

wardell-armstrong.com

ENERGY AND CLIMATE CHANGE  
ENVIRONMENT AND SUSTAINABILITY  
INFRASTRUCTURE AND UTILITIES  
LAND AND PROPERTY  
MINING, QUARRYING AND MINERAL ESTATES  
WASTE RESOURCE MANAGEMENT



**ONE HOUSING GROUP**

**BANGOR WHARF, GEORGIANA STREET, LONDON**

**BAT ROOST ASSESSMENT SURVEY**

**MAY 2016**

*your earth our world*



**DATE ISSUED:** MAY 2016  
**JOB NUMBER:** ST14933  
**REPORT NUMBER:** 002

**ONE HOUSING GROUP**

**BANGOR WHARF, GEORGIANA STREET, LONDON**

**BAT ROOST ASSESSMENT SURVEY**

**MAY 2016**

**PREPARED BY:**

M. Procter Ecologist



**CHECKED BY:**

S. Wykes Associate Director



**APPROVED BY:**

C. House Director



*This report has been prepared by Wardell Armstrong LLP with all reasonable skill, care and diligence, within the terms of the Contract with the Client. The report is confidential to the Client and Wardell Armstrong LLP accepts no responsibility of whatever nature to third parties to whom this report may be made known.*

*No part of this document may be reproduced without the prior written approval of Wardell Armstrong LLP.*



## CONTENTS

1	INTRODUCTION .....	1
1.1	Terms of Reference.....	1
1.2	Site Context .....	1
1.3	Nomenclature.....	1
1.4	Legislative Framework .....	1
1.5	Caveats and Limitations .....	2
1.6	Quality Assurance & Environmental Management.....	3
1.7	Bats and Buildings.....	3
2	METHODOLOGY .....	4
2.1	Desk Study.....	4
2.2	External and Internal Building Inspection and External Tree Inspection .....	4
2.3	Dusk Emergence and Dawn Re-entry Surveys .....	4
3	RESULTS .....	6
3.1	Desk Study.....	6
3.2	External Inspection .....	6
3.3	Internal Inspection.....	9
3.4	Dusk Emergence and Dawn Re-entry Survey.....	9
4	CONCLUSIONS .....	10
5	RECOMMENDATIONS .....	11
6	REFERENCES .....	12

## APPENDICES

Appendix 1 Legislation Summary

## DRAWINGS

ST14933/002 Site Plan and Surveyor Locations

1:500@A3

## **1 INTRODUCTION**

### **1.1 Terms of Reference**

1.1.1 Wardell Armstrong LLP was commissioned by One Housing Group to undertake bat roost surveys at Bangor Wharf, Georgiana Street, London (centred on NGR TQ 293 840).

1.1.2 A Preliminary Ecological Appraisal carried out of the site by Wardell Armstrong in September 2015 identified one building and a weeping willow tree (*Salix babylonica*) as providing low bat roost potential, as per *Bat Surveys Good Practice Guidelines* (Hundt, 2012). This building and tree was therefore subject to one dusk bat survey and one dawn re-entry bat survey.

### **1.2 Site Context**

1.2.1 The site is known as Bangor Wharf, a small commercial complex consisting of five buildings and associated hardstanding. The site is bordered to the north east by Regents Canal, to the east by St Pancras Way, to the south by Georgiana Street and to the west by residential/commercial properties along Royal College Street.

1.2.2 Camden Road overground station is 1.2km to the north of the site. The surrounding wider land use is dominated by residential/commercial development.

### **1.3 Nomenclature**

1.3.1 All flora and fauna names following the National Biodiversity Network (NBN) Gateway (NBN, 2013). The common and scientific name of species/taxa is provided (if available) when first mentioned in the text, with only the vernacular name referred to thereafter.

### **1.4 Legislative Framework**

1.4.1 In Great Britain all bat species and their roosts are fully protected under the Wildlife and Countryside Act 1981 (as amended) and also included as European Protected Species in the Conservation of Habitats and Species (Amendment) Regulations 2012 (which implements the EC Habitats and Species Directive).

