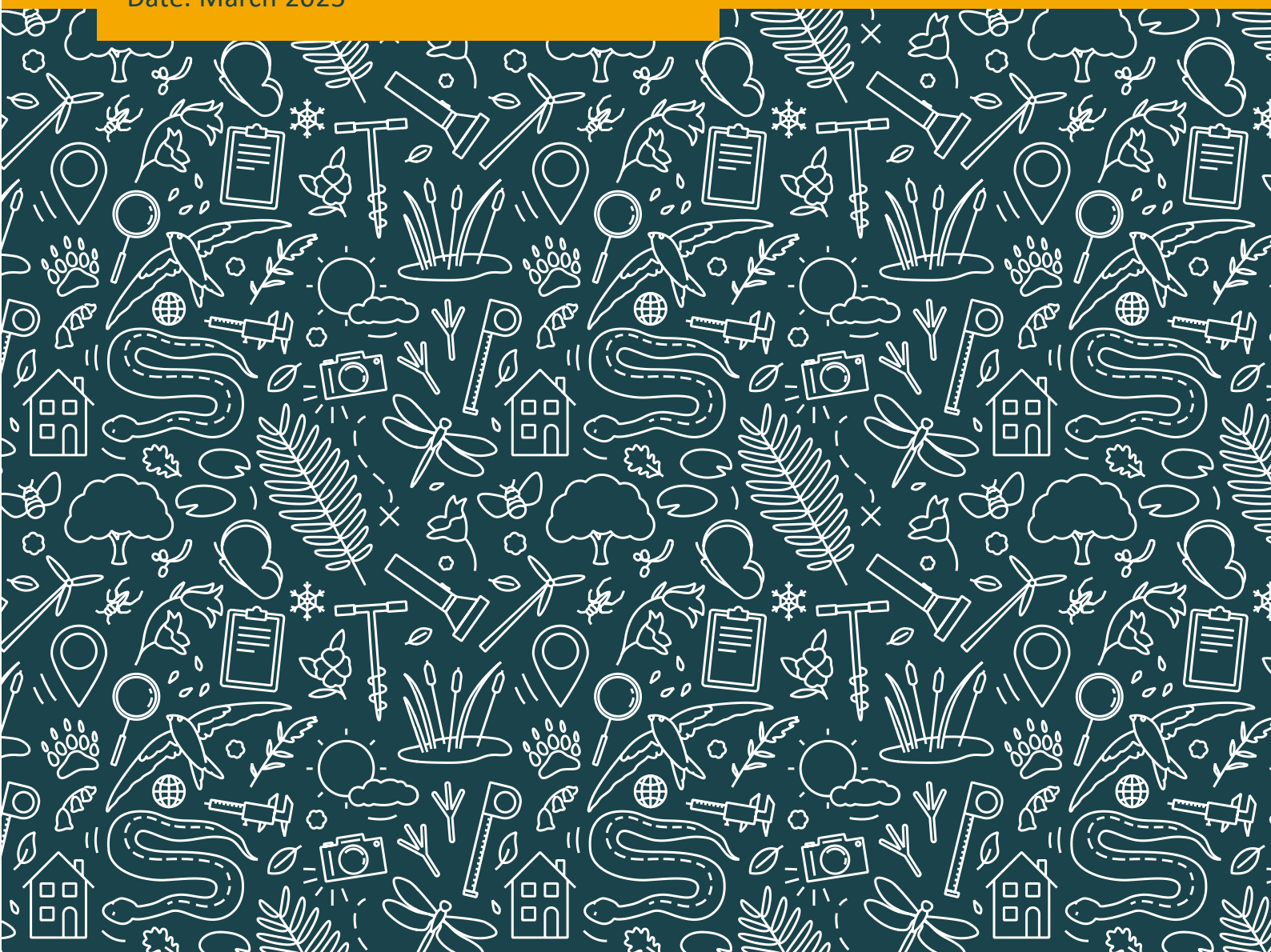
Bat Survey: Ground Level Tree Assessment

Forest Hill School, Dacres Road, London

A Report To: Labosport Limited
Report Number: RT-MME-181796-05
Date: March 2025



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Quality Assurance

Date	Version	Author	Checked by	Approved by
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Declaration of Compliance

This study has been undertaken in accordance with British Standard 42020:2013 "Biodiversity, Code of Practice for Planning and Development". The information which we have prepared is true, and has been prepared and provided in accordance with the Chartered Institute of Ecology and Environmental Management's Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bona fide opinions.

Disclaimer

The contents of this report are the responsibility of Middlemarch Environmental Ltd. It should be noted that, whilst every effort is made to meet the client's brief, no site investigation can ensure complete assessment or prediction of the natural environment. Middlemarch Environmental Ltd accepts no responsibility or liability for any use that is made of this document other than by the client for the purposes for which it was originally commissioned and prepared.

