Taylor Wimpey North Thames

Roche Garden
Update Bat Report

August 2010

Keystone Environmental
Practical Ecological Solutions

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Revision	Date	Author	Checked	Approved
0	13/08/10	J Cook	M Nixon	S Bracken

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Contents

1.0 Introduction

Background

1.1 In August 2010, Keystone Environmental Ltd was instructed by DPP, on behalf of Taylor Wimpey, to undertake a building inspection for bat roost potential/evidence and a dusk/dawn emergence/activity survey of a proposed residental development site at Roche Garden, Welwyn Garden City, Hertfordshire (central OS grid reference: TL 240 125).

1.2 The survey was required to support a new planning application, following refusal of the original development proposal. Bat surveys, including an inspection of all buildings and trees for bat roost potential/evidence and emergence/activity suveys, were previously undertaken at the site by Keystone Environmental in August 2007 for the original planning application, following an Extended Phase 1 Habitat Survey of the site in the same month. Further details regarding these surveys can be found in the following reports:

- *7481/1 Roche Gardens, Welwyn Garden City – Phase 1 Habitat Survey Report, August 2007* (Keystone Environmental Ltd, 2007);
- *7481/2 Roche Garden, Welwyn Garden City – Preliminary Bat Survey, August 2007* (Keystone Environmental Ltd, 2007);
- *7481/1/2 Roche Garden – Bat Activity, August 2007* (Keystone Environmnetal Ltd, 2009)

1.3 During the 2007 surveys, 10 of the buildings were assessed as having low potential to support roosts of crevice dwelling bat species. The remaining buildings were assessed as having negligible bat roost potential. One of the few mature trees within the site was also assessed as having low bat roost potential. However, no evidence of roosting bats was found during any of the surveys and only low levels of bat activity (Common Pipistrelle only) were recorded within the site.

Aims and Objectives

1.4 The aim of the survey was to undertake a re-appraisal of the remaining buildings to ascertain the following:

- Presence/absence of bat roosts
- Status of roosts if present
- Whether additional surveys are required
- Whether a European Protected Species (EPS) licence is required to ensure legal compliance
- Which type of mitigation measures would need to be employed

Site Characteristics

1.5 At the time of the 2007 surveys, the site comprised 16 buildings of various sizes (up to 6 storeys high), which had previously been associated with a pharmaceutical development company. There was an extensive basement network beneath the site, accessible from the buildings above. Most of the area surrounding the buildings was hardstanding, with small areas of amenity grassland and ornamental shrubs/trees.

1.6 Since the 2007 surveys, all but 3 of the original buildings have been demolished (see *Drawing Number: 7481/2/2wor1*). The majority of the site at the time of the 2010 survey comprises bare earth and rubble. The remaining buildings (1 - 3) are all situated towards the north-east corner of the site. A small area of rough grassland with several ornamental shrubs and trees is situated adjacent to the remaining buildings. Several young trees remain along the northern boundary of the site, including the mature sweet chestnut identified as having low bat roost potential in 2007.

1.7 The land surrounding the site still comprises a mixture of industrial, commercial and residential buildings and associated infrastructure. However, the industrial builidings imediately to the north of the site have also been demolished, so this plot is also now predominantly bare ground and rubble.

Legislation, Planning Context and Status

1.8 As all species of bat are listed on Schedule 5 of The Wildlife and Countryside Act (1981), they receive protection under Section 9 of this Act. This has been amended several times, most recently by the Countryside and Rights of Way Act 2000, which added 'or recklessly' to Section 9(4) (a) and (b). In summary, it is a criminal offence to.

- intentionally kill, injure or take a wild bat
- be in possession of, or control, any live or dead wild bat or part of, or anything derived from a wild bat
- intentionally or recklessly damage, destroy or obstruct access to any place that a wild bat uses for shelter or protection
- intentionally or recklessly disturb any wild bat whilst it is occupying a structure or place that it uses for shelter or protection
- transport for sale or exchange, or offer for sale or exchange a live or dead bat or any part of a bat.

