tiles (Photograph 5, Appendix 3)
- TN2: Lifted flashing and missing tiles (Photograph 6, Appendix 3)
- TN3: Missing tiles (Photograph 7, Appendix 3)

Figure 2: Surveyor Location Plan




9.3. Appendix 3: Raw survey data



| Time | Locatio | Common Name | Passe | Comments |
|---------------------------|---------|--------------------|--------------|--|
| Survey 1: 09.05.24 | | | | |
| 21:08 | IR18 | Common pipistrelle | 1 | Faint echolocation heard not seen (HNS) |
| 21:18 | IR16 | Common pipistrelle | 1 | Commuting south to north |
| 21:19 | IR18 | Common pipistrelle | 1 | Commuting north to south |
| 21:30 | IR16 | Common pipistrelle | 2 | Foraging and commuting, coming from north of Site |
| 21:36 | IR19 | Common pipistrelle | 2 | Commuting |
| 21:42 | IR18 | Common pipistrelle | Multipl e | Regular passes and foraging for 11 minutes between 21:42 and 21:54. Two pipistrelles present at 21:45. |
| 21:57 | IR20 | Common pipistrelle | 1 | HNS |
| 21:59 | IR18 | Common pipistrelle | 1 | HNS |
| 22:03 | IR18 | Common pipistrelle | 3 | Regular occasional single passes HNS between 22:03 and 22:05. Two bats at 22:04. |
| 22:07 | IR18 | Common pipistrelle | 2 | HNS |



9.4. Appendix 4: Bat box recommendations

| Example | Description | Picture |
|--------------------------|---|--|
| <p>Schwegler 1FQ</p> | <p>www.schwegler-nature.com</p> <p>Dimensions: 60(h) x 35(w) x 9(d) cm Weight: 15.8kg Installation: Attached to most external brick, timber or concrete walls at least 3m high. Can also be placed inside roof space</p> <p>This box is ideal for all types of bats that inhabit buildings. The box is weather-resistant and is also temperature controlled and self-cleaning. The front panel of the box can also be painted during manufacture, to match an existing colour.</p> |  |
| <p>Schwegler 1WI</p> | <p>www.schwegler-nature.com</p> <p>Dimensions: 55(h) x 35(w) x 9.5(d) cm Weight: 15kg Installation: Attached to most types of external brick, timber or concrete walls. It can be installed flush-mounted and rendered over or simply against the wall. It should be installed at a height of at least 3m.</p> <p>This box typically attracts building-inhabiting bat species like pipistrelles or serotine bat.</p> <p>This box is weather-resistant and designed for both winter hibernation and larger colonies in summer, including nursery roosts.</p> |  |

| Example | Description | Picture |
|-------------------------------|---|---|
| Schwegler 1MF (Swift and Bat) | <p>www.schwegler-nature.com</p> <p>Dimensions: 46(h) x 43(w) x 22.5(d) cm. Weight: approx. 24 kg</p> <p>Installation: The box can be hung against any types of wall of any type of building, between 6-7m above ground level.</p> <p>This box is designed for nesting swifts, however the recess in the rear panel creates a space between the wall of the building and the box, making it ideal for bats that inhabit building, such as common pipistrelle. Whilst the box may require cleaning, the back recess for bats requires no maintenance.</p> |  |

Bat boxes for trees

| Example | Description | Picture |
|--------------------------------------|---|---|
| Schwegler General Purpose Bat Box 2F | <p>www.schwegler-nature.com</p> <p>Dimensions: 33 cm (height), 16cm (diameter) Weight: approx. 3.8 kg</p> <p>A general purpose box to hang on trees, suitable for all species. Made from durable woodcrete.</p> |  |
| Vivara Pro Woodstone bat box | <p>https://www.nhbs.com/equipment</p> <p>Dimensions: (h) 250 x (w) 190 x (d) 165 mm, Weight: 4.5 kg</p> <p>This box is made from woodstone and it is designed to last for years. The box can be attached to either a wall or a tree and should be sited at a height of at least 3 m from the ground. Bats prefer to change</p> |  |

| Example | Description | Picture |
|--|--|--|
| <p>Large Multi Chamber Woodstone bat box</p> | <p>roosts to benefit from varying ambient temperatures, so bat boxes should ideally be clustered in small groups.</p> <p>https://www.nhbs.com/large-multi-chamber-woodstone-bat-box</p> <p>dimensions: 15cm x 27.5cm x 16cm Weight: 4kg</p> <p>This bat box design is most suited to crevice roosting bats and has two entrances, one at the front and one at the bottom. The inside has a wooden construction where the bats can hang between, and the top of the closet has a free space where the bats can hang together. The wooden construction is removable, ideal for monitoring and cleaning. The multi chamber bat box can be placed on either a tree or a façade.</p> |  |
| <p>Schwegler 1FF</p> | <p>www.schwegler-nature.com</p> <p>Dimensions: (h) 43 x (w) 27 x (d) 14 cm Weight: 9.9 kg</p> <p>This box is suitable for crevice dwellers, such as Nathusius' Pipistrelle <i>Pipistrellus nathusii</i>, Daubenton's Bat <i>Myotis daubetonii</i> and Common Pipistrelle <i>Pipistrellus pipistrellus</i>.</p> <p>This box minimises temperature fluctuations in spring and autumn, provides roosting space for individual species climatic needs and is self-cleaning.</p> |  |

9.5. Appendix 5: Screenshots from infrared cameras

The screenshots provided below are taken from the darkest points of each of the nocturnal bat roost surveys conducted at 194 Goldhurst Terrace, London .



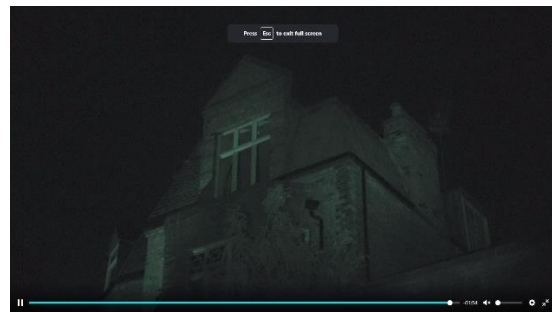
Camera 16



Camera 17



Camera 18



Camera 19



Camera 20



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