Queen Mary's Hospital, Frognall Avenue, Sidcup

Ecological Assessment

A Report for Gardiner & Theobald LLP

November 2023



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Queen Mary's Hospital, Frognall Avenue, Sidcup, Kent

Ecological Assessment

Client:	Gardiner & Theobald LLP			
Project Ref:	Queen Mary's Hospital			
Report Ref:	J21334			
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Revision Ref:	Status/ Comment:	Date of Issue:		
	Final	2 nd November 2023		

Disclosure:

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It should be noted that whilst every effort has been made to meet the client's requirements, no site survey can ensure a complete assessment or prediction of the changeable onsite environment.

Should more than 12 months elapse between the date of this survey and any subsequent development, it may be necessary to consider the need for an update survey to be undertaken.

CONTENTS

1 2 3 3.1	PROJECT OVERVIEW NON-TECHNICAL SUMMARY INTRODUCTION Context	1 2 3 3
3.2	Site Location	3
3.3	Site Description	3
3.4	Legislation and Planning Policy	4
3.5	Objectives of the Survey	4
4 4.1	SURVEY METHODS Desk Study	6 6
4.2	Habitats	6
4.3	Protected and Notable Species	7
4.4	Constraints	9
5	SURVEY RESULTS	11
5.1	Desk Study	11
5.2	Habitats	14
5.4	Protected and Notable Species	15
6 6.1	EVALUATION AND RECOMMENDATIONS Designated Sites	18 18
6.2	Ancient Woodland	18
6.3	Habitats and Botanical Species of Interest	18
6.4	Protected and Notable Species	18
7 8	ECOLOGICAL ENHANCEMENTS REFERENCES	22 23

FIGURES

Figure 1Phase 1 Habitat PlanFigure 2Bat Surveyor Location Plan

APPENDICES

Appendix A Site Photographs Appendix B Legislation and Planning Policy Appendix C Species List per Habitat Type

1 PROJECT OVERVIEW

Client:	Gardiner & Theobald LLP
Site Address:	Queen Mary's Hospital, Frognall Avenue, Sidcup, Kent, DA14 6LT
Lead Ecologist:	Chris Bawler ACIEEM
Attending Ecologists:	Jenny Passmore MCIEEM (PEA)
	Zoe Clarke QCIEEM (Camera Trap Monitoring)
Survey Date:	PEA – 11 th September 2023
	Bat Emergence Survey – 28 th September 2023
	Camera Trap Monitoring – 29 th September to 10 th October 2023
Site Proposals:	Re-development of the Community Diagnostic Centre (CDC).
Associated Planning Re	ference Number: Not yet submitted.

Source of Relevant Documents:

Document:	Source:
Application Boundary:	Google Earth Pro, annotated by client
Site Location Plan:	Google Earth Pro, annotated by client
Desk Study:	Greenspace Information for Greater London (GiGL)
	Magic Maps (Magic.defra.gov.uk)
Proposed Development:	Proposed Floor Plan, Murphy Philipps. (Drawing ref: QMH

2 NON-TECHNICAL SUMMARY

- 2.1 In response to the proposed development at Queen Mary's Hospital, Frognall Avenue, Sidcup (hereafter referred to as 'the Site'), an Ecological Assessment comprising a Preliminary Ecological Appraisal (PEA) and protected species surveys for badgers and bats of land within the redline boundary (Figure 1) has been undertaken.
- 2.2 The Site occupies approximately 0.07a and comprises predominantly ephemeral vegetation with grassland and one building.
- 2.3 Development of the Site will not impact any designated sites or areas of ancient woodland.
- 2.4 A camera trap monitoring survey of a mammal hole (TN1) within the Site was undertaken which determined badger to be likely absent from the Site. However, as a precaution, a precommencement site check for any signs of badger activity and/or new holes should be undertaken prior to site clearance works. The hole should be hand dug to avoid causing unnecessary harm.
- 2.5 Building B2 was identified as having 'Moderate' suitability to support roosting bats. In accordance with the Bat Conservation Trust (BCT) good practice survey guidelines current at the time of the survey (Collins, 2016), two dusk emergence surveys were required to determine the presence or likely absence of roosting bats. The first survey was undertaken in September 2023 and the second survey is scheduled to be undertaken in May 2024.
- 2.6 No bats were recorded emerging from the building during a single emergence survey in September 2023. A second survey is required in the core survey season for bats (May to August) in 2024. If bats are observed emerging, then a third survey will be required to characterise the roost and a licence will need to be sought from Natural England. If no bats are observed emerging, then 'Reasonable Effort' has been applied to the building and no further surveys will be required for bats.
- 2.7 Timings and methods of best practice in relation to breeding birds are required.
- 2.8 In accordance with the requirement of the National Planning Policy Framework (NPPF) 2023, recommendations to enhance the Site's suitability for wildlife have been provided.
- 2.9 Provided the recommendations given within this report are implemented in full, the proposed development will not contravene any relevant legislation or planning policies pursuant to nature conservation.

3 INTRODUCTION

3.1 Context

- 3.1.1 Greenspace Ecological Solutions (GES) was appointed in September 2023 by Gardiner & Theobald LLP to provide ecological support to inform a planning application Queen Mary's Hospital, Frognall Avenue, Sidcup, Kent (hereafter referred to as the "Site").
- 3.1.2 This report represents the findings of a desk study, a Phase 1 Habitat survey and protected species surveys for bats and badgers. This report has been prepared to inform development proposals including avoidance of impacts, mitigation requirements and provision of appropriate enhancements. Ecological features of interest are depicted in Figure 1 and photographs of the Site are presented in Appendix A.

3.2 Site Location

3.2.1 The Site is located in the town of Sidcup, primarily in the London Borough of Bexley, in the southeast of London at National Grid Reference: TQ 46251 70923. The location of the Site is depicted in Image 1.



