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Client: Notting Hill Home Ownership Ltd (NHHO)

Project: St Clare Business Park

Report: Bat Survey Report

QUALITY ASSURANCE

Issue/Revision:	Draft	Final (FV01)	Final (FV02)
Date:	October 2022	November 2022	April 2023
Comments:			Minor change to proposal description.
Prepared by:	Georgia Alfreds	Georgia Alfreds	Georgia Alfreds
Authorised by:	Paul White	Paul White	Paul White
File Reference:	551024_GA_22Oct26_Bat Report_DV01	551024_GA_22Nov09_Bat Report_FV01.docx	551024_GA_22Nov09_Bat Report_FV02.docx

CONTENTS

1.0	EXECUTIVE SUMMARY	1
2.0	INTRODUCTION	2
2.1	AIMS OF SURVEY	2
2.2	SITE DESCRIPTION	3
3.0	METHODOLOGY	4
3.1	DESK BASED ASSESSMENT	4
3.2	SITE ASSESSMENT	4
3.3	EMERGENCE SURVEYS	5
3.4	STATIC SURVEYS	5
3.5	SURVEYORS	5
3.6	LIMITATIONS AND COMMENTARY ON METHODOLOGY	6
4.0	RESULTS	7
4.1	DESK BASED ASSESSMENT	7
4.2	PREVIOUS SITE ASSESSMENT (2018/19)	7
4.3	BAT EMERGENCE/RE-ENTRY SURVEY (2019)	8
4.4	ECOLOGY COMMENTS LETTER (2020)	8
4.5	BAT ACTIVITY SURVEY (2020)	8
4.6	UPDATED SITE ASSESSMENT (2022)	9
4.7	EMERGENCE SURVEYS (2022)	10
4.8	STATIC SURVEYS (2022)	11
5.0	RECOMMENDATIONS & MITIGATION	13
6.0	SUMMARY	15
APPENDIX A SURVEY RESULTS		
APPENDIX B LEGISLATION AND POLICY		
REFERENCES		

Tables

Table 4.1	Survey information and weather conditions	11
Table 4.2	Static Results	12

Figures

Figure 4.1	Building 7 (left) and Building 10 (right)	9
Figure 4.2	Comparison of walnut tree in 2018 (left) to 2022 (right)	10

1.0 EXECUTIVE SUMMARY

Greengage Environmental Ltd was commissioned to undertake two bat emergence surveys and static monitoring by Notting Hill Home Ownership Ltd (NHHO) of a site known as St Clare Business Park in Hampton Hill, London Borough of Richmond upon Thames.

This document is a report of these surveys and has been produced to support a planning application to redevelop the site. This will include "Demolition of existing buildings and erection of 1 no. mixed use building between three and five storeys plus basement in height, comprising 86 no. residential flats (Class C3) and 1,290 sq.m of commercial floorspace (Class E); 1 no. two storey building comprising 595sq.m of commercial floorspace (Class E); 14no. residential houses (Class C3); and, associated access, external landscaping and car parking"..

A detailed systematic daytime external inspection, otherwise known as Preliminary Roost Assessment (PRA) was undertaken by Greengage as part of a Preliminary Ecological Appraisal, which noted low potential value for roosting bats in two buildings, B7 and B10 (i.e. unlikely to be used for hibernation or maternity). A walnut tree in the south of the site was also assessed as having moderate suitability to support roosting bats (ref: 551024GA20Jun22DV02_PEA).

An emergence survey was undertaken on B10 and the tree on 5th July 2022. A second emergence survey was undertaken on B7 and the tree on 17th August 2022. No bats were seen to emergence from either building or tree and low levels of foraging / commuting activity from bats was recorded on site at the time of the survey, which confirmed the likely absence of roosting bats in the buildings and tree.

The majority of the site consists of hardstanding and buildings and therefore the potential for foraging bats across the majority of the site was assessed as low. However, statics were deployed along the western boundary of the site on three occasions in spring, summer and autumn, in order to monitor activity along the railway.