1.4.2 The legislation makes it illegal to damage, obstruct or destroy bat roosts or disturb bats whilst occupying their roost. A roost is protected whether or not bats are present. A licence is required from Natural England to disturb or close a roost site.

1.4.3 A summary of legislation and policy surrounding bats is provided in Appendix 1.

1.4.4 Nine species of bat are listed as Local Biodiversity Action Plan (LBAP) species, three of which are listed as UKBAP species indicated with bold text below. LBAP bat species include:

- Brandt's bat *Myotis brandti*
- **Brown long-eared** *Plecotus auritus*
- Common pipistrelle *Pipistrellus*
- Daubenton's bat *Myotis daubentonii*
- Leisler's bat *Nyctalus leisleri*
- Natterer's bat *Myotis nattereri*
- **Noctule** *Nyctalus noctule*
- **Soprano pipistrelle** *Pipistrellus pygmaeus*
- Whiskered bat *Myotis mystacinus*

## 1.5 Caveats and Limitations

1.5.1 Ecological surveys are limited by factors that affect species presence such as time of year, weather, migration patterns and behaviour. The surveys were undertaken in good weather in May, considered to be within the 'optimal' survey period for bats and consequently there were no constraints to the survey.

1.5.2 The absence of desk study records has not been relied upon to infer absence of a species/habitat. Often, the absence of records is a result of under-recording within the given search area.

1.5.3 Echolocation calls of the brown long-eared bats are significantly quieter than many other bat species within this country, therefore this species can be difficult to record and may at times go unrecorded.

1.5.4 Individual species from the genera *Myotis* and *Nyctalus* are difficult to distinguish from sonogram calls alone. Where an individual species cannot be determined a genus is recorded.

## **1.6 Quality Assurance & Environmental Management**

1.6.1 All Ecologists employed by WA are members of CIEEM, and are bound by its code of professional conduct. All surveys and assessments have been undertaken with reference to the recommendations given in BS 42020.

## **1.7 Bats and Buildings**

1.7.1 A number of bat species are closely associated with buildings; these include pipistrelle species *Pipistrellus* spp.. Bats may use buildings to roost throughout the year, but maternity roosts (high status roosts) would be found in buildings between May and August.

1.7.2 Within buildings bats may roost in very small spaces, cracks and crevices but depending on the species, can also hang free which makes them easily visible. Externally they may roost under boarding or tiles, behind soffits and fascia's, between window frames and brickwork and under roofing felt. Within buildings they can roost inside roof spaces along the ridge beam, around the gable end and chimney breast (Bat Conservation Trust, 2012).

## **2 METHODOLOGY**

### **2.1 Desk Study**

2.1.1 The desktop study was informed by review of available information provided by GiGL (the biological records centre for Greater London) for a 2km search radius from the site's central grid reference.

### **2.2 External and Internal Building Inspection and External Tree Inspection**

2.2.1 The buildings on the site and any trees were assessed for potential to support roosting bats during the Extended Phase 1 habitat survey undertaken in September 2015.

2.2.2 Building 1 was also accessible internally and was therefore subject to an internal inspection.

2.2.3 Survey methodologies within the Joint Nature Conservation Committee *Bat Workers' Manual* (Mitchell-Jones *et al.*, 2004) and Bat Conservation Trusts' *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (Collins, 2016) were used as guidance.

2.2.4 Features that could indicate the presence of roosting bats were searched for using binoculars and a high powered torch. Such features include entry points such as cracks and holes, staining, droppings, feeding remains and live or dead bats.

### **2.3 Dusk Emergence and Dawn Re-entry Surveys**

2.3.1 In addition to external and internal inspections, a dusk emergence and a dawn re-entry survey were undertaken on the evening of the 11 May 2016 and the morning of 12 May 2016. This involved two surveyors standing in positions that provided full coverage of the potential access point for bats. Locations of surveyors are shown on Drawing No. ST14933-002.