Image 1 – Geographical Location of Queen Mary's Hospital, Frognall Avenue, Sidcup

3.3 Site Description

3.3.1 The Site occupies approximately 0.07a and comprises predominantly ephemeral vegetation with areas of grassland and one building.

3.3.3 The wider landscape is one of hardstanding, hospital properties, woodland, grassland, residential properties with associated gardens and the A20.

3.4 Legislation and Planning Policy

3.4.1 Relevant legislation and policies that apply to ecological issues within England and Wales are:

Legislation

- The Conservation of Habitats and Species Regulations 2017 (as amended)
- The Environment Act 2021
- The Wildlife and Countryside Act 1981 (as amended)
- The Countryside Rights of Way Act 2000
- The Natural Environment and Rural Communities (NERC) Act 2006
- The Hedgerows Regulations 1997
- The Protection of Badgers Act 1992
- The Wild Mammal (Protection) Act 1996

Planning Policy

- The National Planning Policy Framework (NPPF) 2021
- <u>Government Circular 06/05</u>
- Bexley Local Plan (Adopted 26 April 2023)
- London Plan 2021
- 3.4.2 The above summary serves as guidance only. Further information is presented in Appendix B.

3.5 Objectives of the Survey

3.5.1 The objectives of the survey were to:

Extended Phase 1 Habitat Survey

- Classify the main habitats present within the Site.
- Evaluate the ecological importance of these habitats.
- Assess the suitability for protected species and any otherwise notable species to occur within the Site.
- Provide appropriate recommendations for further surveys and mitigation where required, as well as opportunities for biodiversity enhancement.

Bat Emergence Surveys

- Determine the presence/likely absence of bats within the building to be affected by the proposed development.
- Identify the number and species of bats, should they be present.
- Identify the entrance/exit points used by bats, should they be present.
- Evaluate the potential for bats to be affected by the proposals.
- Identify any legal or policy constraints related to bats that may affect the development.
- Provide recommendations of appropriate mitigation/compensation measures that are required.
- Assess whether a licence from Natural England is required for the works to proceed lawfully.

Badger

- Determine whether badger are using the mammal hole within the Site boundary.
- Classify the type of sett, should badgers be present.
- Evaluate the potential for badger to be affect by the proposals.
- Provide recommendations of appropriate mitigation/compensation measures that are required.
- Assess whether a sett closure licence from Natural England is required for the works to proceed lawfully.

4 SURVEY METHODS

4.1 Desk Study

- 4.1.1 A desk study was undertaken in September 2023 to determine the presence of sites and habitats of conservation importance, along with existing records of protected and notable species of relevance to the Site.
- 4.1.2 The following bodies were consulted for the desk study:
 - Google Earth Pro for aerial imagery.
 - Magic Map (Magic.defra.gov.org) for statutory designated sites.
 - Greenspace Information for Greater London (GiGL) for existing records of protected and notable species.
 - OS mapping for waterbodies within 250m of the Site.
- 4.1.3 The desk study involved obtaining the following information:
 - International statutory designated sites within 5km.
 - National statutory designated sites within 2km.
 - Non-statutory designated sites within 1km.
 - Protected and notable species within 2km.
 - Ancient woodland parcels within 30m.
 - Habitats of Principal Importance (NERC Act 2006) within, or immediately adjacent to, the Site.
- 4.1.4 These search areas are considered sufficient to cover the potential zone of influence of the proposed development.

4.2 Habitats

- 4.2.1 The Site was surveyed using the methods outlined in '<u>The Handbook for Phase 1 Habitat</u> <u>Survey: A Technique for Environmental Audit</u>' (JNCC, 2016). The techniques applied during the survey involve identifying the main plant communities present on the Site and classifying the habitat types following the JNCC methodology. This technique provides an inventory of the basic habitat types present and enables areas of greater botanical interest which may require further, more detailed, surveys to be identified.
- 4.2.2 Any occurrences of recognised invasive species as listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) were also noted.

- 4.2.3 A map of the habitats and areas of interest (using a variation of the JNCC (2016) protocol for Phase 1 Habitat plans) is provided in Figure 1. Photographs of features of interest are presented in Appendix A. Full species lists have been provided in Appendix C.
- 4.2.4 The survey was undertaken by Principal Ecologist Jenny Passmore MCIEEM on 11th September 2023.

4.3 Protected and Notable Species

4.3.1 The survey was 'extended' to consider the suitability of the Site to support protected and notable species. Species considered included those identified during the desk study, or those considered appropriate by the surveyor during the survey based on the habitats present. Detailed surveys were not completed for these species. However, based on an understanding of species ecology, consideration was given to the Site's potential to provide sheltering or foraging habitat and/or connectivity from other areas of potentially suitable habitat to allow dispersal between populations. Core species considered during the survey are outlined below.

Badger

- 4.3.2 Evidence of badger *Meles meles* activity within the Site was assessed by searching for signs such as:
 - Presence of setts, indicated by suitably sized holes or burrows.
 - Evidence of badger latrines, badger hair and/or footprints.
 - Evidence of well-used runs supported by secondary evidence such as foraging signs.

Badger Camera Monitoring Survey

4.3.3 One mammal hole, identified during the PEA and denoted as TN1 on Figure 1, was subject to a camera monitoring survey to determine which mammal species (if any) were using it. A single camera trap with video and photographic capabilities was deployed adjacent to the mammal hole. The camera trap was left in-situ between 26th September and 10th October 2023. The footage was then analysed to determine whether badgers or any other mammals were using the mammal hole.