With roosting bats confirmed as likely-absent, the development is predicted to have a negligible impact upon roosting bats. Any potential impacts on foraging and commuting bats can be mitigated through implementation of the following recommendations:

- Bat-sensitive lighting regime following guidance from The Institute of Lighting Professionals and Bat Conservation Trust.
- Provision of eight integrated bat boxes into the fabric of the new building, suitable for summer roosting; and
- Wildlife-friendly landscaping to enhance the site as a foraging and commuting resource, including provision of newly planted trees and shrub planting.

The enhancement measures to be implemented will likely result in the development providing long term positive impacts for bats at a local scale, as well as providing net gains in biodiversity value.

2.0 INTRODUCTION

Greengage was commissioned to undertake two bat emergence surveys and static surveys by Notting Hill Home Ownership Ltd (NHHO) of a site known as St Clare Business Park in Hampton Hill, London Borough of Richmond upon Thames.

This document is a report of these surveys and has been produced to support a planning application to redevelop the site. Redevelopment of the site will include "Demolition of existing buildings and erection of 1 no. mixed use building between three and five storeys plus basement in height, comprising 86 no. residential flats (Class C3) and 1,290 sq.m of commercial floorspace (Class E); 1 no. two storey building comprising 595sq.m of commercial floorspace (Class E); 14no. residential houses (Class C3); and, associated access, external landscaping and car parking".

This report should be read in conjunction with the following reports:

- Ecology Assessment - Preliminary Ecological Appraisal and BREEAM 2014 New Construction Assessment (Greengage, 2019, ref: 551024epSept19FV03_Ecology);
- Bat Survey Report (Greengage, 2019, ref: 551024dpSept19FV03_Bats);
- File Note, summarising findings from a site visit on 3rd October 2019 (Greengage, 2019, ref: 551024dpOct19FV01_File_Note);
- Ecology Comments Letter (Greengage, March 2020, ref: 551024dpMar20FV01_L1);
- Updated Bat Activity Survey (Greengage, July 2020, ref: 551024dp14JUL20FV03_Bat_Activity); and
- Update Preliminary Ecological Appraisal (Greengage, 2022, ref: 551024GA20Jun22DV02_PEA.docx).

2.1 AIMS OF SURVEY

The purpose of the emergence surveys and static monitoring 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 building on 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; and
- Determine the type of activity, most usually
 - roosting;
 - foraging (by feeding buzzes); and
 - commuting (by high directional pass rates).

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.

2.2 SITE DESCRIPTION

The survey area extends to approximately 0.9 hectares and is centred on National Grid Reference TQ 14191 70890, OS Co-ordinates 514191, 170890.

The site contains ten buildings and surrounding hardstanding, which can be accessed from Holly Road from the south and Windmill Road from the north.

The site is located in Hampton Hill, approximately 100m west of the High Street. The assessment site consists of office buildings and warehouses, surrounded by associated landscaping and car parking.

The site is bound to the west by the Shepperton branch railway line, mixed-use developments, including commercial and residential, to the east and residential properties to the north and south.

Open green space in the area includes Bushy Park, which is 100m to the east, a recreation ground, Fulwell golf club and a network of private gardens and street trees. Blue links include the nearby Longford River and the River Thames.

3.0 METHODOLOGY

3.1 DESK BASED ASSESSMENT

Biological records from previous reports were analysed to determine the records of bat species in the local area. Records were obtained from Greenspace Information for Greater London (GiGL).

An assessment of the local area using aerial photography and available maps and biological data was also undertaken.

3.2 SITE ASSESSMENT

A Preliminary Roost Assessment was undertaken on 3rd May 2022 in accordance with the Bat Conservation Trust's (BCT) Bat Surveys for Professional Ecologists Good Practice Guidelines¹.

The evaluation of bat potential comprised an assessment of features associated with the property which could be of value for roosting bats. This included a detailed external inspection using a high-powered torch. Consideration was given to:

- The presence and suitability of crevices and other places as roosts; and
- Signs of bat activity or presence.

Definite signs of bat activity were taken to be:

- The bats themselves;
- Droppings;
- Grease marks;
- Scratch marks; and
- Urine spatter.

