www.cherryfieldecology.co.uk

Report prepared for: Jon Ball

For the Site of: Willowtree Marina, Yeading, W Quay Dr, Hayes UB4 9TB

Version:	Written by:	Checked by:	Final:
Draft	Elijah Bird 16/01/2023		
Final	Luke Beeton 16/01/2023	Tanya O'Connor 19/01/2023	Luke Beeton 20/01/2023

Cherryfield Ecology has prepared this report for the named clients use only.

Ecological reports are limited in shelf life, Natural England usually expect reports for licenses to be from the most recent or current season. Therefore, should the project not proceed within 12 months of this report an updated survey should be undertaken in order to check for changes that may have occurred on site. Information is believed to be accurate at the time of survey; recommendations are made without bias based on good practice guidelines within the industry. However, species presence and ecological parameters can change over time.

Luke Beeton BSC (Hons)

luke@cherryfieldecology.co.uk

07421 708652

Contents

Preliminary Roost Assessment (PRA)

0.0 Non-Technical Summary

0.1 Background

The survey undertaken follows national guidelines Collins (2016) allowing for a day-time inspection and recommends for further surveys if considered necessary. If a deviation from the guidelines has been made this will be detailed in the Method Section.

The following report details the findings and recommendations for the site of Willowtree Marina, Yeading, W Quay Dr, Hayes UB4 9TB.

The client commissioned Cherryfield Ecology to undertake a PRA as the proposals include for the repurposing of one dwelling's first and second floor, the construction of one chandlery shop on the ground floor, the building of an additional two bed unit (circa 7000 sq ft) and an additional flat unit over the existing single storey WC/Shower block. Plans have been provided (Appendix I)

0.2 Results and Findings

- The site consists of a detached two storey commercial building, hardstanding and a waterbody.
- No bats or evidence of bats were found on site.
- B1 provides negligible potential for roosting bats due to the lack of roosting features such as gaps under the roofing tiles, gaps leading to the loft voids etc.

0.3 Impact Assessment and Recommendations

No impacts are foreseen; however, if bats are found during the development, all works must stop, and advice sought.

The findings outlined in this report are valid for **one year**, after which updated surveys will be required.

Enhancements and mitigation are recommended (please see Section 4.4 for further details).

1.0 Introduction

1.1 Aim of the Survey

This report aims to inform the client of any bat issues that may be present on site and that could affect the development. It recommends for further survey when considered necessary and provides possible mitigation and enhancement should this become required.

1.2 Background Information

The client, Jon Ball, has commissioned Cherryfield Ecology to undertake a PRA for the site of Willowtree Marina, Yeading, W Quay Dr, Hayes UB4 9TB. Planning permission is being sought for the repurposing of one dwelling's first and second floor, the construction of one chandlery shop on the ground floor, the building of an additional two bed unit (circa 7000 sq ft) and an additional flat unit over the existing single storey WC/Shower block. This survey has checked all buildings, trees (from ground level only) or structures due to be affected by the proposals for bats, signs of bats or features known to be used by bats e.g. crevices, gaps or holes that cannot be checked for a variety of reasons.

The inspection was conducted on the 18/01/2022.

The survey can only ever provide a 'snapshot' of the site at the time of the survey and circumstances may change following this report. Health and Safety restrictions or obstructions may limit the ability to find evidence.

Biological records have been requested to give the report context and allow a study of the surrounds. The information is often sensitive and, therefore, a synopsis is provided.

The survey can be conducted year-round, however it can be limited due to bad weather and in the winter, when bats are not active, thus evidence and bats are often not found. During these periods, habitat value (likely presence) becomes more important to the assessment of the site.

All 18 species of bat common in the UK (17 known to be breeding) are fully protected under the Wildlife and Countryside Act (as amended) 1981 through inclusion in Schedule V of the Act. All bat species in the UK are also included in Schedule II of The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019, which transpose Annex II of the Directive 92/43/EEC 1992 on the Conservation of Natural Habitats and of Wild Fauna and Flora ("Habitats Directive") which defines United Kingdom protected species of animals.

Bats species are afforded further protection by the Countryside and Rights of Way Act 2000; and the Natural Environment and Rural Communities Act 2006.