Bats

Preliminary Roost Assessment – Buildings

4.3.4 An external inspection was undertaken of all the buildings present within the Site, with the use of high-powered torch and binoculars (where required). Any PRFs or access points for bats such as raised fascia boards, missing/lifted tiles, cracks or crevices in brick/blockwork and gaps in soffit boxes were recorded and searched for evidence of use by bats (staining, droppings,

scratch marks, or bats themselves). The results of the scoping survey enabled the buildings to be categorised as having 'Confirmed roosts'; or 'High', 'Moderate', 'Low' or 'Negligible' suitability to support roosting bats.

Dusk Emergence Surveys

- 4.3.5 One dusk emergence survey was conducted on 28th September 2023 and a second survey is scheduled to be undertaken in May 2024 in order to characterise any bat roost(s) present within the building denoted B1. The first survey was completed in accordance with BCT good practice guidance current at the time of survey (Collins *et al.*, 2016) and, to adequately observe all aspects of the building, two surveyors were deployed. For clarity, the location of the surveyors is depicted in Figure 2.
- 4.3.6 The surveys were undertaken in suitable weather conditions with sunset temperatures of $\geq 10^{\circ}$ C, a light moderate breeze and no rain.
- 4.3.7 To account for the varying times in which differing bat species emerge, the dusk emergence surveys commenced 15 minutes before sunset and continued for 1 hour and 30 minutes after sunset.
- 4.3.8 A summary of the weather conditions and survey times recorded during the survey is provided in Table 1 below.

Date	Emergence or Re-entry	Sunset	Start Time	End Time	Start Weather Conditions	End Weather Conditions
28/09/23	Emergence	18:45	18:30	20:00	18°C, 80% cloud cover, wind BF2 and dry	17°C, 100% cloud cover, wind BF3 and light rain

Table 1 – Survey Times and Weather Conditions

- 4.3.9 To aid audible detection, surveyors were equipped with Elekon Batlogger M bat detectors and EM Touch Pro bat detectors (or similar). These detectors convert the inaudible echolocation of bats into a frequency audible to the human ear. All calls were digitally recorded, and the sonograms analysed using the latest version of Elekon BatExplorer and or Kaleidoscope.
- 4.3.10 To aid visible detection, surveyors were equipped with infrared Canon XA10 (or similar) camcorders positioned on tripods adjacent to each surveyor location. These cameras were accompanied by Nightfox XC5 infrared led torches improving visibility during reduced levels of light.

4.3.11 The surveyors experienced no difficulties observing the features on the building. Therefore, in the professional judgment of the appointed ecologist, a pre-dawn re-entry survey was considered unnecessary in this instance.

Breeding Birds

4.3.12 The habitats within the Site were assessed for their suitability to support nesting birds. Factors considered include suitable cover and feeding habitat. Evidence was searched for in the form of any active or disused birds' nests.

Great Crested Newts (GCN)

4.3.13 Any suitable terrestrial habitat for great crested newts (GCN) *Triturus cristatus* including long grass, tall ruderal, woodland and hedgerow borders, as well as wood and rubble piles that act as hibernacula, was recorded. A search for any ponds or standing waterbodies within 250m of the Site, that may provide breeding habitat for GCN, was also conducted via a review of available OS mapping.

Reptiles

4.3.14 Suitable habitat for reptiles was recorded including long grass, vegetated boundaries, woodland and hedgerow borders, as well as wood and rubble piles that provide sheltering opportunities.

4.4 Constraints

Preliminary Ecological Appraisal

- 4.4.1 Any measurements or indications of area provided within this report are estimates and are provided as a guide only.
- 4.4.2 It should be noted that the absence of a species from biological records cannot be taken to represent actual absence. Species distribution patterns should be interpreted with caution as they may reflect survey/reporting effort rather than actual distribution.
- 4.4.3 No internal access was possible for the building as it is in active use as a hospital. However, there is no void space in the building which would be affected by the proposals and the area of the building to be impacted by the proposals was subject to a full external survey.

Bat Emergence Surveys

4.4.4 Results taken from bat detector recordings are biased towards bats that use louder echolocation calls. Therefore, quiet species such as long-eared bats *Plecotus sp.* may be under-recorded due to the limited recording range of the equipment. To compensate for this, the surveyors remained vigilant and used infrared night-vision camcorders, to ensure that any

visual cues identifying the presence of species using quieter echolocation calls were accurately recorded.

4.4.5 Every attempt was made to identify bats to species level, and bat calls were interpreted by experienced surveyors using known call parameters (Russ, 2012) and existing literature on the ecology of UK bat species, including distribution, range, habitat associations and behavioural characteristics, in addition to professional judgement. However, it is not always possible to accurately identify to species level bats from the genus *Myotis* or *Nyctalus* and in such cases these passes are therefore classified at the genus level only (i.e. *Myotis sp.*).

5 SURVEY RESULTS

5.1 Desk Study

Designated Sites

5.1.1 Statutory and non-statutory designated sites identified within the potential zone of influence

of the proposed development are presented in Table 4 below.