Signs of possible bat presence were taken to be:

- Stains; and
- Moth and butterfly wings.
- Cracks or crevices within the building which could be used as entrance or exit holes.

Potential roosting value was defined as per BCT guidelines accordingly:

- 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.

All external areas of the building were accessed, and no loft spaces were present and no internal inspection was therefore required.

3.3 EMERGENCE SURVEYS

The emergence surveys were undertaken during overcast but warm conditions, with temperatures remaining at 19°C.

The emergence surveys commenced 15 minutes before sunset and continued for 90 minutes after sunset. Each surveyor was equipped with an Echometer Touch Pro bat detector to hear, visualize and record bat calls and identify bats to species level.

An infrared camera was also used during the first tree survey on 05/07/22 and footage was reviewed by a suitably qualified bat ecologist.

Each surveyor was equipped with BatBox Duet Heterodyne detectors and an Echo Meter Touch bat detector to detect, visualise and record the calls of any bats present in the area.

3.4 STATIC SURVEYS

Two SM4BAT Zero Crossing static bat detectors fitted with ultrasonic SMM-U2 microphones, were deployed along the western boundary of the site, along the railway embankment (deployed at TQ 14159 70911 and TQ 14176 70954).

For sites containing low suitability, one location per transect is required, however in this case to be precautionary two statics were deployed. Data was collected for five consecutive nights per season (spring - April/May, summer - June/July/August, autumn - September/October) in appropriate weather conditions for bats.

The data was reviewed and analysed using the bat sound analysis software 'Analook' to determine species and forms of activity. Using this method, it is possible to gain a broad understanding of the levels of bat activity at the site and it ensures that all detectable bats are recorded. However, it is not possible to assess the directionality or specific locality of any bats recorded.

3.5 SURVEYORS

Martin Roche and Jess Malim led the first bat survey and Jordan McNulty and Molly Crookshank led the second bat survey.

Martin Roche, has a degree in Zoology (BSc Hons) and is an Associate member of CIEEM with over four years' experience in ecological survey and assessment. Martin possesses a Natural England CL08 Great Crested Newt Licence (2018-33257-CLS-CLS) and CL10 Dormouse Survey Licence (2019-39316-CLS-CLS).

Jess Malim, has an undergraduate degree in Biosciences (BSc Hons). Jess has experience with bat surveys from her undergraduate degree and with Greengage Environmental Ltd.

Jordan McNulty, has an undergraduate degree in Marine Biology (BSc Hons) and a Master's degree in Ecology, Evolution & Behaviour. Jordan has 1 seasons' experience assisting with ecological survey and assessment.

Molly Crookshank, has a Bachelor's degree in Animal Biology (BSc Hons), a Master's degree in Wildlife Biology and Conservation (MSc) and is a Qualifying member of CIEEM. Molly has over 3 years of experience in ecological surveying.

Georgia Alfreds, who wrote this report, has a degree in Geography (BSc Hons), an MSc in Environmental Biology: Conservation and Resource Management and is an Associate member of CIEEM with 7 years' experience in ecological survey and assessment.

Paul White, who reviewed this report, has a Bachelor's degree in Marine Biology (BSc Hons), a Natural England Great Crested Newt Licence (2018-38559-CLS-CLS) and Dormouse Licence (2020-44691-CLS-CLS), and is an Associate member of CIEEM. Paul has over 15 years' experience in ecological surveying and has undertaken and managed numerous ecological surveys and assessments.

This report was written by Georgia Alfreds and reviewed and verified by Paul White 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.

3.6 LIMITATIONS AND COMMENTARY ON METHODOLOGY

There were no significant limitations to the bat surveys. The surveys were undertaken at a suitable time of year and in generally suitable weather conditions. However, the static data collected for the spring period corrupted. This however was not seen to have a significant impact on the results as additional data from this area was obtained by the surveyor adjacent to the statics on the August B7 survey.