2.3.2 The dusk emergence survey was undertaken in the evening approximately twenty minutes before sunset and a subsequent 2 hours after sunset. The dawn re-entry survey was undertaken 2 hours prior to sunrise and 15 minutes subsequently.

2.3.3 All bat activity was recorded using a Batbox Duet bat detector (Stag Electronics, Steyning, West Sussex) used to detect bats.

2.3.4 The weather conditions during the surveys are summarised in Table 1 below.

<b>Table 1: Weather Conditions</b>				
	<b>Dusk emergence</b>		<b>Dawn re-entry</b>	
<b>Date</b>	<b>11 May 2016</b>		<b>12 May 2016</b>	
<b>Sunset/Sunrise</b>	<b>20:41</b>		<b>05:14</b>	
<b>Start/End Time</b>	20:20	22:40	03:20	05:30
<b>Temperature</b>	16°C	15°C	14°C	14°C
<b>Wind</b>	Force 1	Force 1	Force 2	Force 1
<b>Precipitation</b>	Dry	Dry	Dry	Dry
<b>Cloud Cover</b>	7/8	7/8	5/8	7/8



### **3 RESULTS**

#### **3.1 Desk Study**

3.1.1 Seven species of bat have been recorded within 2km of Bangor Wharf. These species include records for Natterer's bat (*Myotis nattereri*), common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle (*Pipistrellus pygmaeus*), Daubenton's bat (*Myotis daubentonii*), noctule (*Nyctalus noctula*), Leisler's bat (*Nyctalus leisleri* and Narthusius's pipistrelle (*Pipistrellus narthusii*).

3.1.2 The closest record, was recorded in 2005, 51 m north-west of the site for a common pipistrelle. The next closest records were located 172m north of the site, recorded in 2012, for soprano pipistrelle, Narthusius's pipistrelle and noctule.

#### **3.2 External Inspection**

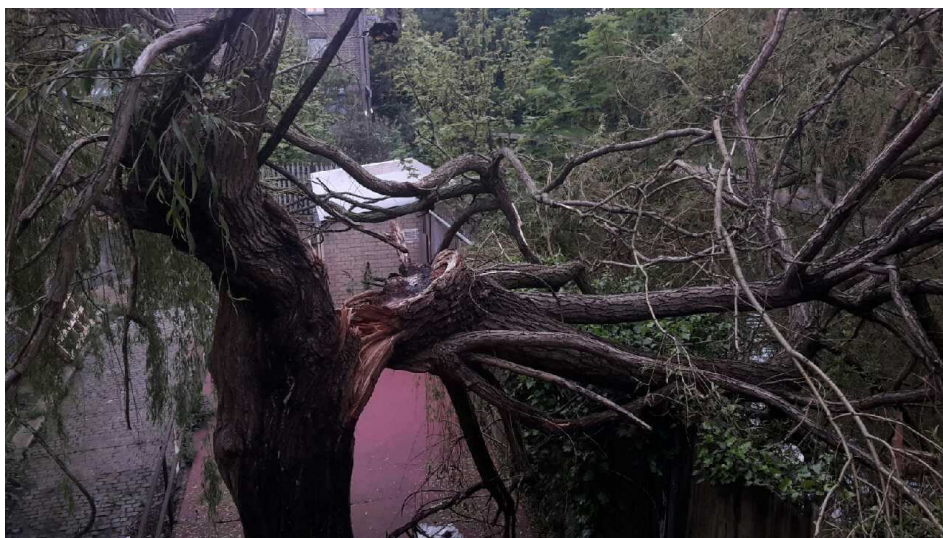
3.2.1 One building, building B1, and one willow tree were identified as having low potential to support roosting bats in September 2015. All other buildings were assessed as having negligible potential as they were all well sealed buildings with no access points for bats.