Validity of Data

The findings of this study are valid for a period of 12 months from the date of survey. If works have not commenced by this date, it may be necessary to undertake an updated survey to allow any changes in the status of bats on site to be assessed, and to inform a review of the conclusions and recommendations made.

Non-Technical Summary

Project Background

In January 2025 Labosport Limited commissioned Middlemarch to undertake a Ground-Level Tree Assessment (GLTA) at the site of a proposed development at Forest Hill School, Dacres Road, London. This assessment is required to inform a planning application associated with the implementation of a new artificial grass pitch.

Scope of Survey

To assess the potential for the existing trees on site to support roosting bats, a GLTA was undertaken on 30th January 2025 by Zeina Farhat (Ecological Consultant) and Ruby Hill (Ecological Project Officer).

Summary of Key Bat Features

Five trees (T1, T3, T6, T7 and T8) on the western perimeter of the site have the potential to support roosting bats. This was due to the presence of a range of potential roosting feature such as woodpecker holes, cavities and man-made pruning wounds.

Whilst the site comprised of predominately hardstanding, the boundary habitats (line of trees and dense scrub) offer some foraging and commuting opportunities on site for bats and provide connectivity to the wider landscape, particularly to the pockets of nearby woodland such as Dacres Wood Nature Reserve.

Potential Impacts on Bats

Trees T1 and T3 have been identified as having potential to support roosting bats and could not be accessed directly to categorise the suitability of the PRF, therefore they have been categorised as FAR. Trees T6, T7 and T8 have been identified as having PRF-M potential to support roosting bats. These trees are to be retained and will not be impacted by the proposed works. The remaining trees on site were deemed to have negligible potential to support roosting bats and therefore no further survey work is required.

The implementation of new flood lighting has the potential to disturb both roosting, commuting and foraging bats.

Recommendations

It is understood that the trees with potential to support roosting bats (T1, T3, T6, T7 and T8) are to be retained as part of the proposed redevelopment of the site. Therefore, no immediate action is required. However, should work proposals change and these trees become subject to removal or management, further survey effort will be required to determine the presence/absence of roosting bats within the trees. A precautionary recommendation to this effect is made in Chapter 6.

The proposed development should be designed to minimise effects on bats in accordance with ecological mitigation hierarchy as set out in the National Planning Policy Framework (NPPF), and the National Planning Practice Guidance (NPPG).

In accordance with best practice guidance relating to lighting and biodiversity (Bat Conservation Trust and Institute of Lighting Professionals, 2023; Gunnell et al, 2012), any new lighting should be carefully designed to minimise potential disturbance and fragmentation impacts on sensitive receptors, such as bat species. A recommendation for an Ecological Lighting Review is made in Chapter 6.

Contents

1. Introduction

1.1 Project Background

In January, 2025 Labosport commissioned Middlemarch to undertake a Preliminary Bat Roost Assessment at Forest Hill School, Dacres Road, London. This assessment is required to inform a planning application associated with the removal of the current Multi-Use Games Area (MUGA) and implementation of a new sports pitch.

Middlemarch has previously carried out a Preliminary Ecological Appraisal (PEA) at this site. The findings of this survey are detailed in Report RT-MME-181796-04.

To fulfil the above brief to assess the potential for the existing trees on site to support roosting bats, a Preliminary Bat Roost Assessment was undertaken on 30th January 2025.

All UK bat species are legally protected species and they are capable of being material considerations in the planning process. A summary of the legislation protecting bats is included within Appendix 1.

1.2 Site Description and Context

Table 1.1 provides a brief summary of the site and its surroundings.

Attribute	Description
Location	Forest Hill School, Dacres Road, London
National Grid Reference	TQ 35730 72278
Site Area (ha)	0.5
Topography	Predominately flat, with sloping along the perimeter from north to south and east to west.
Land Cover (on site)	The site is dominated by hardstanding. The remaining land comprises of amenity grassland with a line of trees in the west perimeter and dense scrub along the northern and eastern boundaries.
Land Cover (site surrounds)	The wider landscape is predominately urban residential with hardstanding, buildings and associated mown grassland dominating the area. The site sits within Forest Hill and is boarded by the urban settlements of Dulwich and Bell Green.

Table 1.1: Summary of Site and Surroundings

1.3 Documentation Provided

The conclusions and recommendations made in this report are based on information provided by the client regarding the scope of the project. Documentation made available by the client is listed in Table 1.2.