4.0 RESULTS

4.1 DESK BASED ASSESSMENT

Biological records obtained from Greenspace Information for Greater London (GiGL) were detailed within a previous report and analysed to determine the records of bat species in the local area (Greengage, 2019, ref: 551024epSept19FV01_PEA). Records for the following bat species were identified within 2km of the site:

- Serotine (*Eptesicus serotinus*);
- Noctule (*Nyctalus noctule*);
- Brown long eared (*Plecotus auritus*);
- Daubenton's bat (*Myotis daubentonii*);
- Natterer's bat (*Myotis nattereri*);
- Common pipistrelle (*Pipistrellus pipistrellus*);
- Soprano pipistrelle (*Pipistrellus pygmaeus*); and
- Nathusius' pipistrelle (*Pipistrellus nathusii*).

An assessment of the local area using aerial photography and available maps and biological data was also undertaken.

4.2 PREVIOUS SITE ASSESSMENT (2018/19)

Greengage Environmental completed a Preliminary Ecological Appraisal on behalf of Notting Hill Home Ownership Ltd in 2018 (Preliminary Ecological Appraisal (Greengage, 2018, ref: 551024epSept19FV01_PEA). The report identified two buildings (B7 and B10) as having 'low' potential to support roosting bats, and one tree as having 'moderate' potential to support roosting bats.

Building 7 had a small number of cracks in the brickwork and gaps under the ridges and was therefore considered to have low potential to support roosting bats.

Building 10 which fronts Windmill Road, has a few potential roosting features, including gaps under the sloping roof, gaps under the wooden boarding and gaps under corrugated iron cladding. This building also was assessed as providing low potential to support roosting bats.

On the basis that a small number of features were present which could provide potential value for low conservation status roosts (i.e. unlikely to be used for hibernation or maternity) for common species (e.g. common pipistrelle) and considering the proximity of the site to good quality bat foraging and commuting habitat, such as the railway on the western site boundary, in accordance with the Bat Conservation Trust (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines and the Bat Workers Manual (2004)², and given the legal protection afforded to bats (see Appendix B), the requirement for one emergence survey for each building was confirmed.

In addition, a single walnut tree on site (labelled 'T25' in the Arboricultural Report, PJC, November 2017 ref: 4707/17-01 Rev 01) was assessed in 2018 as having potential to support roosting bats (Greengage, September 2019, ref: 551024epSept19FV01_PEA). It had north-facing cavities in a branch approximately 3-4m high. It was not possible to determine from ground level whether this cavity extended within the tree and whether the internal cavity was suitable for bats. However, the presence of two cavities suggested that the branch is hollow for at least part of its length and was therefore given moderate suitability to support a bat roost.

A File Note was produced in 2019, following an updated site walkover summarising findings from a site visit on 3rd October 2019 (Greengage, 2019, ref: 551024dpOct19FV01_File_Note), which confirmed that conditions on site has not changed and recommendations within the original PEA could be relied upon.

4.3 BAT EMERGENCE/RE-ENTRY SURVEY (2019)

Bat emergence/re-entry surveys were undertaken by Greengage in May 2018, which confirmed the likely absence of roosting bats (Greengage, 2019, ref: 551024dpSept19FV03_Bats).

4.4 ECOLOGY COMMENTS LETTER (2020)

Comments relating to the ecological mitigation at the proposed site were raised by the LPA. A letter was prepared as a response to concerns raised (ref: 551024dpMar20FV01_L1). The report stated that the development proposals had considered ecology, all adverse ecological impacts could be fully avoided and mitigated, and the proposals were predicted to result in net gains for biodiversity, demonstrating compliance with emerging policy.

4.5 BAT ACTIVITY SURVEY (2020)

The site is bound to the west by a railway line with a wide rail siding, which the previous PEA identified as having potential to act as a wildlife corridor. Concerns were raised by the LPA that the proposed building may impact the rail sidings value for foraging and commuting bats due to the close proximity of the proposed building in response to a council request (see file note referenced above). Therefore, two walked activity surveys were undertaken in June 2020 following methodology described in Bat Conservation Trust guidance. A surveyor walked a transect along the site boundary to the west, focusing on areas where there is minimal impediment between the site and rail siding (Ref: 551024dp14Jul20FV03_Bat_Activity).