3.2.2 Building 1 was noted as being of bare brick construction, with a flat roof covered in roofing felt. The walls facing into the site had multiple down pipes and windows and there were a number of small holes where piping/wiring used to protrude, potentially providing access points for some bat species. This was the case when revisiting the site in May 2016. (see Plate 1).

3.2.3 The single weeping willow within the site boundary in the eastern corner was noted as having a small hole in its trunk in May 2015, however, during late 2015, a large storm caused significant damage to the tree drastically reducing its suitability to support roosting bats. Though several holes were created by the storm, all holes and access points created were open to the elements, thereby providing no shelter to roosting bats (see Plates 2 and 3. As a result, the tree was considered to offer negligible potential to support roosting bats at the time of the May 2016 visit. Nevertheless, the tree was included within the scope of the dusk emergence and dawn re-entry survey for completeness.



**Plate 1 Building 1**



**Plates 2 & 3 Storm damaged willow tree**

### **3.3 Internal Inspection**

3.3.1 During the September 2015 visit, building 1 was accessible and the internal inspection noted that there was no insulation present in the roof cavities and the interior of the roof appeared sound, with no obvious access points. The soffits were generally well joined with no visible entrance points.

### **3.4 Dusk Emergence and Dawn Re-entry Survey**

3.4.1 No bats were observed emerging from or entering building 1 or the weeping willow tree throughout the course of the survey.

3.4.2 Very limited bat activity was recorded on the site throughout the duration of the survey, with activity largely comprising of foraging and commuting common pipistrelle and noctule along the adjacent canal. After 4:40am, no further bat activity was recorded.

## **4 CONCLUSIONS**

- 4.1.1 Bats do use the adjacent canal corridor for foraging and commuting, however, no evidence of roosting bats within building 1 or the weeping willow tree was found during the surveys.
- 4.1.2 It is judged that the surveys undertaken are sufficient to accurately confirm the absence of roosting bats from building 1 and the weeping willow tree.

## 5 RECOMMENDATIONS

- 5.1.1 No further surveys for bats are considered necessary prior to demolition or removal of the weeping willow tree, however if the works do not commence within 12 months of the date of these surveys, then updated surveys may be required.

## 6 REFERENCES

Bat Conservation Trust (2012) *Bats and Buildings*. [pdf] Available at: [http://www.bats.org.uk/data/files/BatsandBuildings\\_2012.pdf](http://www.bats.org.uk/data/files/BatsandBuildings_2012.pdf) .

Collins J. (ed) (2016) *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (3<sup>rd</sup> edn). Bat Conservation Trust, London.

Hundt (2012). *Bat Surveys – Good Practice Guidelines* (2nd Edition). Bat Conservation Trust, London.

Mitchell-Jones, A.J, & McLeish, A.P. Ed., (2004), *3rd Edition Bat Workers' Manual*, JNCC.

National Biodiversity Network (2013) NBN Gateway <http://data.nbn.org.uk/>

**Appendix 1**  
**Legislation Summary**



## Legislation

All UK bat species are listed under Schedule 2 of the Conservation of Habitats and Species Regulations 2012 and as such receive protection under Regulation 41 of these Regulations, which, among other things, makes it an offence to:

- Deliberately capture or kill a bat;
- Deliberately disturb a bat; and
- Damage or destroy a breeding site or resting place of a bat.

Under the 2012 Regulations, disturbance of bats includes in particular any disturbance which is likely to:

- Impair their ability to survive, breed or reproduce, or to rear or nurture their young or to hibernate or migrate; and
- Significantly affect the local distribution or abundance of the species in question.

European Protected Species (EPS) licenses can be granted by Natural England in respect of development to permit activities that would otherwise be unlawful under the 2012 Regulations, providing that favourable conservation status can be maintained.