Document / Drawing Number	Author
TOPO - BRI1090	Labosport

Table 1.2: Documentation Provided by Client (continues)

Document / Drawing Number	Author
Forest Hill School LSUK 24 0 01 EXISTING BLOCK PLAN	Labosport
Forest Hill School LSUK 24 0 01 EXISTING ELEVATIONS	Labosport
Forest Hill School LSUK 24 0 01 FLOODLIGHTING OVERSPILL rev A	Labosport
Forest Hill School LSUK 24 0 01 LOCATION PLAN	Labosport
Forest Hill School LSUK 24 0 01 LOCATION PLAN rev C	Labosport
Forest Hill School LSUK 24 0 01 PROPOSED BLOCK PLAN rev B	Labosport
Forest Hill School LSUK 24 0 01 PROPOSED ELEVATIONS rev A	Labosport

Table 1.2 (continued): Documentation Provided by Client

2. Methods

2.1 Desk Study

As part of the Preliminary Ecological Appraisal (Report RT-MME-181796-04) an ecological desk study was undertaken. The consultee for the desk study was:

- Greenspace Information for Greater London CIC (GIGL).

Middlemarch then assimilated and reviewed the desk study data provided by this organisation. Relevant bat data are discussed in Chapter 3. In compliance with the terms and conditions relating to its commercial use, the full desk study data are not provided within this report.

The desk study included a search for statutory nature conservation sites designated for bats within a 10 km radius of the site.

2.2 Field Survey

A Preliminary Bat Roost Assessment of the trees was carried out on site in line with the specifications detailed in Bat Mitigation Guidelines (English Nature, 2004)[1] and Bat Surveys for Professional Ecologists: Good Practice Guidelines (Collins, 2016)[2]. The assessment was conducted on 30th January 2025 by Zeina Farhat (Ecological Consultant) and Ruby Hill (Ecological Project Officer). Weather conditions were recorded and are presented in Table 2.1.

Parameter	Condition
Temperature (ºC)	7
Cloud (%)	0
Wind (Beaufort)	F1
Precipitation	Dry

Table 2.1: Weather Conditions During Field Survey

A visual assessment was conducted during daylight hours of the trees to determine the presence of any Potential Roost Features (PRFs), together with a general appraisal of the suitability of the site for foraging and commuting bats. Please refer to Appendix 2 for a list of example PRFs.

Based on the tree PRF's present, the survey area was assessed using the suitability classes detailed within Bat Surveys for Professional Ecologists: Good Practice Guidelines (Collins, 2023). Trees with features present which appear from the ground as suitable to support roosting bats (PRF-M, PRF-I and FAR) are discussed more fully in the report.

Assessment of the trees' potential to support roosting bats. Following the guidance the trees will be categorised (Collins 2023) into.

- PRF – M: "*The PRF is suitable for multiple bats and may therefore be used by a maternity colony*".

[1] English Nature (2004). *Bat Mitigation Guidelines.* English Nature, Peterborough.

[2] Collins, J. (ed). (2016). *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd Ed.).* The Bat Conservation Trust, London.

- PRF – I: "*Potential Roosting Feature is only suitable for individual bats or very small number of bats ether due to size or lack of suitable surrounding habitats*".
- Further Assessment Required (FAR): The GLTA has identified a PRF which cannot be assessed from the ground, or a tree likely to have PRFs' not visible from the ground and requires further assessment to determine its suitability for bats.
- Negligible; no PRFs' suitable for bats identified and no further survey work required.

A summary of the trees within the survey area without suitable features to support roosting bats (negligible suitability) is provided within the report. Due to their negligible potential to support roosting bats, the Bat Surveys for Professional Ecologists: Good Practice Guidelines (Collins, 2023) recommend no further survey work is required for this tree class.

3. Desk Study

3.1 Statutory Nature Conservation Sites

The site is not located within 10 km of any statutory nature conservation sites designated for the presence of bats.

3.2 Species Records

The data search was carried out on 3rd February 2025 by Greenspace Information for Greater London CIC (GIGL). Records of bat species within a 1 km radius of the survey area provided by the consultee are summarised in Table 3.1. It should be noted that the absence of records should not be taken as confirmation that a species is absent from the search area.

Species	No. of Records	Most Recent Record	Proximity of Nearest Record to Survey Area	Species of Principal Importance?	Legislation / Conservation Status
Mammals - Bats					
Soprano pipistrelle *Pipistrellus pygmaeus*	11	2012	217 m south-west	✓	ECH 4, WCA 5, WCA 6
Common pipistrelle *Pipistrellus pipistrellus*	24	2016	217 m south-west	-	ECH 4, WCA 5, WCA 6
Unidentified Nyctalus *Nyctalus* sp.	4	2010	329 m east	#	ECH 4, WCA 5, WCA 6
Unidentified Pipistrellus *Pipistrellus* sp.	6	2018	382 m west	#	ECH 4, WCA 5, WCA 6
Noctule *Nyctalus noctula*	5	2016	504 m north-east	✓	ECH 4, WCA 5, WCA 6
Serotine *Eptesicus serotinus*	1	2011	566 m north-east	-	ECH 4, WCA 5, WCA 6
Leisler's bat *Nyctalus leisleri*	4	2016	566 m north-east	-	ECH 4, WCA 5, WCA 6
Unidentified bat *Vespertilionidae* sp.	12	2016	625 m south	#	ECH 2 #, ECH 4, WCA 5, WCA 6
Daubenton's bat *Myotis daubentonii*	2	2023	*Potentially within 1 km	-	ECH 4, WCA 5, WCA 6
Unidentified bat *Chiroptera* sp.	1	2016	976 m south-west	#	ECH 2 #, ECH 4, WCA 5, WCA 6
Brown long-eared bat *Plecotus auritus*	1	2016	*Potentially within 1 km	✓	ECH 4, WCA 5, WCA 6