Table 4 – Designated	Sites within the	Potential Zone	of In	fluence o	of the .	Site
· · · J · · ·					J	

Site Name	Description	Distance and Orientation from Site	
Statutory Designated S	ites		
Internationally Designa	ted Sites (to 5km) (SAC, SPA, Ramsar) – <i>No sites within search a</i>	irea	
Nationally Designated S	Sites (to 2km) – (SSSI, NNR)		
Ruxley Gravel Pits SSSI	Ruxley Gravel Pits are one of the few areas of relatively undisturbed open water in Greater London south of the Thames. The site comprises four small gravel pits with patches of fen vegetation surrounded by a thin fringe of dry land. The River Cray flows through three of these pits while the fourth is fed by springs.	1.2km SE	
Locally Designated Sites	s (to 2km) – (LNR)		
Scadbury Park LNR	Scadbury Park is a relic area of countryside almost completely surrounded by the London conurbation. The land has been managed for centuries as a country estate and this historic continuity has maintained a diverse range of features including woodlands, scattered spinneys, streams, ponds, old meadows, mature hedgerows and steep grassland banks. The extensive woodland is of particular interest for a scattering of old and massive parkland trees that support a dead wood fauna particularly rich in beetle species. Common frog, common toad, smooth, palmate and great crested newts are all supported by the numerous pond habitats.	145m SW	
Foots Cray Meadows LNR	The site is 97ha area of grassland, woodland and wetland, with the River Cray forming a central feature of the landscape.	1.5km NE	
Non-statutory Designated Sites			
Sidcup Place and Green SINC	This site consists of parkland surrounding the former council offices of Sidcup Place, and the ornamental gardens of Sidcup Green. Parts of the park are managed to improve their value to wildlife. These include areas of scrub, tall herbs and woodland.	0.3km N	
Queen Mary's Hospital Grounds SINC	This site consists of a matrix of fields, hedgerows and remnant woodland planted with many exotic tree species. Some additional areas of successional scrub and woodland are also present. A few of the fields are relatively species-rich, although continued intensive grazing pressure is having a detrimental impact on them.	0.5km SE	

Site Name	Description	Distance and Orientation from Site
Hoblands Wood SINC	A linear woodland, probably a fragment of ancient woodland, running alongside Sidcup bypass, much of it in private back gardens.	0.8km W
Rectory Lane Pond SINC	A sizeable pond surrounded by woodland. The pond has reasonably good marginal vegetation. There are proposals to create a reed bed around the edge of part of the pond. Much of the woodland is secondary, having developed from overgrown parkland. Around the edges is much older woodland, probably relict ancient woodland.	0.9km NE
Kemnal Woodlands SINC	A large area of woodlands and fields lying within the Green Belt between Chislehurst and the Sidcup By-pass, to the east of Kemnal Road. Some of the woods are probably ancient. A series of ponds and streams occur within the site.	1.2km NW
Ruxley Gravel Pits SINC	The Ruxley Gravel Pits, flooded in 1951, are one of the few areas of relatively undisturbed open water in south London. Besides open water, the site includes several wooded islands, as well as important marginal areas of dense scrub, swamp and tall herbs.	1.5km SE
Belmont Pasture SINC	The field was formerly a unique relict in the Borough of unimproved pasture with ant hills over heavy London clay but is now intensively managed by grazing and mowing. To the south is another rare habitat in the Borough, where tall herb wet grassland vegetation borders a small stream but again most of this appears to have been intensively managed. The field boundaries are wooded strips or "shaws" of probably ancient woodland. In the south-east are two lakes with a good diversity of marginal wetland plants.	1.8km W
Scadbury Park, St Paul's Cray Common, Pett's Wood & Hawkwood Estate SINC	Scadbury Park is a Local Nature Reserve with large areas of ancient woodland, notably Park Wood. Ancient parkland oaks are valuable for invertebrates, while ponds set in pasture support large populations of great crested newts. A large proportion of the site consists of undisturbed neutral grassland, parts of which are more acidic in character. The Hawkwood Estate, owned and managed by the National Trust, has fields of grassland generally of lower botanical interest but with some old hedgerows.	1.9km SW
Abbey Hill Park SINC	This small park is being managed for nature conservation by London Borough of Bexley. It is dominated by rough grassland and scrub, with extensive plantings of mostly native trees. These are now maturing into woodland.	1.9km N
Hoblingwell Wood SINC	This mosaic of habitats, which lies on Blackheath Beds and Woolwich & Reading Beds, together form an extensive site. Hoblingwell Wood is a large woodland, a small part of which is probably ancient. Other habitats include dense scrub, glades, damp woodland, vegetated ponds, acid grassland with scrub, neutral grassland that is frequently mown and a mix of tall herbs and scrub.	2.0km S
Ruxley Wood SINC	A sizeable ancient woodland of pedunculate oak (Quercus robur), field maple (Acer campestre) and silver birch (Betula pendula), much of which has been badly disturbed by clearance and replanting with Scot's pine (Pinus sylvestris) and larch (Larix sp.).	2.0km E

Ancient Woodland

5.1.2 There are no ancient woodland parcels within 30m of the Site. The closest ancient woodland is Little Wood Ancient & Semi-Natural Woodland (ASNW) which lies approximately 300m south of the Site.

NERC s41 Habitats of Principal Importance (HPI)

5.1.3 No HPIs lie within, or adjacent to, the Site. The closest HPI is a Deciduous Woodland, located approximately 150m north of the Site.

Protected and Notable Species

5.1.4 Existing records of protected and notable species of relevance to the Site returned by the desk study are presented in Table 5 below.

Common Name	Scientific Name	Closest Record	Date
Bats			2410
Common pipistrelle	Pipistrellus pipistrellus	0.4km N	18/04/2020
Birds		·	·
Dunnock	Prunella modularis	0.4km NE	05/05/2021
House martin	Delichon urbicum	0.3km NE	12/08/2017
House sparrow	Passer domesticus	0.4km NE	05/05/2021
Lapwing	Vanellus vanellus	1.4km SE	24/10/2016
Lesser whitethroat	Curruca curruca	0.4km NE	30/05/2013
Mistle thrush	Turdus viscivorus	0.3km NE	17/07/2017
Redwing	Turdus iliacus	0.3km NE	24/01/2017
Song thrush	Turdus philomelos	0.3km NE	07/04/2017
Swift	Apus apus	0.3km NE	07/07/2017
Tawny owl	Strix aluco	0.3km NE	31/10/2017
Mammals			
West European hedgehog	Erinaceus europaeus	0.2km S	21/05/2018
Harvest mouse	Micromys minutus	1.4km N	27/10/2016
European water vole	Arvicola amphibius	1.4km N	02/11/2015
Eurasian Badger	Meles meles	Confidential	Confidential
Reptiles			

