Greengage

Brighter strategies
for greener projects

Client: Curlew Developments London Limited

Project: Britannia Street Car Park

Report: Bat Survey Report

QUALITY ASSURANCE

Issue/Revision:	Draft	Final
Date:	September 2024	December 2024
Comments:		
Prepared by:	Heather Downer	Heather Downer
Authorised by:	Daniel Perlaki	Mike Harris
File Reference:	552554hdDec24FV01_BSR.docx	552554hdDec24FV01_BSR

CONTENTS

Tables

Figures

1.0 EXECUTIVE SUMMARY

Greengage Environmental Ltd (Greengage) was commissioned by Curlew Developments London Limited to undertake a bat emergence survey of a site known as Britannia Street Car Park to establish the presence/likely absence of roosting bats.

This document is a report of this survey and has been produced to inform a planning application for the site which seeks redevelopment of the existing brownfield site for Purpose-Built Student Accommodation in addition to community floorspace.

A Preliminary Ecological Appraisal (PEA) (552554dpDec24FV01_PEA[1]) undertaken by Greengage in July 2024 involved a detailed systematic assessment of the sites suitability to support bats. The site extends to 0.1 hectares (ha) and comprises an operational carpark constructed on a concrete slab above the Thames Link railway lines. The site also contains a brick vent shaft for the below rail line.

The PEA included a daytime external inspection and noted low suitability for roosting bats in the brick shaft associated with loose brick works and missing mortar. A drone survey of the vent shaft confirmed that the rail line below the site is unsuitable for roosting or hibernating bats owing to the lack of Potential Roost Features, high levels of light, noise and vibration disturbance and heat.

As such, in accordance with the Bat Conservation Trust (BCT) guidelines a single dusk emergence survey was carried out in July 2024.

The emergence surveys confirmed the likely absence of roosting bats in the structure and no mitigation actions in relation to roosting bats are required. No bat activity of any kind was recorded. This is attributed to the lack of green infrastructure present on/in the vicinity of the site and the high levels of lighting present in the area.

In accordance with planning policy and good practice, measures to mitigate for foraging bats and enhance the site for both roosting and foraging bats are recommended. These measures include:

- Creation of foraging/commuting habitat through provision of high quality urban green infrastructure;
- Bat-sensitive lighting regime following guidance from The Institute of Lighting Professionals (ILP) and Bat Conservation Trust[2]; and
- Provision of four integrated bat boxes into the fabric of the new building/s, suitable for summer roosting.

With roosting bats confirmed as likely-absent, the development is predicted to have a negligible impact upon roosting bats. Furthermore, the enhancements measures to be implemented will likely result in the development providing long term positive impacts for bats at a local scale.

The data collected during the bat emergence survey is considered valid for 18 months in accordance with the Chartered Institute of Ecology and Environmental Management (CIEEM) guidance[3] and an updated survey will be required if the works have not started within this timeframe or should site conditions change significantly during this time.

2.0 INTRODUCTION

Greengage was commissioned to undertake a bat emergence survey by Curlew Developments London Limited of a site known as Britannia Street Car Park in the London Borough of Camden (LBC) to establish the presence/likely absence of roosting bats and to assess levels of bat foraging or commuting activity across the site.

This document is a report of this survey and has been produced to inform a planning application for the site which seeks redevelopment of the existing brownfield site for Purpose-Built Student Accommodation in addition to community floorspace.

2.1 AIMS OF SURVEY

The purpose of the survey was to determine the presence/absence of roosting bats from the site, identify the likelihood of impacts upon roosting bats arising from the development and identify the requirement for/approach to mitigation.

2.2 SITE DESCRIPTION

The site extends to approximately 0.1 hectares (ha) and is centred on National Grid Reference TQ 30651 82881, OS Co-ordinates 530651, 182881.

The site is located in the Kings Cross Ward of LBC, bounded by Britannia Street to the north; the three storey 'Help Musicians Building' and six storey Derby Lodge buildings to the east; Wicklow Street to the south; and by London Underground railway lines (in a cutting) to the west. The Thames Link railway line also runs in a shallow tunnel beneath the western half of the Site.

The Site comprises undeveloped hardstanding in use as a public car park and includes a ventilation shaft linked to the Thames Link railway tunnel running below the Site. The area surrounding the Site was historically industrial and residential in nature with the Site itself having previously been occupied by a 3-storey warehouse. While the area generally retains its historic built form, forming part of the Kings Cross St Pancras Conservation Area, over time the areas industrial uses have been replaced by office, creative and additional residential uses (including student accommodation).

The site is set in an urban context typical of Central London. Commercial development and transport infrastructure are the dominant land uses in the vicinity of the site. Green infrastructure provision is confined to the network of pocket parks, street trees and green roofs.