Table 3.1: Bat Species Records Within 1 km of Survey Area (continues)

Key:
#: Dependent on species.
ECH 2: Annex II of the European Communities Council Directive on the Conservation of Natural Habitats and Wild Fauna and Flora. Animal and plant species of community interest whose conservation requires the designation of Special Areas of Conservation.
ECH 4: Annex IV of the European Communities Council Directive on the Conservation of Natural Habitats and Wild Fauna and Flora. Animal and plant species of community interest in need of strict protection.
WCA 5: Schedule 5 of Wildlife and Countryside Act 1981 (as amended). Protected animals (other than birds).
WCA 6: Schedule 6 of Wildlife and Countryside Act 1981 (as amended). Animals which may not be killed or taken by certain
methods.

Species of Principal Importance: Species of Principal Importance for Nature Conservation in England

Table 3.1: Bat Species Records Within 1 km of Survey Area (continued)

4. Survey Results

4.1 Trees on site and the Potential to Support Roosting Bats

Species present in the survey were English oak *Quercus robur*, hawthorn *Crataegus monogyna*, ash *Fraxinus excelsior*, blackthorn *Prunus spinosa*, elder *Sambucus nigra*, yew *Taxus baccata*, sycamore *Acer pseudoplatanus*, cherry *Prunus avium*, Lawson cypress *Chamaecyparis lawsoniana* hazel *Corylus avellana* and goat willow *Salix caprea*.

The trees considered to have potential for use by roosting bats are summarised in Table 4.1. Descriptions of the trees and PRF locations are described in Appendices 3 & 4.

Tree No.	Arb Ref No.	Tree Species	Potential Roost Feature	Suitability (using BCT guidance)
T1	T16	English Oak	Cavity in main stem facing north-east. Deadwood on western branch.	FAR
T2	T15	Goat Willow	Young tree with no features.	Negligible
T3	T14	English Oak	Pruning wound on west facing branch. Pruning wound on east facing branch.	FAR
T4	G7	English Oak	Mature tree with no features.	Negligible
T5	G7	Ash	Young tree with no features.	Negligible
T6	T13	English Oak	Three woodpecker holes on northern aspect of tree. Broken branch leading to a cavity on the south-west aspect of tree.	PRF-M
T7	G6	English Oak	Large woodpecker hole on northeastern aspect of main stem.	PRF-M
T8	G6	English Oak	Woodpecker hole on northeastern aspect of the main stem.	PRF-M
T9	G5	Ash	Young tree with no features.	Negligible
T10	G5	Cherry	Young tree with no features.	Negligible
T11	T12	English Oak	Mature tree with no features.	Negligible
T12	G4	Lawson cypress	Mature tree with no features identified from ground level.	Negligible
T13	G4	Lawson cypress	Mature tree with no features identified from ground level.	Negligible
T14	G4	Lawson cypress	Mature tree with no features identified from ground level.	Negligible

Table 4.1: Summary of Trees with Suitability for Bats Within the Survey Area (continues)

Tree No.	Arb Ref No.	Tree Species	Potential Roost Feature	Suitability (using BCT guidance)
G1	T5-T11	Group of young saplings: Ash, Blackthorn, Elder, English oak, Goat willow, Sycamore, Hazel, Yew and Holly.	Young saplings with no features.	Negligible
G2	N/A	Group of young saplings: Ash, Blackthorn, Elder, English oak, Goat willow, Sycamore, Hazel, Yew and Holly.	Young tree with no features.	Negligible

Table 4.1 (continued): Summary of Trees with Suitability for Bats Within the Survey Area

4.2 Site and Surrounding Habitats

Whilst the site comprised of predominately hardstanding, a line of trees bordered the site within a section of amenity grassland and introduced shrub along the western perimeter and the northern and eastern boundaries consisted of dense scrub. These boundary habitats offer some foraging and commuting opportunities on site for bats and provide connectivity to the wider landscape, particularly to the pockets of nearby woodland such as Dacres Wood Nature Reserve.

Habitats within 1 km of the site suitable for roosting, commuting and foraging include:

- Residential houses and associated gardens;
- Running water and standing waterbodies;
- Pockets of woodland;
- Churches, schools, hospitals and associated grounds;
- Open grassland habitats; and,
- Railway lines with vegetated banks.