Table 5 – Relevant Records of Protected and Notable Species within 2km of the Site

Common Name	Scientific Name	Closest Record	Date
Slow-worm	Anguis fragilis	0.3km W	28/05/2021
Invertebrates			
Norfolk hawker	Anaciaeschna isoceles	1.6km E	15/09/2017
Scarce Emerald Damselfly	Lestes dryas	1.6km E	15/09/2017
Stag beetle	Lucanus cervus	0.1km E	23/06/2015
Small Heath	Coenonympha pamphilus pamphilus	1.9km NE	08/06/2021
Dingy Skipper	Erynnis tages tages	0.3km S	11/06/2017
White Admiral	Limenitis camilla	0.4km S	25/06/2018
Buff Ermine	Spilosoma lutea	2.0km S	23/06/2022

5.2 Habitats

- 5.2.1 The following habitat types were recorded within the Site:
 - Semi-Improved Grassland
 - Ephemeral
 - Buildings
- 5.2.2 A summary of the key botanical species present within each habitat type are included within the descriptions below with full species lists provided in Appendix C. While considering this information, reference should be made to the Phase 1 Habitat Survey Plan presented in Figure

1.

Semi-Improved Grassland

5.2.3 Tall grassland is located on the 2m high bank on the south and west boundary of the Site. Abundant species recorded include false oatgrass *Arrhenatherum elatius* and black mustard *Brassica nigra*.

Ephemeral

5.3 Ephemeral habitat was present within the Site, with 70% bare ground formed of sandy/rubble substrate. Abundant species recorded include black medic *Medicago lupulina*, green foxtail *Setaria viridis*, Canadian fleabane *Erigeron canadensis* and bittersweet *Solanum dulcamara*.

Buildings

5.3.1 One building was present within the Site, denoted B1. A more detailed description of the structure and their suitability to support roosting bats and nesting birds is provided in Section
 5.3 below.

Invasive species

- 5.3.2 No occurrences of recognised invasive species as listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) were noted.
- 5.3.3 Ring-necked parakeet *Psittacula krameri*, listed on category 4 of the London Invasive Species Initiative, were noted within and around the Site.

5.4 **Protected and Notable Species** Badger

- 5.4.1 The grassland within the Site provided suitable foraging and commuting habitat for badger.
- 5.4.2 A large mammal hole (TN1), of a suitable size and shape to be used by badger, was recorded on the grass bank in the southwest corner of the Site. The mammal hole was 20cm x 20cm with a large sandy spoil pile. Paw prints resembling fox prints were recorded around the hole. Within the wider area, a mammal path was noted 25m to the southwest but no definitive badger evidence such as foraging signs, latrines or hairs were recorded.

Camera Monitoring Survey

- 5.4.3 During the monitoring period, no badgers were recorded entering or exiting the mammal hole.In addition, no badgers were observed in any of the video files.
- 5.4.4 Species recorded in close proximity to the mammal hole included fox *Vulpes vulpes*. One fox was recorded utilising the mammal hole.

Bats

Foraging and Commuting Habitats

5.4.5 The grassland provides foraging opportunities for bats. The surrounding landscape offers suitable foraging and commuting habitat in the form of areas of woodland, grassland and hedgerows.

Roosting Habitat – Buildings

5.4.6 One building, denoted B1, is present within the Site which will be affected by the proposed development. Table 7 provides a description of the building and its suitability to support roosting bats, and its location is depicted on Figure 1.

Building	Description	PRFs (and any	Suitable Access Points	Level of
Ref		evidence found?)		Suitability
B1	Two-storey hospital	Gaps in the	Gaps in the brickwork	Moderate
	building. Red brick cavity	brickwork, missing	extend into cavity wall	
	walls with wood panelling	bricks, and a hole		
	in sections. Flat roof.	around a pipe		
		which extends		
		into the		
		weatherboarding		

Table 7 – Building Descriptions and their Suitability to Support Roosting Bats

Emergence Surveys

28th September 2023

- 5.4.7 No bats were recorded emerging from Building B1 during this survey.
- 5.4.8 The first bat recorded was a common pipistrelle which was heard but not seen at 19:06, 21 minutes after sunset. No other bats species were recorded on this survey.
- 5.4.9 Overall, bat activity within and around the Site during this survey was 'Low'.
- 5.4.10 Table 8 provides details of the bat emergence survey results.

Table 8 – Bat Emergence Survey Results Summary

Survey Number and Date	Bats Emerging or Returning from/to the Building	Bat Species Recorded Commuting or Foraging within the Site
Survey 1 – 28/09/23	None	Common pipistrelle

Breeding Birds

5.4.11 The building provides suitable nesting habitat and feral pigeon *Columba livia domestica* were noted using the underside of the plant room, part of B1.

Hazel Dormouse

5.4.12 No evidence of dormouse was recorded during the survey and there is no suitable habitat on Site for this species.

Great Crested Newt Terrestrial Habitat

5.4.13 The ephemeral and grassland provide suitable terrestrial foraging habitat for GCN.

Aquatic Habitat

5.4.14 A review of available online OS mapping identified no waterbodies within 250m of the Site.

Other Species

- 5.4.15 The habitats recorded within the Site provide foraging habitat for European hedgehog *Erinaceus europaeus* and common toad *Bufo bufo*, both "Notable" species and SPIs listed under s41 of the NERC Act 2006.
- 5.4.16 Beyond those noted above, the survey identified negligible suitability for other species of conservation concern within the Site.