Additionally, one SM4BAT ZC static bat detector fitted with an ultrasonic SMM-U2 microphone was installed at site on the western boundary on two occasions. On both occasions the static detector was set to record from sunset to sunrise for a minimum period of five nights.

The walked transect surveys recorded moderate levels of commuting activity. No periods of sustained foraging were recorded, and all observations were single passes of bats commuting along the railway line. Very few visual observations were made despite bats being in range to trigger the bat detector. Only one bat pass was recorded over the site itself. Species recorded include common pipistrelle, soprano

pipistrelle and common noctule– all of which are species commonly found in London and noted as being relatively light tolerant species.

Data collected on the static detectors recorded the same species mix. The average number of passes recorded per night was 6.85 (6.68 SD), with soprano pipistrelles responsible for 62% of all activity. Common and soprano pipistrelles account for 93% of all activity. Two additional species were recorded on the static detectors, including serotine and myotis (*Myotis* sp.).

Existing levels of lighting were observed during both walked transect surveys which were very high and are considered likely to deter bats from commuting near the site boundary. Given the low levels of commuting activity and absence of sustained foraging activity, coupled with the high levels of existing lighting, the proposals are not likely to negatively impact the value of the rail sidings for foraging and commuting bats. Whilst some light spill may occur on the site-side of the trees on the rail siding, this will not impact the main value of the interior of the corridor for bats, which will remain unlit.

4.6 UPDATED SITE ASSESSMENT (2022)

Since a significant amount of time had lapsed since the previous PEA was produced, an updated Preliminary Ecological Appraisal was required to reflect any changes or degradation to the site since the previous assessment and to consider updates in new planning legislation.

The two buildings (B7 and B10) remained as low suitability to support roosting bats.

Figure 4.1 Building 7 (left) and Building 10 (right)



The updated survey identified the walnut tree had since developed a layer of ivy and that the assessment of 'moderate' suitability to support roosting bats, remained valid.

Figure 4.2 Comparison of walnut tree in 2018 (left) to 2022 (right)



4.7 EMERGENCE SURVEYS (2022)

Since a significant time period has lapsed, further surveys are required to inform the planning resubmission. In accordance with the Bat Conservation Trust (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines and the Bat Workers Manual (2004), for the reasons listed above, and given the legal protection afforded to bats (see Appendix B), the requirement for a single emergence survey was confirmed for each building and two surveys required for the tree with moderate suitability.

One surveyor was positioned in location to observe the features highlighted for each building and the tree. One infra-red camera was also deployed to support the first tree survey to monitor the features mentioned above.

Table 4.1 Survey information and weather conditions

Survey type	Date	Start	End	Locations		Sunset	Conditions
Preliminary Ecological Appraisal	03/05/22	N/A	N/A	N/A	N/A	N/A	Dry and mild
Emergence	05/07/22	21:04	22:49	B10 (MR)	Tree with IR camera (JM)	21:19	Start 19°C End 19°C 5% cloud cover Wind 0km/h
Emergence	17/08/22	20:04	21:49	B7 (JMc)	Tree (MC)	20:19	Start 19°C End 19°C Overcast Wind 12km/h

During the first emergence survey, several passes were recorded around the walnut tree and heard but not seen around B10, including soprano and common pipistrelle and noctule. The first call was heard at 21:35, 16 mins after sunset and the last call was heard at 22:38, 1 hour and 3 minutes after sunset. The IR camera footage from the tree was analysed and no bats were recorded to have emerged.

During the second emergence survey, low activity was recorded around the gardens and road adjacent to the walnut tree and numerous passes over the fence line in the west of the site towards the railway adjacent to B7. Activity included foraging and commuting behaviour by soprano and common pipistrelle and noctule. The first call was heard at 20:35, 16 mins after sunset and the last call was heard at 21:35, 1 hour and 16 minutes after sunset.

There was no evidence of roosting observed during the emergence surveys. Roosting bats can therefore be confirmed as likely-absent from the site. Locations of passes and foraging activity, in addition to the surveyor locations, are shown in the bat activity plan at Figure 1.