5. Impact Assessment

5.1 Summary of Proposals

The development proposals consist of the removal of the current concrete MUGA area for the implementation of a new synthetic turf sports pitch. The plans include the construction of two goal storage recesses, the installation of new perimeter fencing and new floodlight columns. The majority of proposed works will be confined to the hardstanding habitat, with a maximum of 25m^2 of dense scrub habitat to be impacted to facilitate the installation of the goal recesses. It is understood that a group of Lawson cypress trees in the north-west corner of the site require some pruning to facilitate installation of new fencing.

The proposed development has the potential to adversely impact ecological features, but also presents opportunities to deliver new or enhanced habitats and benefits to biodiversity.

Activities likely to be associated with the proposed development during the construction and operational phases are outlined below.

Construction Phase

- Site clearance and ground preparation;
- Use and movement of heavy goods vehicles and machinery;
- Storage of plant, materials and waste; and,
- Presence of and movement of site personnel.

Operational Phase

- Use of new lighting associated with the synthetic turf pitch; and,
- Maintenance of landscaping surrounding the pitch, such as the regular pruning of trees.

5.2 Summary of Key Bat Features

Roosting Bats

Five trees (T1, T3, T6, T7 and T8) on the western perimeter of the site have the potential to support roosting bats. This was due to the presence of a range of potential roosting feature such as woodpecker holes, cavities and man-made pruning wounds. Trees T1 and T3 have been identified as having potential to support roosting bats and could not be accessed directly to categorise the suitability of the PRF, therefore they have been categorised as FAR. Trees T6, T7 and T8 have been identified as having PRF-M potential to support roosting bats.

Commuting and Foraging Bats

Whilst the site comprised of predominately hardstanding, a line of trees bordered the site within a section of amenity grassland and introduced shrub along the western perimeter and the northern and eastern boundaries consisted of dense scrub. These boundary habitats offer some foraging and commuting opportunities on site for bats and provide connectivity to the wider landscape, particularly to the pockets of nearby woodland such as Dacres Wood Nature Reserve.

5.3 Potential Impacts on Bats

Although no bat roosts were confirmed during the survey works, five trees (T1, T3, T6, T7 and T8) located along the western perimeter of the site contain potential suitable features to support roosting bats. It is understood that these trees are to be retained and will not be impacted by the proposed works and therefore no further survey work is required at this time.

However, if bats are roosting within any of these features and work is required to, or in close proximity to, the trees supporting them (T1, T3, T6, T7 and T8), there is the potential for bats to be killed, injured or disturbed, which would be in breach of the legislation outlined in Appendix 1. If plans change and these trees are to be removed or subject to management to facilitate the development, then further survey work will be required to determine whether the trees identified as having bat roost potential contain a bat roost. A precautionary recommendation to this effect is made in Chapter 6.

It is understood that pruning works will be required to trees T12-T14 to facilitate the installation of the new perimeter MUGA fencing. Trees T12-T14 were assessed as having negligible potential to support roosting bats from ground level and therefore no further assessment is required.

The remaining trees on site were deemed to have negligible potential to support roosting bats and therefore no further survey work is required.

It is understood that new floodlight columns (12 m high) will be installed within the pitch footprint in 500mm diameter sockets. Whilst the site comprised of predominately hardstanding, the boundary habitats (line of trees and dense scrub) offer potential roosting features and some foraging and commuting opportunities on site for bats and connectivity to the wider landscape. The installation of new lighting has potential to impacts on roosting, commuting and foraging bats utilising the site as a green corridor. This can be avoided or minimised by maintaining dark corridors along the site boundaries and retained treeline. A recommendation regarding an Ecological Lighting Review is made in Chapter 6.

6. Recommendations

All recommendations provided in this section are based on Middlemarch's current understanding of the site proposals, correct at the time the report was compiled. Should the proposals alter, the conclusions and recommendations made in the report should be reviewed to ensure that they remain appropriate.

In September 2023 the Bat Surveys for Professional Ecologists: Good Practice Guidelines (Collins 2023)[3] was updated which included a new process for the assessment of trees for bat roosting potential. The new process is staged, with the pathways dependent upon the results of the previous stage. In summary this process includes:

- Ground Level Tree Assessment (GLTA): This assessment is undertaken from the ground and investigates if Potential Roost Features (PRFs) are present within the trees. This assessment maps the locations of the trees with PRFs and identifies the number of trees requiring further assessment.
- Aerial Inspection Survey (AIS): The Aerial Inspection Survey is required to internally search the PRF for evidence of bats and to assess the internal suitability of the PRF to accommodate bats
- Emergence Surveys: Where the PRF is unsafe to access, or cannot be fully internally inspected, emergence surveys are usually required within the peak bat activity season. Emergence surveys may also be required to gain a population count and to determine usage where bats or evidence of bats have been identified.