6 EVALUATION AND RECOMMENDATIONS

6.1 Designated Sites

Statutory Designated Sites

- 6.1.1 There are no internationally designated sites within 5km of the Site.
- 6.1.2 There is one nationally designated and two locally designated statutory sites within 2km of the Site. The closest is Scadbury Park LNR which is located 145m southwest of the Site.
- 6.1.3 Due to the small, localised scale of the proposed development and lack of direct habitat linkage between the development and the designated site due to the separation by the A20, the proposed works are considered highly unlikely to have a detrimental impact on any statutory designated sites.

Non-statutory Designated Sites

- 6.1.4 There are fifteen non-statutory designated sites within 2km of the Site. The closest is Sidcup Place and Green SINC which is located 0.3km north of the Site.
- 6.1.5 Due to the limited extent and nature of the proposals, coupled with the spatial separation and lack of direct habitat linkages, no non-statutory designated sites are considered likely to be impacted by the proposed development.

6.2 Ancient Woodland

6.2.1 Guidance from Natural England and the Forestry Commission state that no development should occur within 15m of an ancient woodland. There is no woodland within 15m of the Site and no detrimental impacts to any areas of ancient woodland are likely to result from the proposed development.

6.3 Habitats and Botanical Species of Interest

6.3.1 No HPIs lie within or adjacent to the Site. The closest is a Deciduous Woodland, located approximately 150m north of the Site.

6.4 **Protected and Notable Species** Badger

- 6.4.1 Suitable foraging and commuting habitat exists within the Site and a mammal hole (TN1) is present within the grassland.
- 6.4.2 The results of the camera monitoring survey in September to October 2023, coupled with the lack of any other secondary evidence of badger within the Site such as latrines, footprints or hairs, determined that the mammal hole is not an active badger sett. One fox was recorded

exiting the hole, but no badgers were recorded walking past the camera during the recording period. It is therefore considered that the mammal hole is currently in use by foxes.

- 6.4.3 As a precaution, a pre-commencement survey to check for any signs of active use, or any new mammal holes should be undertaken ahead of any site clearance or construction activities.
- 6.4.4 In addition, badgers are a highly mobile species and the presence of badgers using the Site for foraging/commuting cannot be ruled out. Therefore, to prevent killing and injury of badgers which may occasionally use the Site, any excavations that are created during the course of the construction that are greater than 1m in depth should either be covered over at night or should have at least one sloping side of no greater than a 45° angle to enable any badgers or other mammals that may fall in to escape unharmed. Any spoil piles created as a result of construction works should be fenced/covered to prevent badgers establishing setts within them.
- 6.4.5 If evidence of badgers becomes apparent prior to, or during construction, all work should <u>stop</u> immediately, and a suitably qualified ecologist should be consulted on the appropriate way to proceed.
- 6.4.6 The Wild Mammal (Protection) Act 1996 makes it an offence to crush or asphyxiate any wild mammal with intent to inflict unnecessary suffering. To prevent unnecessary suffering to foxes which may be using the hole, any construction work in the area should be proceeded by slow and methodical hand digging of the hole 24 hours before machinery is used.

Bats – Commuting and Foraging Habitat

- 6.4.7 The grassland provides sub-optimal foraging and commuting opportunities for bats. The surrounding landscape offered suitable foraging and commuting habitat in the form of areas of woodland, hedgerows and tree lines, and numerous nearby records of bats were noted in the desk study. However, overall, the Site's habitats are considered to offer 'Low' suitability for foraging and commuting bats.
- 6.4.8 The majority of the grassland habitat within the Site will be retained. Consequently, bat activity surveys are not considered necessary.

Bats – Roosting Habitat

6.4.9 Building B1 was assessed as having 'Moderate' suitability to support roosting bats due to the presence of external PRFs. Therefore, in-line with the Bat Conservation Trust (BCT) good practice survey guidelines current at the time of the survey (Collins, 2016), two dusk emergence surveys were required to determine the presence or likely absence of roosting

bats. The first survey was undertaken in September 2023 and the second is scheduled to be undertaken in May 2024.

- 6.4.10 No bats were recorded emerging from the building during the first survey and a second survey is required in the core survey season for bats (May to August) in 2024. If bats are observed emerging, then a third survey will be required to characterise the roost and a licence will need to be sought from Natural England. If no bats are observed emerging, then 'Reasonable Effort' has been applied to the building and no further surveys will be required for bats.
- 6.4.11 In accordance with current industry standards, should a period of more than 12 months elapse between the date of the final survey and any subsequent development, it may be necessary to consider the need for an update survey to be undertaken.
- 6.4.12 Since lighting can be detrimental to bats using vegetation for foraging and commuting, any external lighting proposed for the development should be sensitive to the retained and proposed hedgerows, trees and all boundary features, avoiding direct illumination of them. The Institution of Lighting Professionals (ILP), in partnership with the Bat Conservation Trust (BCT), has published guidance relating to bats and lighting this is available at the following link: https://theilp.org.uk/publication/guidance-note-8-bats-and-artificial-lighting/.

Breeding Birds

- 6.4.13 Suitable nesting habitat for breeding birds was present within the Site in the form of the building. Further bird surveys are considered disproportionate however, measures to retain and create suitable habitat to support breeding birds should be included within the design proposals.
- 6.4.14 As all nesting birds are protected under the Wildlife and Countryside Act 1981 (as amended), it is recommended that works to these areas (where necessary) are conducted outside the core breeding period for birds of late February August, inclusive.
- 6.4.15 However, should this timeframe be unobtainable, a survey for the presence of breeding birds should be conducted by a suitably experienced ecologist immediately prior to the start of works. Should evidence of breeding birds be recorded, works within 5m of the nest should stop until the eggs have hatched and the chicks have fledged. If the nest is deemed by a suitably experienced ecologist to no longer be active, works may continue.