This combined legislation makes it an offence to:

- Intentionally or deliberately kill, injure or capture bats.
- Deliberately disturb bats, whether at roost or not.
- Damage, destroy or obstruct access to bat roosts.
- Possess or transport bats, unless acquired legally.
- Sell, barter or exchange bats.

A bat roost is well-defined by the legislation as the 'resting place' of a bat. However, the word roost is used to describe this resting place and is generally accepted as the word describing where a bat or bats rest, feed or sleep.

2.0 Methods

The survey follows the national guidelines Collins (2016), and the following equipment is available for the inspection (it may or may not all be used):

- Torches (e.g. LED Lensar type).
- Ladders (Standard 4m telescopic surveying ladder).
- Endoscope where holes, cracks and crevices are accessible.
- Mirrors as above (extendable and movable mirror face).
- Binoculars (Pentax close focus).
- Thermometer/hygrometer.
- Camera.
- Sample bags for collecting dropping and feeding evidence (should this be found).

The assessment allows for a detailed inspection of the site looking for bats, evidence of use by bats e.g. droppings/feeding remains, and features known to be used by bats for roosting e.g. gaps, crevices and holes. Trees and buildings are assessed from ground level only and may require climbed surveys of holes, cracks and crevices.
Biological records data is ordered from the local records centre to provide context and background information. As the data is often sensitive, a synopsis is provided.

If a deviation from the guidelines has been made, the reason and justification will be explained below:

No deviation from the standard guidelines has been made for this survey.

2.1 Limitations

This survey provides a snapshot of the site at the time of the survey only. Bats are highly mobile and can turn up from time to time, unexpectedly. All care has been taken to ensure the results and recommendations are suitable to the context of the development and the information gathered on surveys.

Table 1: Roosting features (likelihood) of bat presence assessed against Collins (2016) guidelines *Source: Adapted from Collins (2016) pp 35, Table 4.1.*

Likelihood of bat presence (Habitat Value)	**Features that bats can use, regardless of evidence being present.**
Confirmed Bat Presence	Bats are found to be present during the survey. Evidence of bats is found to be present during the survey.
Higher likelihood of bat presence.	Pre-20th century or early 20th century construction. Agricultural buildings of traditional brick, stone or timber construction. Large and complicated roof void with unobstructed flying spaces. Large (>20 cm) roof timbers with mortice joints, cracks and holes. Entrances for bats to fly through. Poorly maintained fabric providing ready access points for bats into roofs, walls, bridges, but at the same time not too draughty and cool. Roof warmed by the sun, in particular south facing roofs. Weatherboarding and/or hanging tiles with gaps. Low level of disturbance by humans. Bridge structures, follies, aqueducts and viaducts over water and/or wet ground.
Moderate and Lower likelihood of bat presence.	Modern, well-maintained buildings or built structures that provide few opportunities for access by bats. Small, cluttered roof space. Buildings and built structures comprised primarily of prefabricated steel and sheet materials. Cool, shaded, light or draughty roof voids. Roof voids with a dense cover of cobwebs and no sections of clean ridge board. High level of regular disturbance. Highly urbanised location with few or no mature trees, parkland, woodland or wetland. High levels of external lighting.
Negligible likelihood of bat presence.	No features suitable for roosting, minor foraging or commuting.

Notes on using this table

1 The features listed here may not be indicative of use of the site by bats during winter or spring.

2 Pre-1914 buildings may present the greatest likelihood of providing roost space for bats due to their design, materials used and age. Pre-1990 buildings, especially when close to good foraging habitat, and with favoured features such as cavity walls and soffits, also have a high likelihood of providing roost sites for some bat species.

3 Post-1990 buildings are generally less likely than older buildings to house roosts; however, some modern designs provide access to suitable roosting spaces for bats. Pipistrelles, in particular, occupy modern buildings and built structures providing that there are suitable access gaps (>8mm) and provided the structure has appropriate characteristics for roosting.

3.0 Results

The following section details the results of the desk study, inspection and survey; it includes MAGIC information, biological records data and map/aerial photo information. The results detail the building, structure or tree (numbered for reference) description of any evidence found and habitat value if no evidence has been located.

3.1 Desk Study

The desk study is centred on Grid Reference – TQ124815 and Postcode – UB4 9TB.