4.8 STATIC SURVEYS (2022)

Repeat walked transects were not considered appropriate for this site, due to its limited extent, part of which is blocked by the buildings and numerous parked cars (associated with the garage on site) along the western boundary, restricting viability which would limit the benefit of a walked transect approach.

Therefore, the placement of two static bat detectors was considered sufficient. The frequency and extent of static monitoring required under the Bat Conservation Trust (BCT) guidelines is proportionate to the value present for bats, which assumes a low to moderate value along the existing tree line.

Table 4.2 Static Results

Survey type	Start	End	Notes
Spring Statics x2	05/05/22	10/05/22	*Data corrupted
Summer Statics x2	21/07/22	25/07/22	
Autumn Statics x2	07/09/22	12/09/22	

The data recorded in May was corrupted, as detailed in the constraints section of this report.

The most frequently recorded species across the sample period was soprano pipistrelle with over 88% of all recorded calls in July and 62% of all records in September, followed by common pipistrelle. Four noctule passes were detected in July and two Nathusius's pipistrelle passes were recorded in September. Therefore, the bat species recorded using the static bat detector included:

- Soprano pipistrelle;
- Common pipistrelle;
- Common noctule; and
- Nathusius's pipistrelle.

5.0 RECOMMENDATIONS & MITIGATION

The survey results confirmed the likely-absence of roosting bats within the buildings and tree on site. There is therefore no requirement for mitigation with regards to roosting bats.

Similar levels of bat activity and species recorded in the previous bat surveys undertaken on site were recorded during the updated surveys. Low levels of bat foraging and commuting activity were observed during the emergence survey. Three species were recorded; common pipistrelle, soprano pipistrelle and noctule species. In addition to these species, Nathusius's pipistrelle was recorded using the static detectors along the western part of the site.

Whilst foraging and commuting resources for bats are not formally protected by law, their protection is a material consideration within the planning process. Suitable best practice and mitigation recommendations are detailed below.

Lighting

Artificial lighting can cause disturbance to bat species' roosting, foraging and commuting activity. Proposals should therefore impose measures to limit additional light disturbance at site following development. Bat-sensitive lighting should be incorporated into the scheme to minimise any potential impacts of increased lighting levels on foraging, commuting and socialising bats. Lighting should follow guidance provided by the Institute of Lighting Professionals and Bat Conservation Trust³. This involves the use of low-UV warm-white LED bulbs with directional, downward facing and shielded lights which point away from green features such as tree lines or areas of planting. External lights should be subject to curfew controls where possible with lights on movement sensors to reduce light pollution when not needed. Open green space (including any living roofs) should remain unlit, particularly between April and October, inclusive. Measures should be taken in internal light placement to reduce risk of light spill from windows, as per guidelines. Lighting at site should be modelled to confirm predicted intensity and spill.

Wildlife Friendly Landscaping

To minimise impacts upon local bat populations identified at the site, valuable habitat will be retained within the scheme where possible. Any unavoidable loss of foraging habitat will be compensated for through new planting of native trees, shrubs and wildflowers.

Compensatory areas of wildlife-friendly landscaping will include fruit and berry producing shrubs and trees and trees to encourage a richer invertebrate community and provide foraging resources for bats (Landscape Masterplan ref: 3522-901 - P11; and Planting Plan ref: 3522-902 - P2; and Tree Retention and Removal Plan ref: 3522-903 - P3).

Further to the above recommendations it is considered unlikely that there will be a significant adverse impact on bats in the local surrounding area, and the overall impact from the proposed development is predicted to be negligible.

Enhancement

In addition to the above best practice mitigation, the following enhancement measure is also recommended due to the potential value for bats at the site:

Most species of bats will use bat boxes at various times of year but in particular they are favoured by pipistrelles, Leisler's, noctule and *Myotis* species. Pipistrelles and noctule were identified during the survey and are known to be in the wider area, therefore, we would propose that eight bat boxes, bricks or 'habibats' should be incorporated, where appropriate; the use of these bat boxes will increase roosting opportunities for bats in the area. Bat boxes or bricks should be positioned in sunny locations mainly to the south or west façade of the building or trees. However, a variety of different locations would provide a range of climatic conditions and attract several different species. The optimal height for a bat box is 3 to 6 metres with an entrance free from obstruction and obstacles. The behaviour of bats varies from species to species but generally they will use a number of different roosts so it is best to erect several boxes in different locations across the site and include a range of aspects.