Hazel Dormouse

6.4.16 There was no suitable dormouse habitat recorded during the survey and there are no records of dormice within 2km of the Site. No further surveys or mitigation for this species are required.

Great Crested Newt

6.4.17 The grassland provides suitable terrestrial foraging and commuting habitat for GCN. However, no waterbodies are present within 250m of the Site, which are essential for the survival and reproduction of GCN. Therefore, GCN are considered likely absent from the Site and no further consideration to this species is required.

Reptiles

6.4.18 Desk study records of reptile species including slow worm, common lizard and grass snake were identified within 2km of the Site, and the grassland on-site provides foraging and commuting for reptiles. However, the habitat is small in area and is isolated in the surrounding landscape of buildings, hardstanding and short amenity grassland and is therefore considered unsuitable for supporting a population of reptiles.

Other Species

- 6.4.19 There are records of hedgehog present within 2km of the Site, and habitats within the Site have suitability to support foraging. Therefore, the proposed development should incorporate new native hedgerow planting to enhance the Site for this species.
- 6.4.20 There are no obvious and immediate issues regarding other protected or notable species on the Site and no further surveys to determine the presence of other protected or notable species is required in this instance.
- 6.4.21 Should at any point during the development a protected or notable species be identified within the Site, then all works should **stop** and the appointed ecologist consulted on the appropriate manner in which to proceed.

7 ECOLOGICAL ENHANCEMENTS

- 7.1 Opportunities to include biodiversity enhancements within the Site exist and in accordance with the requirements of the NPPF 2023, the following recommendations are considered appropriate for the Site:
 - The installation of bat boxes installed in suitable locations such as integrated into any proposed buildings would increase the Site's suitability for roosting bats. These boxes should be installed at a height of 3m or more or at eaves height on sunny, sheltered aspects, away from direct illumination by artificial lighting and in a location, which ensures connectivity to foraging habitats within the wider landscape. In this instance, two boxes such as those provided by <u>www.habibat.co.uk</u> are recommended for within the built structure.
 - The incorporation of a wildlife-friendly planting scheme within the boundary postdevelopment, including native plant species, would be of benefit to invertebrates, hedgehogs, birds and bats. A native hedgerow around the boundary of the Site is recommended and should include species such as beech *Fagus sylvatica*, oak *Quercus robur*, guelder rose *Viburnum opulus*, hawthorn *Crataegus monogyna*, hazel *Corylus avellana*, holly *llex aquifolium* and yew *Taxus baccata*.
 - The installation of four <u>bee bricks</u> on the southern elevation of the proposed building would increase the Site's biodiversity by supporting solitary bees.

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Figures





Appendices

APPENDIX A – SITE PHOTOGRAPHS

Photo 1: B1 and ephemeral habitat	Photo 2: Grassland on the banks
Photo 3: Mammal hole in grass bank	Photo 4: Mammal hole in grass bank
Photo 5: Ephemeral habitat and B1	Photo 6: Grass bank

APPENDIX B – Legislation and Planning Policies

Legislation

- <u>The Conservation of Habitats and Species Regulations 2017 (as amended)</u> transposes European Union Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (EC Habitats Directive) into National law. These regulations provide for the designation and protection of 'European Sites', the protection of 'European Protected Species' and the adaptation of planning controls for the protection of such sites and species. Under the regulations, public bodies have a duty in exercising their functions to have regard to the EC Habitats Directive.
- <u>The Environment Act 2021</u> operates as the new framework of environmental protection following the United Kingdom's departure from the EU. The Environment Act allows the UK to enshrine some environmental protection into law, and offers new powers to set new binding targets, including for air quality, water, biodiversity, and waste reduction. The Act mandates the creation of Local Nature Recovery Strategies, Protected Site Strategies, Species Conservation Strategies, and the use of conservation covenants to support the design and delivery of strategic approaches to deliver better outcomes for nature. Additional mandates covered by The Act (Part 7) will come into force in November 2023 and include:
 - A requirement for Biodiversity Net Gain for developments, to ensure all development deliver a minimum of 10% net gains in biodiversity (Section 98).
 - Strengthening of the duty placed on all public bodies to "conserve" and "enhance" biodiversity (Section 102).
 - Duty placed upon Local Authorities to consult prior to felling street trees (Section 115).
- <u>The Wildlife and Countryside Act 1981 (as amended)</u> provides detail on a range of protection and offences relating to wild birds, other animals, and plants. The level of protection depends on which Schedule of the Act the species is listed on. Licences are available for specific purposes to permit actions that would otherwise constitute an offence in relation to species.
- <u>The Countryside Rights of Way Act 2000</u> provides additional support to the Wildlife and Countryside Act 1981; for example, increasing the level of protection for certain species of reptiles.
- <u>The Natural Environment and Rural Communities (NERC) Act 2006</u> imposes an obligation on all public bodies, including local authorities, to consider whether their activities can contribute to the protection of wildlife. The duty is created by section 40(1) of the Act, which states that:

"Every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity."

- <u>The Hedgerows Regulations 1997</u> are enforced under the Environment Act 1995, and serves to: restrict the removal of hedgerows, or parts of hedgerows which are over 20m in length. In this case, removal includes digging up and replanting elsewhere, as well as removing from the land completely or destroying in the course of other actions. This includes developments or activities which destroy the roots, causing the vegetation to die.
- <u>The Protection of Badgers Act 1992</u> exists to protect badgers *Meles meles* from cruelty. Under the act it is a criminal offense to wilfully kill, injure, take, possess or cruelly ill-treat a badger, or to attempt to do so, or to intentionally or recklessly interfere with a sett.
- <u>The Wild Mammal (Protection) Act 1996</u> protects wild mammal species from certain cruel acts, including kicking, beating, nailing, or otherwise impaling, stabbing, burning, stoning, crushing, drowning, dragging or asphyxiation of any wild mammal with intent to inflict unnecessary suffering. Crushing and asphyxiation are most likely to occur as a result of development proposals, should these works collapse any mammal burrows, or encounter wild mammals on site.