All UK bat species are also listed under Schedule 5 of the Wildlife and Countryside Act 1981 and therefore receive protection under Section 9 of this Act (as amended by the Countryside and Rights of Way Act 2000). Among other things, this legislation makes it a criminal offence to:

- Intentionally kill, injure or take a wild bat;
- Intentionally or recklessly damage, destroy or obstruct access to any place that a wild bat uses for shelter or protection; and
- Intentionally or recklessly disturb any wild bat whilst it is occupying a structure or place that it uses for shelter or protection.

The National Planning Policy Framework (NPPF) (Department for Communities and Local Government (DCLG), 2012) sets out government policy regarding consideration of biodiversity in planning decisions. Under the NPPF the presence of a protected species is a material consideration when a planning authority is considering a development proposal that, if carried out, would be likely to result in harm to the species or its habitat.

The NPPF states that:

*‘When determining planning applications, local planning authorities should aim to conserve and enhance biodiversity by applying the following principles:*

- if significant harm resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;*
- proposed development on land within or outside a Site of Special Scientific Interest (SSSI) likely to have an adverse effect on a SSSI (either individually or in combination with other developments) should not normally be permitted. Where an adverse effect on the site’s notified special interest features is likely, an exception should only be made where the benefits of the development, at this site, clearly outweigh both the impacts that it is likely to have on the features of the site that make it of special scientific interest and any broader impacts on the national network of SSSIs;*
- development proposals where the primary objective is to conserve or enhance biodiversity should be permitted;*
- opportunities to incorporate biodiversity in and around developments should be encouraged;*
- the following wildlife sites should be given the same protection as European sites: potential Special Protection Areas (SPA) and possible Special Areas of Conservation (SAC); listed or proposed Ramsar sites; and sites identified, or required, as compensatory measures for adverse effects on European sites, potential SPAs, possible SACs, and listed or proposed Ramsar sites.’*

Under Section 40 of the Natural Environment and Rural Communities (NERC) Act 2006 public bodies, including Local and Regional Planning Authorities have a duty to ‘have regard’ to the conservation of biodiversity in England when carrying out their normal functions, which includes consideration of planning applications. In compliance with Section 41 of the Act, the Secretary of State has published a list of species considered to be of principal importance for conserving biodiversity in England. This is known as The England Biodiversity List, of which there are 941 species, all of which make up the UK Biodiversity Action Plan (BAP) Priority Species. Regional Planning Bodies and Local Planning Authorities will use it to identify the species that should be afforded priority when applying the requirements of the NPPF to promote the protection and recovery of priority species populations, linked to national and local targets.