Table 2: Weather Records

Temperature	2ºC
Cloud cover	20%
Precipitation	None
Wind	2/12

3.2 MAGIC

The following statutory sites and Natural England Protected Species (NEPS) have been located within the 2km search area (Figure 1):

- There is one statutory site located within the search area:
  - Yeading Meadows (LNR)
- There are no NEPS licence granted for bats within the search area:

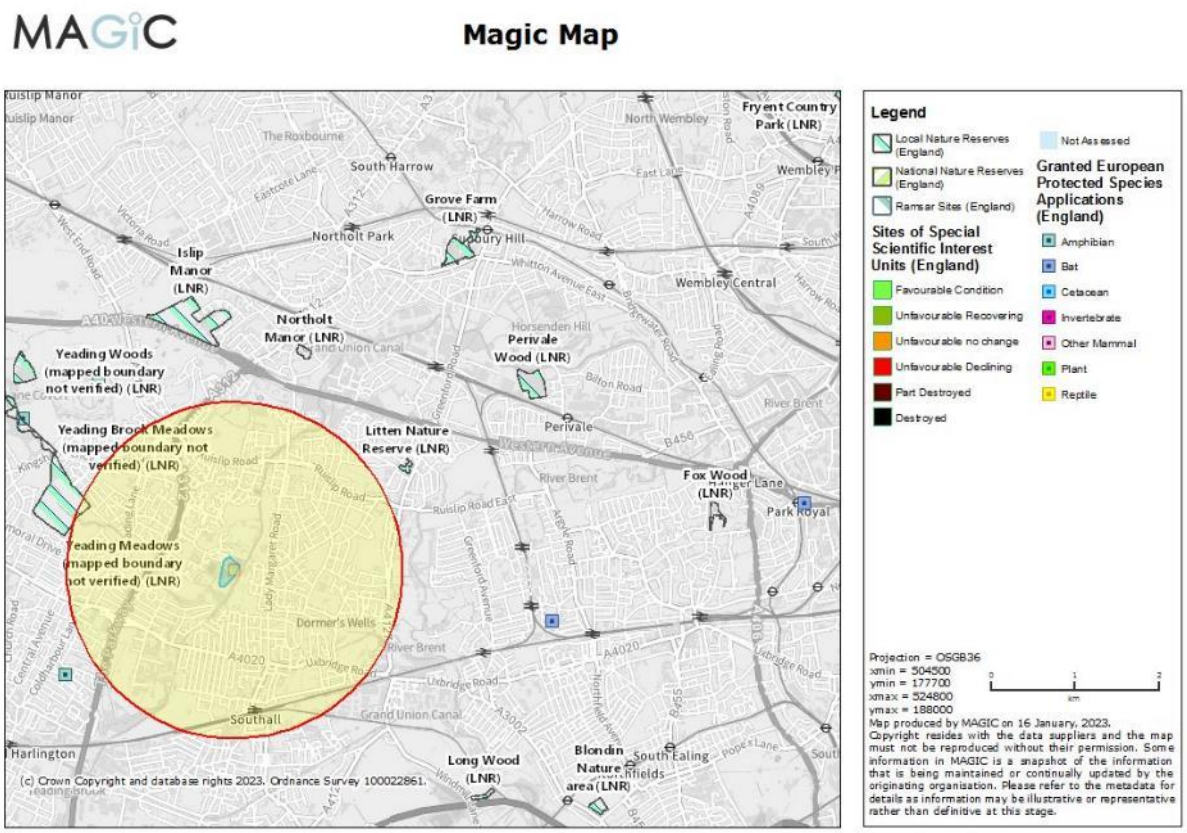


Figure 1: Magic Map Search

3.3 Biological Records Data

A 1km data search of existing records for protected species and nature reserves has been commissioned, below details the results and site context.

Biological records were obtained from London Bat Group (2022). A total of 16 records were provided from a total of six confirmed bat species.