2.3 PROPOSALS

The proposals seek comprehensive redevelopment of the site to provide a Purpose-Built Student Accommodation in addition to community floorspace, in addition to significant improvements in green infrastructure provision.

2.4 ECOLOGICAL CONTEXT

Desk Based Assessment

Biological records were analysed to determine the records of bat species in the local area. Records were obtained from Greenspace Information for Greater London (GiGL) in September 2023.

Records for the following bat species were identified within 2km of the site:

- Common pipistrelle (*Pipistrellus pipistrellus*);
- Soprano pipistrelle (*Pipistrellus pygmaeus*);
- Nathusius' Pipistrelle (*Pipistrellus nathusii*);
- Serotine (*Eptesicus serotinus)*;
- Noctule (*Nyctalus noctule)*;
- Leisler's (*Nyctalus leislerii*); and
- Daubenton's (*Myotis daubentonii*).

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

Preliminary Ecological Appraisal (PEA)

Full access to the external areas of the site was granted and the survey was undertaken on 21st September 2023 in overcast and dry weather conditions. Internal access was not possible due to the nature of the structure. A follow-up survey was undertaken on 22nd July 2024.

During the PEA a visual assessment of the vent shaft for suitability of roosting features was undertaken and entailed a check for signs of roosting bats, including the presence of droppings, urine staining, grease marks and signs of food remnants such as moth and butterfly wings. A drone survey of the vent shaft was undertaken on December 2023 confirmed that the rail line below the site is unsuitable for roosting or hibernating bats owing to the lack of Potential Roost Features, high levels of light, noise and vibration disturbance and heat.

The vent shaft was determined to have low suitability to support summer roosting bats due to loose brickwork and gaps in the mortar present.

In accordance with the Bat Conservation Trust (BCT) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines[4] and the Bat Workers Manual (2004)[5], for the reasons listed above, and given the legal protection afforded to bats, a single emergence survey was recommended as sufficient survey effort to confirm the presence/ likely absence of roosting bats.

3.0 METHODOLOGY

3.1 EMERGENCE SURVEY

The PEA identified two locations across the site that would enable all aspects of the structure to be surveyed. Surveyor locations are mapped in Appendix B.

A single emergence survey was undertaken on 22nd July 2024. The survey was undertaken in overcast, still and warm conditions with a sunset temperature of 21°C, decreasing to 18°C by the end of the survey, in accordance with BCT guidelines. There was no rain at any point during the survey.

The emergence survey commenced 15 minutes prior to sunset (20:47 - sunset at 21:02) and continued for 90 minutes after sunset (22:32). The survey was conducted by two surveyors to ensure all features with suitability to support roosting bats and aspects of the building could be assessed.

Each surveyor was equipped with an Echo Meter Touch bat detector to detect, visualise and record the calls of any bats present in the area. Additionally, infrared Canon XA11 cameras, each alongside two Light Emitting Diodes (LED) Infra-Red (IR) lights, were used as Night Visual Aids (NVA) for surveyors. Stills from the darkest point of the survey from each surveyor location have been provided in Appendix C. Following the survey, the video footage and any bat calls recorded were analysed in-office using specialist computer software to confirm species present and assess ambiguous sightings/calls.

3.2 SURVEYORS

BCT guidance outlines the different levels of competency to undertake professional bat work which aligns with CIEEM definitions[6] .

The survey was led by Alex Hurley. Alex has a BSc Zoology & Physiology and a MSc in Conservation Biology. Alex has over six years' experience working within the environmental management sector including planning and coordinating restoration management activities, developing environmental management plans and undertaking ecological surveys.

The survey was assisted by Nadia Sushko. Nadia has a degree in Ecology (BSc Hons), and MSc in Environmental Science and Sustainability and is a Qualifying CIEEM Member. Nadia has over 2 years' experience in survey resourcing, environmental protection coordination, natural resources management, and environmental crime prevention.

The report was written by Heather Downer. Heather has a BSc and MBiol (Industrial) (Hons) in Zoology and one season's experience in ecological surveying and reporting. Her experience includes GIS mapping, Preliminary Ecological Appraisals and bat acoustic analysis.

The report was reviewed by Daniel Perlaki, who has an undergraduate degree in Ecology (BSc Hons), a Master's degree in Conservation Science and Policy and is a Graduate member of CIEEM. Dan has over 7 years' experience in ecology survey and consultancy.

This report was verified by Mike Harris, who has a Bachelor's degree in Environmental Biology (BSc Hons), a Natural England Great Crested Newt Licence and Dormouse Licence, is a Chartered

Environmentalist (CEnv) and Full member of CIEEM. Mike has over 20 years' experience in ecological surveying and has undertaken and managed numerous ecological surveys and assessments.