6.0 SUMMARY

Greengage undertook bat emergence and activity surveys in order to determine the presence or likely absence of roosting bats and to observe any bat foraging or commuting activity across the wider site.

An external inspection identified low value for roosting bats at B7 and B10 and moderate suitability for roosting bats in the walnut tree.

Multiple passes were recorded during the emergence surveys (heard and seen) by three species, common pipistrelle, soprano pipistrelle and noctule, however, no roosting activity was observed and formal mitigation is therefore not required to avoid or minimise impacts upon roosting bats.

The static detectors recorded low foraging levels of the same species, in addition to Nathusius's pipistrelle.

Mitigation measures have been recommended which include the provision of bat sensitive lighting, compensatory green space and enhanced landscaping and roosting opportunities.

Assuming recommendations are followed, the impact of the proposed development upon both local bat populations is expected to be negligible.

Enhancement measures for bats have been recommended to increase the biodiversity value of any proposed redevelopment. These enhancements include the provision of bat boxes to provide roosting opportunities and further foraging resources. Assuming these enhancements are followed, the development will result in net gains for biodiversity.

APPENDIX A SURVEY RESULTS

St Clare Business Park



- Tree
- Buildings
- Red Line Boundary
- Static Locations
- Common Pipistrelle flight lines



Greengage Environmental Ltd
9 Holyrood Street, London
SE1 2EL

www.greengage-env.com

Fig 1.0 Bat Survey Results

Project Number 551024
October 2022
1 to 1000 at A4
Map Data - Google Satellite



0 10 20 30 40 m

A horizontal scale bar with alternating black and white segments, representing distances of 0, 10, 20, 30, and 40 meters.

APPENDIX B LEGISLATION AND POLICY

B.1 LEGISLATION

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)⁴ 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 Annex IV of the Habitats Directive⁵, 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 2017⁶, 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.

B.2 PLANNING POLICY

National Planning Policy Framework (NPPF)

The National Planning Policy Framework (NPPF) 2021⁷ 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..

The London Plan⁸

Policy G1 Green infrastructure

1. London’s network of green and open spaces, and green features in the built environment such as green roofs and street trees, should be protected, planned, designed and managed as integrated features of green infrastructure.
2. Boroughs should prepare green infrastructure strategies that integrate objectives relating to open space provision, biodiversity conservation, flood management, health and wellbeing, sport and recreation.
3. Development Plans and Opportunity Area Planning Frameworks should:
 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.
4. Development proposals should incorporate appropriate elements of green infrastructure that are integrated into London’s wider green infrastructure network.

Policy G5 Urban greening

1. 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.
2. 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 Table 8.2, 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).
3. 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 Table 8.2.

Policy G6 Biodiversity and access to nature

1. Sites of Importance for Nature Conservation (SINCs) should be protected.
2. Boroughs, in developing Development Plans, should:
 - a. use up-to-date information about the natural environment and the relevant procedures to identify SINCs and ecological corridors to identify coherent ecological networks
 - b. 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
 - c. 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
 - d. seek opportunities to create other habitats, or features such as artificial nest sites, that are of particular relevance and benefit in an urban context
 - e. ensure designated sites of European or national nature conservation importance are clearly identified and impacts assessed in accordance with legislative requirements.
3. 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:
 - a. avoid damaging the significant ecological features of the site
 - b. minimise the overall spatial impact and mitigate it by improving the quality or management of the rest of the site
 - c. deliver off-site compensation of better biodiversity value.
4. 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.
5. Proposals which reduce deficiencies in access to nature should be considered positively.

Policy G7 Trees and woodlands

1. 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.
2. In their Development Plans, boroughs should:
 - a. Protect 'veteran' trees and ancient woodland where these are not already part of a protected site
 - b. Identify opportunities for tree planting in strategic locations

3. Development proposals should ensure that, wherever possible, existing trees of quality are retained [Category A and B]. 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.