Table 3: Biological Records

Species	Number of Records	Closest record (accuracy)	Most recent record (year)
Barbastelle *Barbastella barbastellus*	0		
Brown Long-Eared *Plecotus auritus*	2	n/a	1987
Common Pipistrelle *Pipistrellus pipistrellus*	2	342m (100m)	2015

Daubenton's *Myotis daubentonii*	0		
Leisler's *Nyctalus leislerii*	0		
Nathusius' Pipistrelle *Pipistrellus nathusii*	0		
Natterer's *Myotis nattererii*	0		
Noctule *Nyctalus noctula*	1	n/a	1984
Serotine *Eptesicus serotinus*	0		
Soprano Pipistrelle *Pipistrellus pygmaeus*	1	342m (100m)	2013
Unidentified Bat *Chiroptera*	0		
Unidentified Long-Eared *Plecotus sp.*	0		
Unidentified Myotis *Myotis sp.*	0		
Unidentified Pipistrelle *Pipistrellus sp.*	8	>1km	1994
Unidentified Vesper *Vespertilionidae*	2	n/a	1986
Whiskered *Myotis mystacinus*	0		
Whiskered/Brandt's *Myotis mystacinus/brandtii*	0		

3.4 Site Location and Surrounds

The site is located in Hayes, Middlesex and is surrounded by high density housing in the immediate local. Table 4 details the commuting, feeding and habitat features in a 1km radius of the site.

Table 4: Habitat features suitable for bat use in the general area.

Feature	Description
Water course	The Paddington Arm of the Grand Union Canal is located approx. 102.25m southeast. Yeading Brook is located approx. 717.84m southwest.
Water bodies	A boat port is located on the site. A water body forming part of Willow Tree Pond Nature Reserve is located approx. 109.86m northeast. A water body is located approx. 208.73m west. Engineer's Warf Moorings is located approx. 947.95m north.
Woodland	Woodland is located approx. 58.44m southwest.
Linear e.g. hedgerows	Garden hedgerows dominate the search area. With field margin hedgerows found to a much lesser extent.
Pasture/arable/grassland	Willow Tree Open Space is located approx. 346.77m northeast. King George's Field is located approx. 512.55m northeast. Yeading Playground is located approx. 481.62m north. Brookside is located approx. 409.46m

	southwest. Jubilee Park is located approx. 928.25m east. Some playing fields are found throughout the search area.
Other	n/a

3.5 Building, Tree or Other Structure

This section details the structures reference and description (see Figure 8 for Site Plan).

Building/tree/structure reference – B1 (Main Building)

3.5.1 Description

3.5.2 General

The site consists of a detached two storey commercial building with several occupiers including a restaurant (B1), hardstanding and a waterbody currently used as a marina.

3.5.3 External

B1 is a timber clad two storey building with a complex roof structure and multiple open gable ends. The roofing tiles are interlocking concrete tiles. Bird proofing implements, including pigeon spikes, are found throughout the roof. The soffit boxes, window and door frames are made of wood.

Figure 2: front of B1

Figure 3: part of the rear of B1

3.5.4 Internal

There are two loft voids within the property. Both have timber frames with fiberglass boarding. Both lofts are partially boarded and partially insulated with a mixture of rockwool and gypsum panels.

Figure 5: example of loft no. 1

Figure 6: example of loft no. 2

3.6 Bats, Evidence or Likelihood of Bat Presence

The following table details the results of the survey.

Table 5: Bats, evidence or likelihood of bats being present.

Bats found	No bats were found at the time of the survey.
Evidence of bat use	No evidence of bats was found at the time of the survey.
Potential for bat use	Level of likelihood of presence – B1 - Negligible B1 provides negligible potential for bats due to the lack of gaps leading to the loft voids. Additionally, there are a lack of gaps under the interlocking roof tiles and the wooden cladding. Furthermore, the soffit, window and door frames do not have sufficient gaps.

Figure 7: example of roofing tiles with no sufficient gaps

3.7 Supplementary Observations

Evidence of other protected species was not found. There are bird control measures in place, however with the number of pigeons on the roof, it is possible that breeding birds are present onsite.

Figure 8: Site Plan

4.0 Conclusions, Discussion and Recommendations

The following section details the conclusions, discussion, potential impacts and recommendations in the context of the proposed works.

Building/tree/structure reference – B1 (Main Building)

4.1 Conclusion and Discussion

The proposals include for the repurposing of one dwelling's first and second floor, the construction of one chandlery shop on the ground floor, the building of an additional two bed unit (circa 7000 sq ft) and an additional flat unit over the existing single storey WC/Shower block. The site consists of a detached two storey commercial building, hardstanding and a waterbody. No bats or evidence of bats were found on site. B1 provides negligible potential for roosting bats due to the lack of roosting features such as gaps under the roofing tiles, gaps leading to the loft voids etc. no further surveys will be required. Please see section 4.4 regarding enhancements.