The survey was designed by Daniel Perlaki who meets the BCT Level 2 (Capable) competency which is the appropriate level for simple sites such as this one.

This report was written by Heather Downer, reviewed by Daniel Perlaki and verified by Mike Harris 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.

3.3 LIMITATIONS AND COMMENTARY ON METHODOLOGY

The data collected during the bat emergence survey is considered valid for 18 months in accordance with the Chartered Institute of Ecology and Environmental Management (CIEEM) guidance[7] and an updated survey will be required if the works have not started within this timeframe or should site conditions change significantly during this time.

Emergence surveys

There were no significant limitations to the bat surveys. The surveys were undertaken at a suitable time of year and in suitable weather conditions.

4.0 RESULTS

4.1 EMERGENCE SURVEYS

There was no evidence of roosting observed during the emergence survey, therefore roosting bats can therefore be confirmed as likely-absent from the site.

During the survey no foraging or commuting activity was recorded by any species.

5.0 RECOMMENDATIONS AND CONCLUSIONS

5.1 SUMMARY OF EMERGENCE SURVEYS

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

No bat foraging or commuting activity was observed during the emergence survey indicating that the site is not used for foraging or along any important commuting routes for bats in the area. This is likely due to the high levels of light pollution and dearth of semi-natural habitats in the vicinity of the site.

Enhancement recommendations to improve the ecological value of the site for roosting, foraging and commuting bats are set out below.

5.2 ENHANCEMENT

Bat boxes

Most species of bats will use bat boxes at various times of year but in particular they are favoured by pipistrelles, Leisler's, noctule, brown long eared and Myotis species[8].

It is recommended that a minimum of four bat boxes are incorporated into the proposed development. These bat boxes should be installed within the building, either integrated into the surface render/cladding/brick courses.

Bat boxes should be positioned in sunny locations, most suitably on the southern and western façades of the building. Bat boxes should be placed away from doors, windows and street lighting, ideally at 3-5m from ground level, with the entrance free from obstruction. The behaviour of bats varies between species however, generally they will use a number of different roosts of varying climate conditions. Therefore, it is advisable to integrate several boxes with varying locations and aspects across the site.

Greengage do not endorse specific products, but the products shown in Figure 5.1 or similar would be suitable.

Given the findings of the survey, and the nature of the proposed works, the scheme is considered to have a positive impact on bats using the site and the surrounding area.

Figure 5.1 Integrated Habibat Bat Box 003 - Blended Facing[9] (top left); Vivara Pro low profile woodstone bat box [10] suitable for mounting on buildings (top right); 2F Schwegler bat box[11] suitable for tree mounting (bottom left)

Wildlife friendly habitat creation

By increasing the diversity of habitats on site the scheme will be increasing the diversity of bat invertebrate prey species. The following habitat types should be considered for incorporation into the landscaping plans:

- Extensive biodiverse roofs on suitable flat roof areas with no public access. This should consist of low-nutrient substrate ranging in depth from 150-200mm, seeded with a suitable mix of wildflowers and grasses. This type of roof is compatible with Photo-voltaic (PV) arrays and can be placed around roof plant equipment;
- Extensive biodiverse roofs should be further enhanced with log piles, sand mounds and piles of stone/rubble to mimic brownfield/wasteland and create microclimates suitable for a range of different invertebrates;

- Roof terraces and accessible roof areas should feature intensive roof gardens with fragrant herbaceous/shrub planting of sensory interest whilst providing pollen/nectar sources;
- Vertical greening should be incorporated on suitable facades consisting of climbing plants trained to wire trellises. Species should include native climbers such as ivy (Hedera helix), honeysuckle (*Lonicera periclymenum*), hops (*Humulus lupulus*) and old-man's-beard (*Clematis vitalba*);
- Increase tree canopy cover where possible to provide foraging and nesting resources for birds whilst providing evaporative cooling for site users. Species should be selected based on available space and ecosystem service provision using Tree and Design Action Group (TDAG)[12] guidance; and
- Inclusion of integrated bird and bat boxes within the new structure. These should be embedded in cladding/surface render/brick courses.

The development presents the opportunity to benefit a range of taxa through incorporation of ecological features and provision of new habitats that would encourage species to the site. Assuming appropriate mitigation and compensation actions are followed, alongside enhancements described above it should be possible to deliver an increase in value for local bat populations.

6.0 SUMMARY AND CONCLUSION

Greengage was commissioned to undertake a bat emergence survey by Curlew Developments London Limited of a site known as Britannia Car Park to establish the presence/likely absence of roosting bats and to assess levels of bat foraging or commuting activity across the site.