R1 **Trees T1, T3, T6, T7 and T8:** Trees T1 and T3 have been identified as having potential to support roosting bats and could not be accessed directly to categorise the suitability of the PRF, therefore they have been categorised as FAR. Trees T6, T7 and T8 have been identified as having PRF-M potential to support roosting bats.

It is understood that these trees are to be retained and will not be impacted by the proposed redevelopment of the site. Therefore, no immediate action is required.

However, should work proposals change and these trees become subject to removal or management, further survey effort will be required to determine the presence/absence of roosting bats within the trees. There are two possible survey options available to the client:

Aerial Inspection Survey

An Aerial Inspection Survey using standard tree climbing equipment to access features that were inaccessible during this GLTA survey is required. Where safe to do so, trees will be climbed utilising tree climbing equipment. Any PRF will be internally searched using a torch and endoscope. Following the guidance the trees will be categorised (Collins 2023) into.

- PRF – M: "*The PRF is suitable for multiple bats and may therefore be used by a maternity colony*". Under the guidance, three aerial inspection surveys are required within the bat

[3] Collins, J. (ed). (2023). *Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edn).* The Bat Conservation Trust, London. Available: http://www.bats.org.uk/

activity season. The bat activity season extends from May to September. At least two of the surveys should be undertaken between May and August.

- PRF – I: "*Potential Roosting Feature is only suitable for individual bats or very small number of bats ether due to size or lack of suitable surrounding habitats*". No further surveys are required for trees in the PRF-I category, with future works covered under a Precautionary Working Method Statement.
- If the feature on further inspection is found to be unsuitable for bats, then the status of the tree will be downgraded to negligible.

If the PRF extends beyond the reach of an endoscope and/or cannot be fully inspected, or if the PRF is occupied by bats and the number of bats cannot be fully counted, dusk emergence will be required.

Emergence surveys

If it is not safe to undertake further daytime assessments using tree climbing methods and as such, to determine the presence/absence of roosting bats within the trees, further survey work is required in the form of dusk emergence surveys.

Bat Survey: Good Practice Guidelines published by the Bat Conservation Trust (Collins, 2023) recommends that for trees with PRF-M bat roosting potential, or trees with FAR which are unsafe to climb, at least three dusk emergence surveys be undertaken during the bat activity season. The bat activity season extends from May to September. At least two of the surveys should be undertaken between May and August. If a roost is discovered during these surveys, a Natural England licence application may be required.

R2 **Trees T2, T4, T5, T9-T14, G1 and G2:** T2, T4, T5, T9-T14, G1 and G2 were considered to have negligible potential for roosting bats. The survey data obtained for the site is valid for 12 months from the survey date. If proposed site works have not commenced within this timeframe, it will be essential to update the survey effort to establish if the trees have developed features that could be used by roosting bats in the interim. In the unlikely event that a bat is found during works to the trees all works must immediately cease and a suitably qualified ecologist should be contacted.

R3 **Scheme Design:** The proposed development should be designed to minimise effects on bats in accordance with ecological mitigation hierarchy as set out in the National Planning Policy Framework (NPPF), and the National Planning Practice Guidance (NPPG): The ecological mitigation hierarchy requires all development schemes to apply to following principles:

- *Avoidance and Mitigation* – the proposed development should seek to avoid/minimise losses of features with bat potential, in the first instance and incorporate these features in the landscaping layout of the scheme accordingly. Similarly, protection measures for retained features and surrounding habitats should be considered to prevent incidental damage or disturbance during the construction phases. These measures will help to reduce the likelihood of impacting bats and minimise losses of suitable bat roosts and habitat. Where significant harm cannot be wholly or partially avoided, adverse impacts should be minimised by design or through the use of effective mitigation measures such as minimising light spill (see below).
- *Compensation* – where unavoidable losses occur and mitigation cannot be provided, compensation for significant residual harm will be required as a last

resort or planning permission could be refused. Where there is a significant effect on a bat roost, a compensation strategy sufficient to obtain a development licence from Natural England may also be required.

R4 **Ecological Lighting Review:** An ecological lighting review should be produced for the site. In accordance with best practice guidance relating to lighting and biodiversity (Bat Conservation Trust and Institute of Lighting Professionals, 2023[4]; Gunnell et al, 2012[5]), any new lighting should be carefully designed to minimise potential disturbance and fragmentation impacts on sensitive receptors, such as bat species. Examples of good practice include:

- Avoiding the installation of new lighting in proximity to key ecological features.
- Using modern LED fittings rather than metal halide or sodium fittings, as modern LEDs emit negligible UV radiation.
- The use of directional lighting to reduce light spill, e.g. by installing bespoke fittings or using hoods or shields. For example, downlighting can be used to illuminate features such as footpaths whilst reducing the horizontal and vertical spill of light.
- Where the use of bollard lighting is proposed, columns should be designed to reduce horizontal light spill.
- Implementing controls to ensure lighting is only active when needed, e.g. the use of timers or motion sensors.
- Use of floor surface materials with low reflective quality. This will ensure that bats using the site and surrounding area are not affected by reflected illumination.