4.2 Potential Impact

Impact assessments must be proportionate to the scale of the development (CIEEM, 2018) and the following details a proportionate impact assessment based on current information.

Table 6: Impact Assessment.

Impact	No impact foreseen.
Characterisation of unmitigated impact on the feature	n/a
Effect without mitigation	n/a
Enhancement	See Table 7
Significance of effects of residual impacts (after mitigation)	n/a

4.3 Recommendations

No impacts are foreseen; however, if bats are found during the development, all works must stop, and advice sought.

The findings outlined in this report are valid for one year, after which updated surveys will be required.

Enhancements and mitigation are recommended (please see Section 4.4 for further details).

4.4 Recommended Mitigation and Enhancements

The local planning authority have a duty to impose enhancements. The following table details the affordable and simple enhancements suitable for the site (Table 7).

Table 7: Table 7: Recommended enhancements

Work	Specification
Enhancements to provide a net gain as per the LPA's duty.	A minimum of three Chillon Woodstone bat boxes or similar boxes (Figure 9) will be hung on the building or a suitable tree at a minimum of 3m from ground level and face south/southwesterly. These boxes are known to be used by crevice and void dwelling species.  Figure 9: Chillon Woodstone Bat Box (British-made) Bat tubes can also be built into the building (Figure 10); these require no maintenance and can be hidden by facing the tube with the cladding/brick etc. for aesthetics.  Figure 10: Example of bat tube

Lighting	Any lighting near or shining onto any trees, especially those with bat boxes, should be designed to minimise the impact it has on potential bat roosting and commuting. Lighting should be in line with the BCT lighting guidelines (Bats and Lighting in the UK (Bat Conservation Trust, 2018) *https://www.theilp.org.uk/documents/guidance-note-8-bats-and-artificial-lighting/* This lighting should be of low level, be on downward deflectors and, ideally, be on PIR sensors. Using LED directional lighting can also be a way of minimising the light spill affecting the habitat. No up-lighting should be used. This will ensure that the roosting and commuting resources that the bats are likely to be using is maintained.

5.0 References

CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater and Coastal, September 2018. Chartered Institute of Ecology and Environmental Management, Winchester, online at https://www.cieem.net/data/files/ECIA%20Guidelines.pdf

Collins, J. (ed), (2016), Bat Surveys for Professional Ecologists: Good Practice Guidelines 3rd Edition, BCT, London

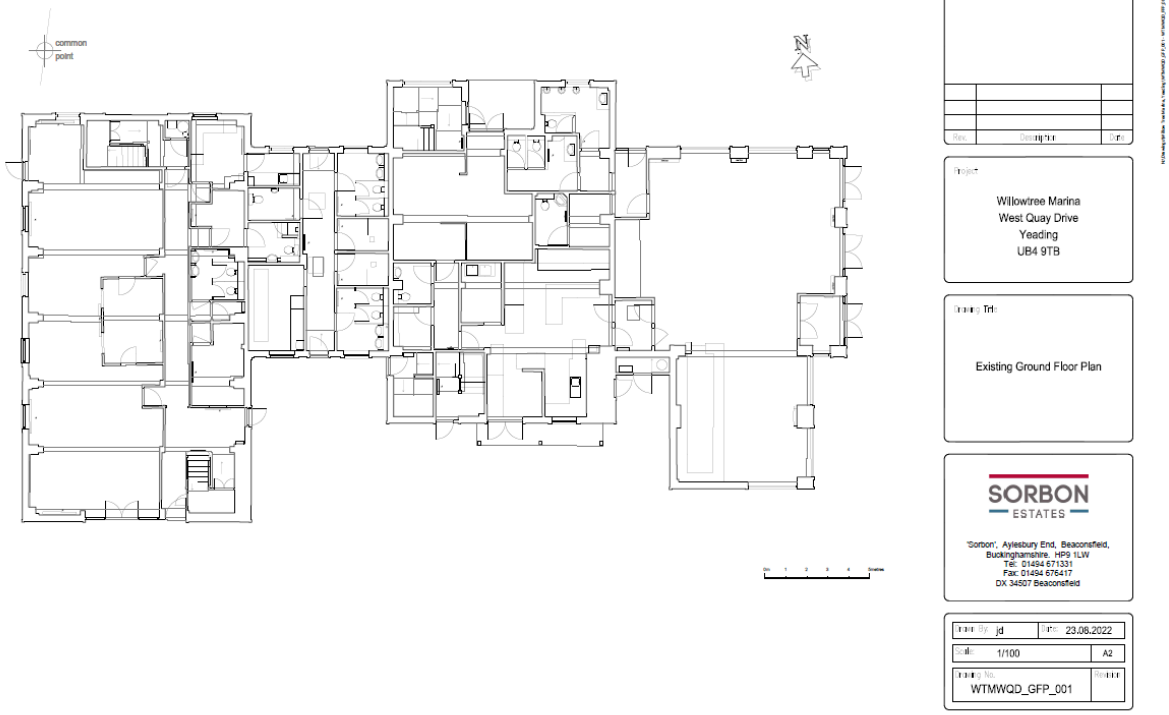
Google Earth, (2017), Located on site postcode, online