A PEA undertaken by Greengage in July 2024 involved a detailed systematic assessment of the sites suitability to support bats. The PEA included a daytime external inspection and noted low suitability for roosting bats in a brick vent shaft connecting the site to the below rail lines. A drone survey undertaken in December 2023 provided additional context and confirmed the site as being unsuitable for hibernating bats.

As such, in accordance with the BCT guidelines a single dusk emergence survey was carried out in July 2024.

The emergence surveys confirmed the likely absence of roosting bats in the structure and no mitigation actions in relation to roosting bats are required. No bat activity of any sort was recorded.

Enhancement measures for bats have been recommended to increase the biodiversity value of any proposed redevelopment and include provision of bat boxes and wildlife friendly habitat creation. 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 value for local bat populations.

APPENDIX A LEGISLATION AND POLICY

A.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)[13] was the first legislation to provide protection for all bats and their roosts in England, Scotland and Wales (earlier legislation gave protection to horseshoe bats only.)

All eighteen British bat species are listed in Schedule 5 of the Wildlife and Countryside Act, 1981 and under Annexe IV of the Habitats Directive[14], 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 (Amendment) (EU Exit) Regulations 2019[15], 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.

A.2 PLANNING POLICY

National Planning Policy Framework (NPPF)

The National Planning Policy Framework (NPPF) 2024[16] 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 Plan[17]

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

5. 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.
6. 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).
7. 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

8. Sites of Importance for Nature Conservation (SINCs) should be protected.
9. 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.
10. 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.
11. 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.
12. Proposals which reduce deficiencies in access to nature should be considered positively.

Policy G7 Trees and woodlands

13. 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.
14. 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

15. 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 2018[18]

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".

Camden Local Plan 2017

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.

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.

APPENDIX B SURVEYOR LOCATIONS AND BAT SURVEY RESULTS

BRITANNIA STREET CAR PARK

- Red Line Boundary
- Surveyor Locations

Title: Appendix A - UK Hab plan

Drawn by: DP
Date: 16/12/2024

Reviewed by: MJH
Date: 16/12/2024

Project number: 552554
Sources: CartoDB, Greenspace Information for Greater London (GiGL), Natural England

Greengage

APPENDIX C STILLS FROM NVA AT THE DARKEST POINT OF SURVEY

Table C.1 Stills from NVAs during the darkest point of survey

Date	Survey Location reference	Time	Still
07/22/2024	1	22:30	

REFERENCES

[1] *Greengage Environmental Limited (2024); Preliminary Ecological Appraisal. 552554dpDec24FV01_PEA*
[2] *Institution of Lighting Professionals and Bat Conservation Trust (2023), Bats and Artificial Lighting in the UK; Bats and the Built Environment Series.*
[3] *Chartered Institute of Ecological and Environmental Management (CIEEM) (2019) On The Lifespan Of Ecological Reports & Surveys*
[4] *Collins, J. (ed.) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edition). The Bat Conservation Trust, London. ISBN-978-1-7395126-0-6.*
[5] *Mitchell-Jones, A.J. & McLeish, A.P. (2004) Bat Works Manual, 3rd Edition*
[6] *Chartered Institute of Ecological and Environmental Management (CIEEM) (2021) Competency Framework /*
[7] *Chartered Institute of Ecological and Environmental Management (CIEEM) (2019) On The Lifespan Of Ecological Reports & Surveys*
[8] *The Vincent Wildlife Trust (2006) An analysis of the usage of bat boxes in England, Wales and Ireland*
[9] *Habibat Bat Box 003 - Blended Facing. Available from: Integrated Bat Boxes | NHBS Practical Conservation Equipment*
[10] *Vivara Pro low profile woodstone bat box. Available from: For Crevice Species | NHBS Practical Conservation Equipment*
[11] *2F Schwegler bat box. Available from: 2F Schwegler Bat Box (General Purpose) | NHBS Practical Conservation Equipment*
[12] *Hirons, A. and Sjoman, H. (2019) Tree species selection for green infrastructure - A guide for specifiers. TDAG*
[13] *HM Government, (1981); Part I and Part II of Wildlife and Countryside Act (as amended). HMSO*
[14] *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*
[15] *HM Government, (2019); The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019. Statutory Instrument 2019 no. 579*
[16] *GOV.UK. (2024). National Planning Policy Framework. [online] Available at: https://www.gov.uk/government/publications/national-planning-policy-framework--2*
[17] *Greater London Authority (2021) The London Plan: The Spatial Development Strategy for Greater London (GLA)*
[18] *Greater London Authority (2018). London Environment Strategy 2018. London: Greater London Authority.*