National Planning Policy

- <u>The National Planning Policy Framework (MHCLG July 2021)</u> states (Section 15) that the planning system should identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks; promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity. It also states that local planning authorities should refuse planning on the following principles:
 - If significant harm to biodiversity resulting from a development cannot be avoided, adequately mitigated, or, as a last resort, compensated for;
 - If development is on land within or outside a Site of Special Scientific Interest (SSSI), and is likely to have an adverse effect on it (the exception being where the benefits of the development in the location proposed clearly outweigh its likely impact);
 - If development results in the loss or deterioration of irreplaceable habitats, such as ancient woodland and ancient or veteran trees (unless there are wholly exceptional reasons, and a suitable compensation strategy exists).
- Additionally, the NPPF states that development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity

improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity.

Species and Habitats of Principal Importance for Conservation in England and Wales and priority habitats and species listed in the Kingston Upon Thames local plan are species which are targeted for conservation. The government has a duty to ensure that involved parties take reasonable practice steps to further the conservation of such species under Section 41 of the Natural Environment and Rural Communities Act 2006. In addition, the Act places a biodiversity duty on public authorities who 'must, in exercising their functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity' (Section 40 [1]). Criteria for selection of national priority habitats and species in the UK include international threat and marked national decline.

Local Planning Policy

Bexley Local Plan (Adopted 26 April 2023)

• <u>Policy DP20: Biodiversity and geodiversity in development</u>. Development proposals will only be permitted where it can be demonstrated that

a) a strict approach to the mitigation hierarchy has been taken (i.e. avoid, mitigate, compensate and net gain) and all unavoidable impacts on biodiversity can be justified;

b. completion of the development will result in a measurable long-term net gain for biodiversity, as demonstrated through the application of an acceptable method of measurement, and/or impact assessments;

c. biodiversity enhancement measures and where appropriate mitigation measures have been incorporated within the design, layout and materials used in the built structure and landscaping;

d. opportunities to help connect and improve the wider ecological networks, wildlife corridors and stepping stones for wildlife have been taken by creating linkages through the development site;

e. deficiencies in access to nature conservation are reduced, where possible; and,

f. opportunities to increase wildlife aesthetic value and visual connections with important features have been considered

The London Plan 2021

- Policy G6 Biodiversity and access to nature
 - Sites of Importance for Nature Conservation (SINCs) should be protected.
 - Boroughs, in developing Development Plans, should:

1) use up-to-date information about the natural environment and the relevant procedures to identify SINCs and ecological corridors to identify coherent ecological networks

2) identify areas of deficiency in access to nature (i.e. areas that are more than1km walking distance from an accessible Metropolitan or Borough SINC) andseek opportunities to address them

3) support the protection and conservation of priority species and habitats that sit outside the SINC network, and promote opportunities for enhancing them using Biodiversity Action Plans

4) seek opportunities to create other habitats, or features such as artificial nest sites, that are of particular relevance and benefit in an urban context

5) ensure designated sites of European or national nature conservation importance are clearly identified and impacts assessed in accordance with legislative requirements.

- Where harm to a SINC is unavoidable, and where the benefits of the development proposal clearly outweigh the impacts on biodiversity, the following mitigation hierarchy should be applied to minimise development impacts:
 - 1) avoid damaging the significant ecological features of the site
 - 2) minimise the overall spatial impact and mitigate it by improving the quality
 - or management of the rest of the site
 - 3) deliver off-site compensation of better biodiversity value.
- 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.
- Proposals which reduce deficiencies in access to nature should be considered positively.

APPENDIX C: SPECIES LIST

Common Name	Scientific Name	DAFOR
Grassland		
False oatgrass	Arrhenatherum elatius	А
Black mustard	Brassica nigra	А
Common ragwort	Senecio vulgare	F
Dandelion	Taraxacum offincialis agg.	F
Fig-leaved goosefoot	Chenopodium ficifolium	0
Perennial rye-grass	Lolium perenne	0
Common nettle	Urtica dioica	0
Cocksfoot	Dactylis glomerata	0
Hedge bedstraw	Galium mollugo	R
Autumn hawkbit	Scorzoneroides autumnalis	R
Creeping cinquefoil	Potentilla repens	R
Field bindweed	Convolvulus arvensis	R
Wall lettuce	Lactuca muralis	R
Common mallow	Malva sylvestris	R
Ephemeral		
Black medic	Medicago lupulina	А
Green foxtail	Setaria viridis	А
Canadian fleabane	Erigeron canadensis	А
Bittersweet	Solanum dulcamara	А
Common knotgrass	Polygonum aviculare	F
Ivy leaved toadflax	Cymbalaria muralis	0
Bristly ox-tongue	Helminthotheca echioides	0
Common ragwort	Senecio vulgaris	0
Black mustard	Brassica nigra	0

Herb Robert	Geranium robertianum	0
Yarrow	Achillea millefolium	0
		U
Cocksfoot	Dactylis glomerata	0
Smooth sow-thistle	Soncus oleraceus	0
Snapdragon	Antirrhinum majus	0
Wheat	Triticum aestivum	0
Petty spurge	Euphorbia peplus	0
White clover	Trifolium repens	0
Creeping buttercup	Ranunculus repens	0
Hoary willowherb	Epilobium parviflorum	0
Barley	Hordeum vulgare	0
Narrow-leaved ragwort	Senecio inaequidens	R
Ribwort plantain	Plantago lanceolata	R