London Environment Strategy 2018⁹

The Mayor's Environment Strategy was published in May 2018. This document sets out the strategic vision for the environment throughout London. Although not primarily a planning guidance document, it does set strategic objectives, policies and proposals that are of relevance to the delivery of new development in a planning context, including:

Objective 5.1 Make more than half of London green by 2050

Policy 5.1.1 Protect, enhance and increase green areas in the city, to provide green infrastructure services and benefits that London needs now.

This policy states:

“New development proposals should avoid reducing the overall amount of green cover and, where possible, seek to enhance the wider green infrastructure network to increase the benefits this provides. [...] New developments should aim to avoid fragmentation of existing green space, reduce storm water run-off rates by using sustainable drainage, and include new tree planting, wildlife-friendly landscaping, or features such as green roofs to mitigate any unavoidable loss”.

This supports the ‘environmental net gain’ approach promoted by government in the 25 Year Environment Plan.

Proposal 5.1.1.d The London Plan includes policies to green streets and buildings, including increasing the extent of green roofs, green walls and sustainable drainage.

Objective 5.2 conserving and enhancement wildlife and natural habitats

Policy 5.2.1 Protect a core network of nature conservation sites and ensure a net gain in biodiversity

This policy requires new development to include new wildlife habitat, nesting and roosting sites, and ecologically appropriate landscaping will provide more resources for wildlife and help to strengthen ecological corridors. It states:

“Opportunities should be sought to create or restore priority habitats (previously known as UK Biodiversity Action Plan habitats) that have been identified as conservation priorities in London [and] all land managers and landowners should take BAP priority species into account”.

Local

London Borough of Richmond Upon Thames - Local Plan (adopted July 2018)

Whilst the draft local plan is in development, the current local plan for Richmond Upon Thames looks ahead to 2033 and identified where the main developments will take place.

Policy LP 12 - Green Infrastructure

Green infrastructure is a network of multi-functional green spaces and green features, which provides multiple benefits for people, nature and the economy.

A. To ensure all development proposals protect, and where opportunities arise enhance, green infrastructure,

the following will be taken into account when assessing development proposals:

- a. the need to protect the integrity of the green spaces and features that are part of the wider green infrastructure network; improvements and enhancements to the green infrastructure network are supported;
- b. its contribution to the wider green infrastructure network by delivering landscape enhancement, restoration or re-creation;
- c. incorporating green infrastructure features, which make a positive contribution to the wider green infrastructure network.

Policy LP 15 - Biodiversity

A. The Council will protect and enhance the borough's biodiversity, in particular, but not exclusively, the sites designated for their biodiversity and nature conservation value, including the connectivity between habitats. Weighted priority in terms of their importance will be afforded to protected species and priority species and habitats including National Nature Reserves, Sites of Special Scientific Interest (SSSI) and Other Sites of Nature Importance as set out in the Biodiversity Strategy for England, and the London and Richmond upon Thames Biodiversity Action Plans. This will be achieved by:

1. protecting biodiversity in, and adjacent to, the borough's designated sites for biodiversity and nature conservation importance (including buffer zones), as well as other existing habitats and features of biodiversity value;
2. supporting enhancements to biodiversity;
3. incorporating and creating new habitats or biodiversity features, including trees, into development sites and into the design of buildings themselves where appropriate; major developments are required to deliver net gain for biodiversity, through incorporation of ecological enhancements, wherever possible;
4. ensuring new biodiversity features or habitats connect to the wider ecological and green infrastructure networks and complement surrounding habitats;

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5. enhancing wildlife corridors for the movement of species, including river corridors, where opportunities arise; and
 6. maximising the provision of soft landscaping, including trees, shrubs and other vegetation that support the borough-wide Biodiversity Action Plan.

B. Where development would impact on species or a habitat, especially where identified in the relevant Biodiversity Action Plan at London or local level, or the Biodiversity Strategy for England, the potential harm should:

1. firstly be avoided (the applicant has to demonstrate that there is no alternative site with less harmful impacts),
2. secondly be adequately mitigated; or
3. as a last resort, appropriately compensated for.

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- ⁵ 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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