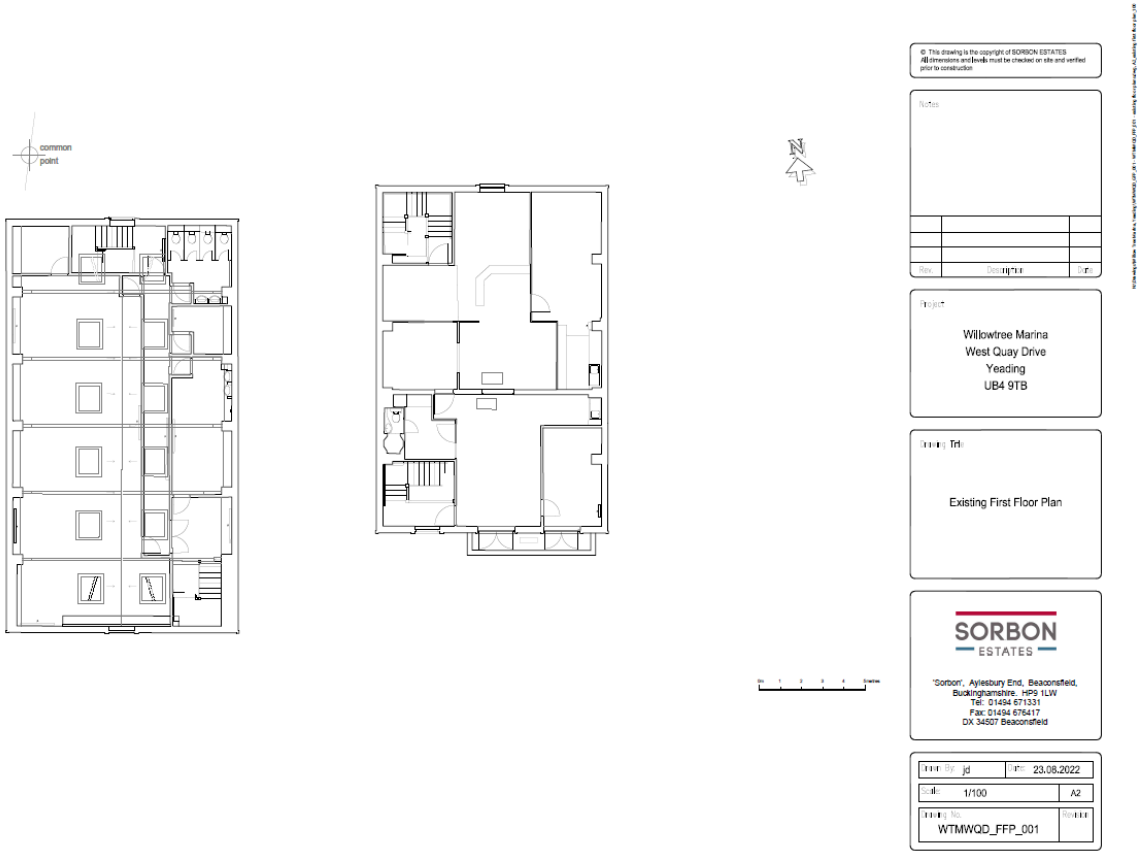
MAGIC, (2017): Magic maps, NEPS licences and designated sites, online http://www.magic.gov.uk/Login.aspx?ReturnUrl=%2fMagicMap.aspx, accessed as report date.