[4] Bat Conservation Trust and Institute of Lighting Professionals (2023) *Guidance Note 08/23: Bats and artificial lighting at night*. ILP, Rugby

[5] Gunnell, K., Grant, G. and Williams, C. (2012) *Landscape and urban design for bats and biodiversity.* Bat Conservation Trust.

7. Drawings

Drawing C181796-05-01 – Preliminary Ground Level Bat Roost Assessment of Trees

535700

535750

172300

172250

T14

T11

T13

T12

G1

T8

T7

T10

T9

T6

T5

T4

T3

T2

T1

G2

0

10

20 m

Legend

- Site boundary
- Tree with PRF-M
- Tree without PRF(s)
- Tree with FAR

N

Project	Forest Hill School, London
Drawing	Ground Level Tree Assessment
Client	Labosport Limited
Drawing Number	C181796-05-01
Revision	00
Scale @ A3	1:400
Date	March 2025
Approved By	RH
Drawn By	BD

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C181796-05-01

8. Photographs

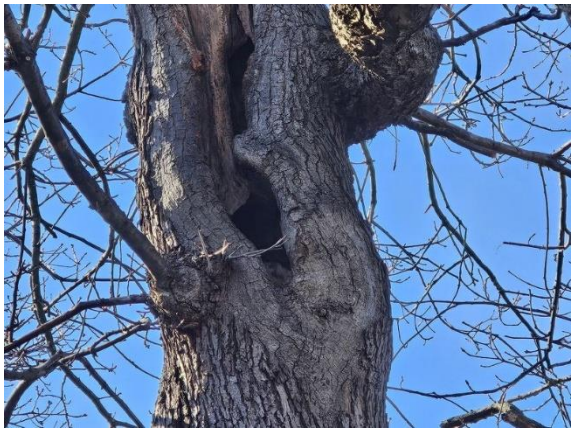

Plate 8.1: Example of PRF on T1, cavity in main stem facing north-east.

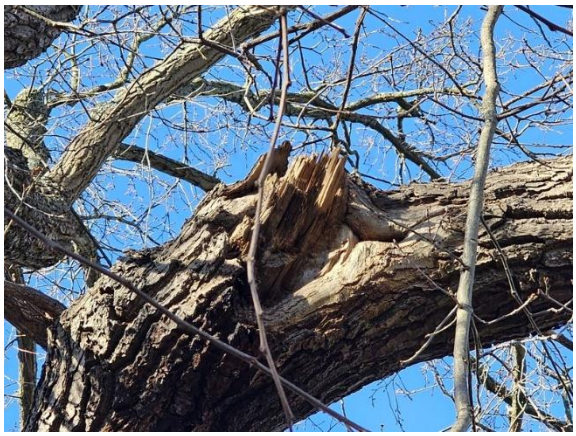

Plate 8.2: Example PRF on T3, pruning wound.

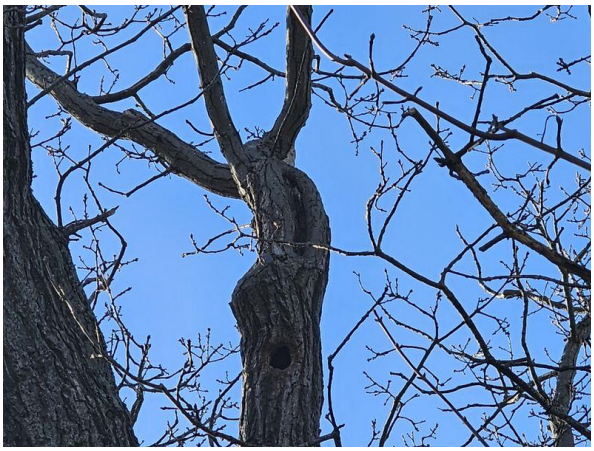

Plate 8.3: Example of PRF on T6, woodpecker hole.

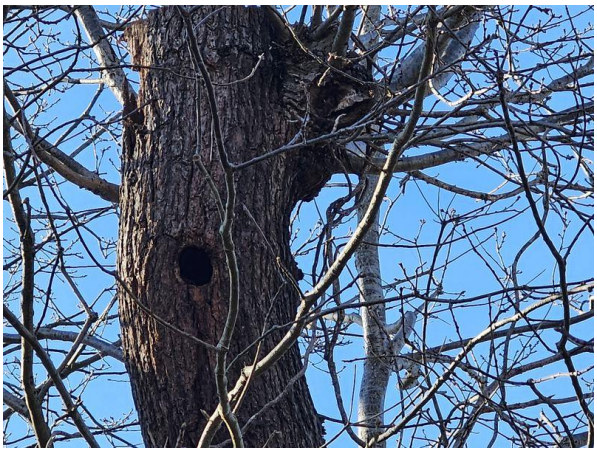

Plate 8.4: Example of PRF on T7, Large woodpecker hole on northeastern aspect of main stem.