1.9 All species of bat are also listed in Schedule 2 of the Conservation of Habitats and Species Regulations 2010 and as such receive protection under Regulation 41 of these Regulations which make it an offence to:

- deliberately capture or kill a bat
- deliberately disturb a bat
- damage or destroy a breeding site or resting place of a bat
- keep, transport, sell or exchange, or offer for sale or exchange a live or dead bat or any part of a bat.

1.10 Under the 2010 Regulations, disturbance of bats includes 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
- Significantly affect the local distribution or abundance of the species in question

1.11 Since 2007 it is no longer a defence to show that the killing, capture or disturbance of a species covered by the Regulations or the destruction or damage of their breeding sites or resting places was the incidental and unavoidable result of a lawful activity.

1.12 EPS licenses can be granted in respect of development to permit activities that would otherwise be unlawful under European legislation.

1.13 Planning Policy Statement 9 (PPS9): Biodiversity and Geological Conservation (ODPM, 2005) states that:

1.14 *'The aim of planning decisions should be to prevent harm to biodiversity and geological conservation interests. Where granting planning permission would result in significant harm to those interests, local planning authorities will need to be satisfied that the development cannot reasonably be located on any alternative sites that would result in less or no harm. In the absence of any such alternatives, local planning authorities should ensure that, before planning permission is granted, adequate mitigation measures are put in place. Where a planning decision would result in significant harm to biodiversity and geological interests which cannot be prevented or adequately mitigated against, appropriate compensation measures should be sought. If that significant harm cannot be prevented, adequately mitigated against, or compensated for, then planning permission should be refused.'*

1.1 Under PPS9 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.

1.2 Under Section 40 of the Natural Environment and Rural Communities 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 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 PPS9 to maintain, restore and enhance species and habitats.

1.3 Seven bat species are UK BAP (2007) Priority Species. These are:

- Barbastelle
- Bechstein's
- Noctule
- Soprano Pipistrelle

- Brown Long-eared
- Greater Horseshoe
- Lesser Horseshoe

1.4 Natterer's bat is the only bat species currently listed on Hertfordshire Local Biodiversity Action Plan (Hertfordshire Environmental Forum, 2009).

2.0 Methodology

Building Re-Inspection

2.1 An internal and external inspection of the 3 remaining buildings was conducted on 5th August by a Licensed Bat Worker (Natural England Licence Number: 20093273) and a second experienced bat ecologist. Weather conditions on the day of the survey were dry and sunny with patchy cloud and light wind.

2.2 The inspection involved a detailed search of all buildings, where accessible, for potential bat access points and roost features, as well as evidence of use by bats, such as presence of live or dead bats, droppings, staining *etc.* High powered torches were used to aid the internal inspection.

2.3 In the absence of any evidence, structures have been assigned a rating of suitability from negligible to high potential for supporting bats. The rating is based on the location of the structure in the surrounding landscape, the number and type of features suitable for use by bats and the surveyor's experience. For example, a structure with a high level of regular disturbance and few opportunities for access by bats that is in a highly urbanised area with few or no mature trees, parkland, woodland or wetland would have negligible potential. Conversely, a pre 20th century or early 20th century building with many features suitable for use by bats close to good foraging habitat would have high potential.

Emergence/Activity Survey

2.4 Dusk and dawn surveys were undertaken on 5th and 6th August respectively to check for bats emerging from or re-entering roosts not identified by the building inspection and assess the level and type of bat activity within the site.

2.5 The surveys were undertaken by a Licensed Bat Worker (Natural England Licence Numbers: 20093273 and a second experienced bat ecologist, positioned to the north-west of building 3 and south-east of building 2 respectively. Both surveyors were equipped with Batbox Duet combined frequency division and heterodyne bat detectors, connected to digital audio recording devices.

2.6 The dusk survey commenced approximately 30 minutes before local sunset and lasted for 2 hours. During the survey the weather was dry and overcast, with no wind and temperatures around 17°C.