Mitchell-Jones, A.J. (2004), Bat Mitigation Guidelines, English Nature, Peterborough

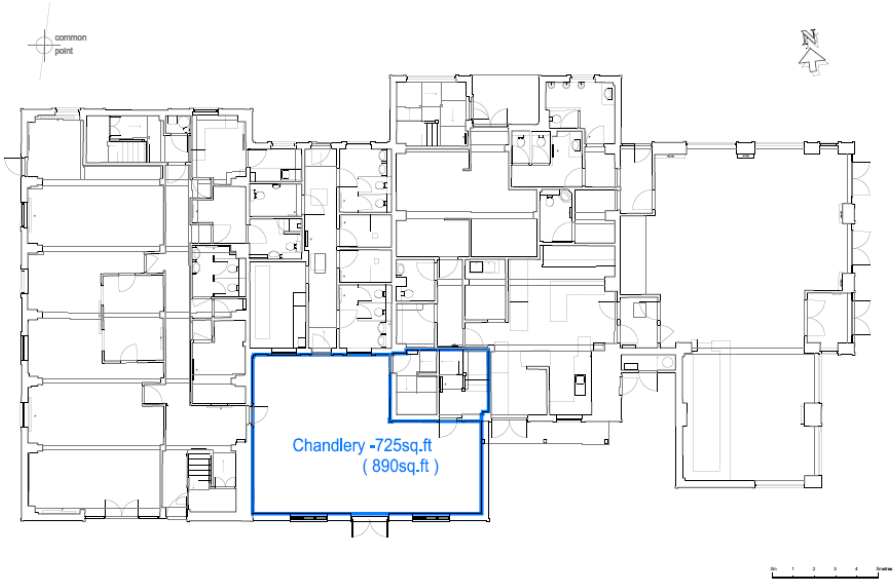
Records: London Bat Group (2022).

Appendix I – Site Plans





Existing Site Plan (Sorbon Estates, 2022)