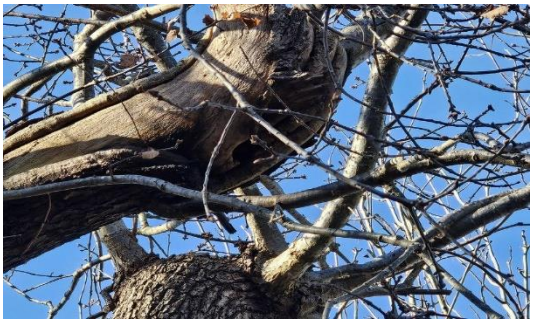

Plate 8.5: Example of PRF on T8, woodpecker hole on northeastern aspect of the main stem.

Appendix 1

Relevant Legislation

Bats and the places they use for shelter or protection (i.e. roosts) receive legal protection under the Conservation of Habitats and Species Regulations 2017 (Habitats Regulations 2017) and the Conservation of Habitats and Species Regulations (Amendment) (EU Exit) Regulations 2019 (Habitats Regulations 2019). They receive further legal protection under the Wildlife and Countryside Act (WCA) 1981, as amended. This protection means that bats, and the places they use for shelter or protection, are capable of being a material consideration in the planning process.

Regulation 41 of the Habitats Regulations 2017, states that a person commits an offence if they:

- deliberately capture, injure or kill a bat;
- deliberately disturb bats; or
- damage or destroy a bat roost (breeding site or resting place).

Disturbance of animals includes in particular any disturbance which is likely to impair their ability to survive, to breed or reproduce, or to rear or nurture their young, or in the case of animals of a hibernating or migratory species, to hibernate or migrate; or to affect significantly the local distribution or abundance of the species to which they belong.

It is an offence under the Habitats Regulations 2017 for any person to have in his possession or control, to transport, to sell or exchange or to offer for sale, any live or dead bats, part of a bat or anything derived from bats, which has been unlawfully taken from the wild.

Changes have been made to parts of the Habitats Regulations 2017 so that they operate effectively from 1st January 2021. The changes are made by the Habitats Regulations 2019, which transfer functions from the European Commission to the appropriate authorities in England and Wales.

All other processes or terms in the 2017 Regulations remain unchanged and existing guidance is still relevant.

The obligations of a competent authority in the 2017 Regulations for the protection of species do not change. A competent authority is a public body, statutory undertaker, minister or department of government, or anyone holding public office.

Whilst broadly similar to the above legislation, the WCA 1981 (as amended) differs in the following ways:

- Section 9(1) of the WCA makes it an offence to *intentionally* kill, injure or take any protected species.
- Section 9(4)(a) of the WCA makes it an offence to *intentionally or recklessly** damage or destroy, *or obstruct access to*, any structure or place which a protected species uses for shelter or protection.
- Section 9(4)(b) of the WCA makes it an offence to *intentionally or recklessly** disturb any protected species *while it is occupying a structure or place which it uses for shelter or protection*.

*Reckless offences were added by the Countryside and Rights of Way (CRoW) Act 2000.

As bats re-use the same roosts (breeding site or resting place) after periods of vacancy, legal opinion is that roosts are protected whether or not bats are present.

The reader should refer to the original legislation for the definitive interpretation.

The following bat species are Species of Principal Importance for Nature Conservation in England: barbastelle bat *Barbastella barbastellus*, Bechstein's bat *Myotis bechsteinii*, noctule *Nyctalus noctula*, soprano pipistrelle *Pipistrellus pygmaeus*, brown long-eared bat *Plecotus auritus*, greater horseshoe bat *Rhinolophus ferrumequinum* and lesser horseshoe bat *Rhinolophus hipposideros*. Species of Principal Importance for Nature Conservation in England are material considerations in the planning process. The list of species is derived from Section 41 list of the Natural Environmental and Rural Communities (NERC) Act 2006.

Appendix 2

Examples of Potential Roost Features

Trees
• Bat and bird boxes on trees; • Cankers (caused by localized bark death) in which cavities have developed; • Compression forks with included bark, forming potential cavities; • Cracks/splits in stems or branches (both vertical and horizontal); • Crossing stems or branches with suitable space between for roosting; • Ivy stems with diameters in excess of 50 mm with suitable roosting space behind (or where a roosting space can be seen where a mat of thinner stems has left a gap between the mat and the trunk); • Man-made holes (e.g. cavities that have developed from flush cuts); • Natural holes (e.g. knot holes) arising from naturally shed branches, or cavities created by branches tearing out from parent stems; • Other hollows or cavities, including rot holes and butt rots; • Partially detached or loose, platy bark; • Woodpecker holes; or, • Other features that offer a place of shelter.

Potential Roost Features (Adapted from Collins, 2023)