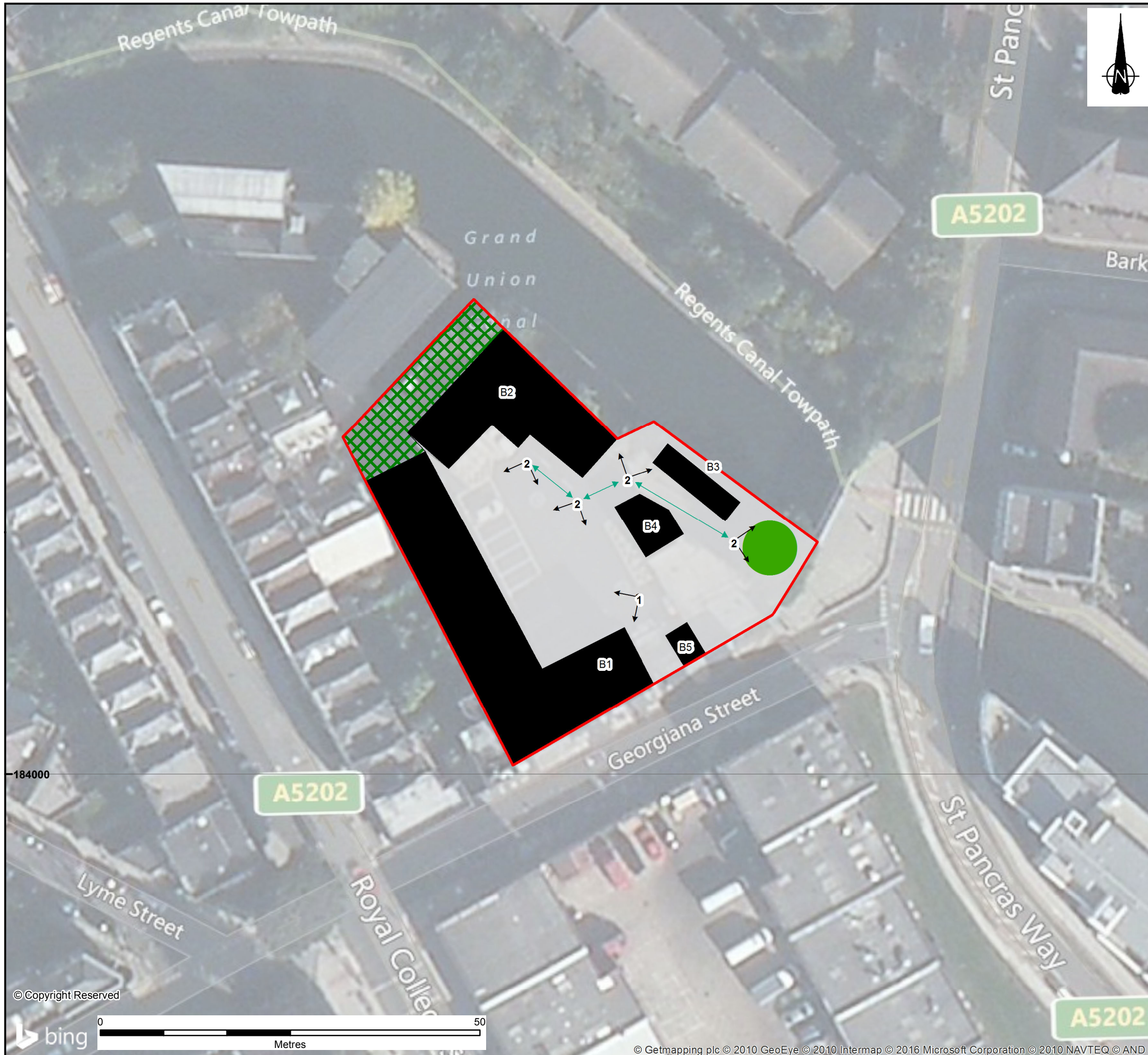
Seven bat species are listed as Biodiversity Action Plan (BAP) Priority Species within the UK. These species are:

- Barbastelle *Barbastella barbastellus*
- Bechstein's *Myotis bechsteinii*
- Noctule *Nyctalus noctula*
- Soprano pipistrelle *Pipistrellus pygmaeus*
- Brown long-eared *Plecotus auritus*
- Greater horseshoe *Rhinolophus ferrumequinum*
- Lesser horseshoe *Rhinolophus hipposideros*

Bat foraging areas and commuting routes are not directly protected under the wildlife protection legislation described above. However, loss of important foraging areas and/or commuting routes could potentially constitute a disturbance offence, as defined by the 2012 Regulations. The loss of a commuting route providing the only access to a roost could also potentially constitute indirect damage/destruction of a breeding site/resting place under the 2012 Regulations and damage/destruction/obstruction of a place used for shelter/protection under the Wildlife and Countryside Act 1981.

Even where loss of foraging habitats and commuting routes does not constitute an offence under the wildlife protection legislation, the presence of such habitats is still a material consideration under the NPPF and planning authorities are legally obliged to have regard for such habitats under the NERC Act 2006.

## **DRAWINGS**



**KEY**

- Site Boundary
- Scattered scrub
- B1 Buildings
- Hardstanding
- Individual Tree
- Surveyor Route
- ↔ Surveyor Locations & Lines of Sight

Notes:  
Coordinates to British National Grid.  
Boundaries are indicative. Aerial imagery shown for context purposes only.  
Classifications in accordance with Handbook for Phase 1 Habitat Survey - A technique for Environmental Audit (JNCC 2010).