Notes

Rev.	Description	Date

Project

Willowtree Marina
West Quay Drive
Yeading
UB4 9TB

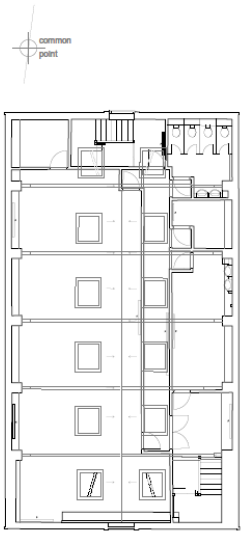
Drawing Title

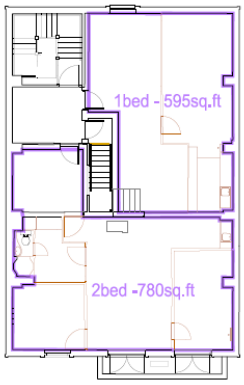
Proposed Ground Floor Plan

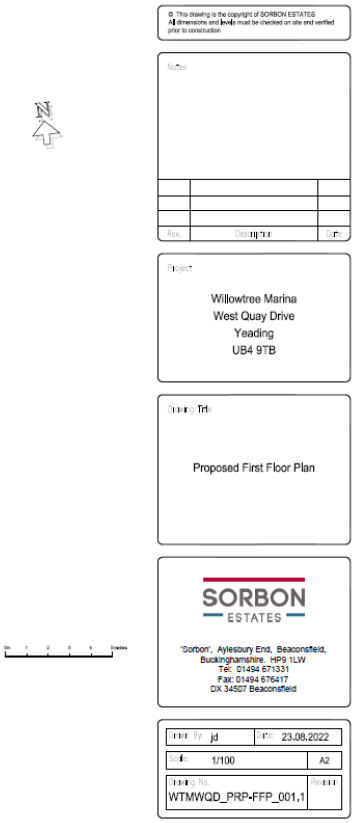
SORBON ESTATES

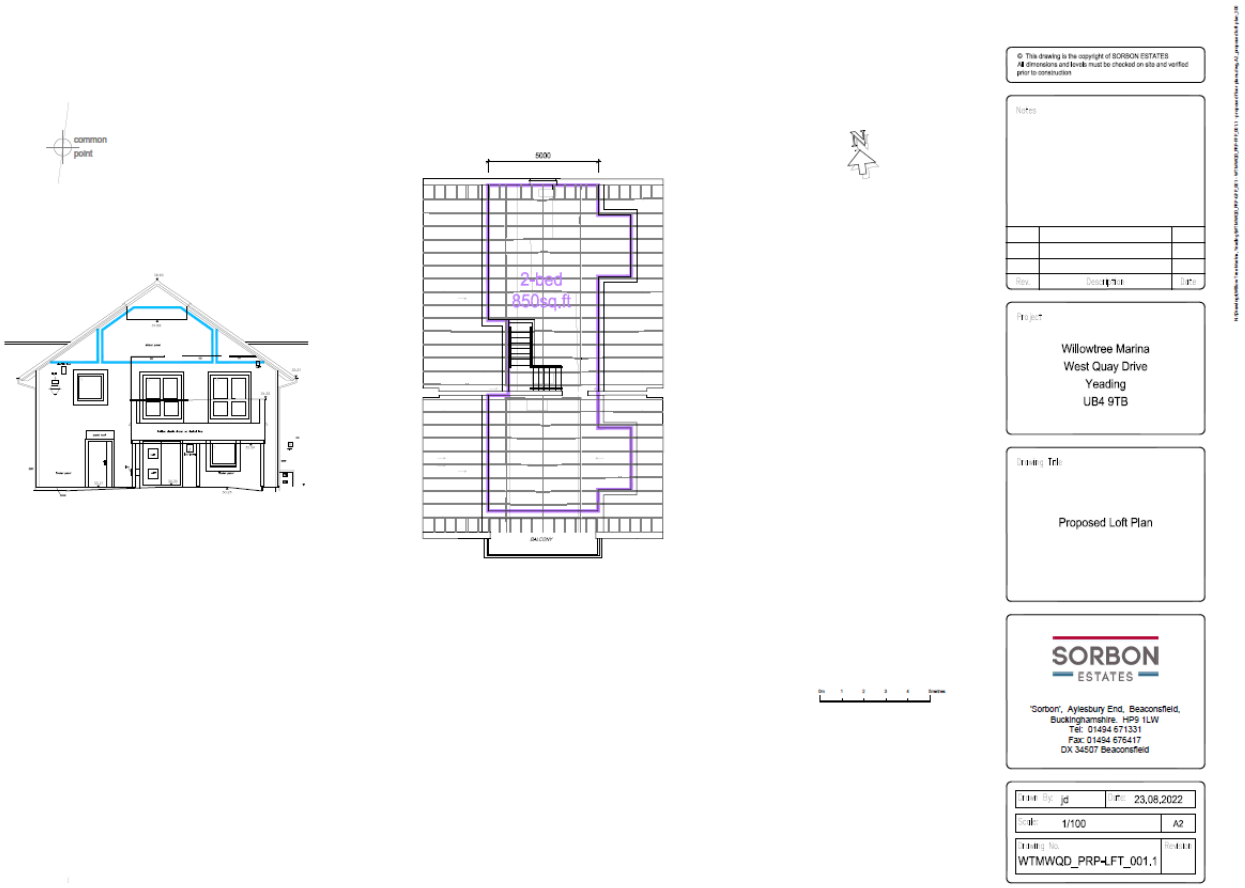
'Sorbon', Aylesbury End, Beaconsfield, Buckinghamshire, HP9 1LW
Tel: 01494 671331
Fax: 01494 676417
DX 34507 Beaconsfield

Drawn By: jd	Date: 23.08.2022
Scale: 1/100	A2
Drawing No.: WTMWQD_PRP-GFP_001	Revision


common point


1bed - 595sq.ft
2bed -780sq.ft


© This drawing is the copyright of SORBON ESTATES
All dimensions and levels must be checked on site and verified prior to construction
Notes
Rev
Description
Date
Project
Willowtree Marina
West Quay Drive
Yeading
UB4 9TB
Drawing Title
Proposed First Floor Plan
SORBON
ESTATES
"Sorbon", Aylesbury End, Beaconsfield, Buckinghamshire, HP9 1LW
Tel: 01494 671331
Fax: 01494 676417
DX 34507 Beaconsfield
Drawn By: jd
Date: 23.08.2022
Scale: 1/100
A2
Drawing No: WTMWQD_PRP-FFP_001,1
Revision



Proposed Site Plan (Sorbon Estates, 2022)