REVISION	DETAILS	DATE	DRAWN	CHKD	APP'D
CLIENT					
One Housing Group					
PROJECT					
Bangor Wharf, Georgiana Street					
DRAWING TITLE					
Bat Survey					
DRG No	SCALE	@ A3	DATE	16/05/2016	
ST14933-002	1:500				
DRAWN BY	CHECKED BY	APPROVED BY			
JP	SW	SW			
<input checked="" type="checkbox"/> STOKE-ON-TRENT (HEAD OFFICE)	TEL 0845 111 7777	<input type="checkbox"/> CARDIFF	TEL 029 2072 9191		
<input type="checkbox"/> NEWCASTLE UPON TYNE	TEL 0191 232 0943	<input type="checkbox"/> LEIGH	TEL 01942 260101		
<input type="checkbox"/> WEST BROMWICH	TEL 0121 586 0909	<input type="checkbox"/> SHEFFIELD	TEL 0114 245 6244		
<input type="checkbox"/> LONDON	TEL 020 7267 2872	<input type="checkbox"/> EDINBURGH	TEL 0131 555 3311		
		<input type="checkbox"/> TAUNTON	TEL 01823 703100		

© Copyright Reserved



STOKE-ON-TRENT  
Sir Henry Doulton House  
Forge Lane  
Etruria  
Stoke-on-Trent  
ST1 5BD  
Tel: +44 (0)178 227 6700

BIRMINGHAM  
Two Devon Way  
Longbridge Technology Park  
Longbridge  
Birmingham  
B31 2TS  
Tel: +44 (0)121 580 0909

CARDIFF  
22 Windsor Place  
Cardiff  
CF10 3BY  
Tel: +44 (0)292 072 9191

CROYDON  
Melrose House  
42 Dingwall Road  
Croydon  
Surrey  
CR0 2NE  
Tel: +44 (0)20 8680 7600

CUMBRIA  
Cocklakes Yard  
Carlisle  
Cumbria  
CA4 0BQ  
Tel: +44 (0)122 856 4820

EDINBURGH  
Great Michael House  
14 Links Place  
Edinburgh  
EH6 7EZ  
Tel: +44 (0)131 555 3311

GLASGOW  
2 West Regent Street  
Glasgow  
G2 1RW  
Tel: +44 (0)141 433 7210

LONDON  
46 Chancery Lane  
London  
WC2A 1JE  
Tel: +44 (0)207 242 3243

MANCHESTER (City Centre)  
76 King Street  
Manchester  
M2 4NH  
Tel: +44 (0)161 817 5038

MANCHESTER (Greater)  
2 The Avenue  
Leigh  
Greater Manchester  
WN7 1ES  
Tel: +44 (0)194 226 0101

NEWCASTLE UPON TYNE  
City Quadrant  
11 Waterloo Square  
Newcastle upon Tyne  
NE1 4DP  
Tel: +44 (0) 191 232 0943

SHEFFIELD  
Unit 5 Newton  
Business Centre Newton  
Chambers Road Thornccliffe  
Park Chapeltown  
Sheffield  
S35 2PH  
Tel: +44 (0)114 245 6244

TAUNTON  
Victoria House  
Victoria Street  
Taunton  
Somerset  
TA1 3JA  
Tel: +44 (0)182 370 3100

TRURO  
Baldhu House  
Wheal Jane Earth  
Science Park Baldhu  
Truro  
TR3 6EH  
Tel: +44 (0)187 256 0738

International offices:  
ALMATY  
29/6 Satpaev Avenue  
Regency Hotel Office  
Tower Almaty  
Kazakhstan  
050040  
Tel: +7(727) 334 1310

MOSCOW  
21/5 Kuznetskiy Most St.  
Moscow  
Russia  
Tel: +7(495) 626 07 67