2.7 The dawn survey comennced 1½ hours before local sunrise and ended at sunrise. During the survey the sky was mostly clear and there was no wind or rain. The temperature was around 10°C.

2.8 During the dusk and dawn surveys the surveyors monitored the few potential bat roost access points identified during the building inspection and recorded all bat passes on a detailed site plan.

Limitations

2.9 The results of the survey and assessment work undertaken by Keystone Environmental are representative at the time of surveying.

2.10 Keystone Environmental staff and their sub-consultants will endeavour to identify the presence of protected species wherever possible on-site, where this falls within the agreed scope of works.

2.11 Up to date standard methodologies will be used, which are accepted by Natural England and other statutory conservation bodies. No responsibility will be accepted where these methodologies fail to identify all species on-site. Keystone Environmental cannot take responsibility where Government, national bodies or industry subsequently modify standards.

2.12 For health and safety reasons, it was not possible to access all parts of the basement beneath buildings 2 and 3 during the building inspection.

Nomenclature

2.13 The English name only of flora and fauna species is given in the main text of this report; however, scientific names are used for invertebrates where no English name is available. A list of all species recorded on site and those mentioned in the text but not necessarily occurring on site together with scientific names is given in *Appendix 1*. Vascular plants and Charophytes follow the nomenclature of The Botanical Society for the British Isles (BSBI) 2007 database (BSBI, 2008) with all other flora and fauna following the Nameserver facility of the National Biodiversity Network Species Dictionary (http://www.nhm.ac.uk/nbn/), which is managed by the Natural History Museum.

3.0 Survey Results

Building Inspection

3.1 No evidence of bat roosts was found in any of the 3 surveyed buildings and none of the structures were found to have changed in any way since the 2007 inspection that would warrant alteration of the assessments of bat roost potential made in the previous bat report:

- Building 1 – Negligible
- Building 2 – Low
- Building 3 – Low

3.2 However, it should be noted that the basement beneath buildings 2 and 3 does now have limited access (via 2 windows which were previously grilled) through which bats could potentially gain entry. While no evidence of bats was found in the sections of the basement that could be accessed during the building inspection, there is now a low probability that bats could hibernate within the basement during the winter.

Emergence/Activity Survey

3.3 During the course of the dusk and dawn surveys no bats were observed emerging from or re-entering any of the buildings.

3.4 As in 2007, only 1 species of bat, Common Pipistrelle, was recorded foraging within the site, predominantly towards the north-west corner. The level of activity was very low and it is likely that only 1 or 2 bats use the site in this way.

3.5 All of the survey data is presented in *Appendix 1* and *Drawing Number: 7481/2/2wor1*.

4.0 Conclusions

4.1 The only potentially significant changes since the 2007 bat surveys are the new potential bat access points into the basement beneath buildings 2 and 3. While it is considered that there is only a low probability that the basement is actually used by bats (possibly as a winter hibernation site), it would be prudent to determine whether the basement is used by bats prior to any works which would affect it.

4.2 Given that the whole basement cannot currently be accessed for inspection, it is recommended that Anabats (automated remote bat detectors) are placed just inside the basement, next to the 2 potential access points, during the autumn to record any bats which might enter for the winter.

4.3 If it can be established using the Anabats that the basement is not used by bats, it is recommended that all the potential access points to the basement are sealed to prevent the establishment of any hibernation roosts in the period prior to the commencement of works.

4.4 In the unlikely event that bats are found to hibernate within the basement, it may be necessary to obtain a European Protected Species (EPS) Licence from Natural England before any works affecting the basement can be undertaken. This would most probably require further detailed inspection of the basement during the winter in order to inform the licence application.

5.0 References

Countryside and Rights of Way Act 2000, (c.37), London: HMSO.

Hertfordshire Environmental Forum, HEF (2009). *Hertfordshire Local Biodiversity Action Plan*. [Online]. Available at: http://hef.org.uk/nature/biodiversity [accessed on 13th August 2010].

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ODPM (2005). Planning Policy Statement 9: Biodiversity and Geological Conservation (PPS9). ODPM: London.

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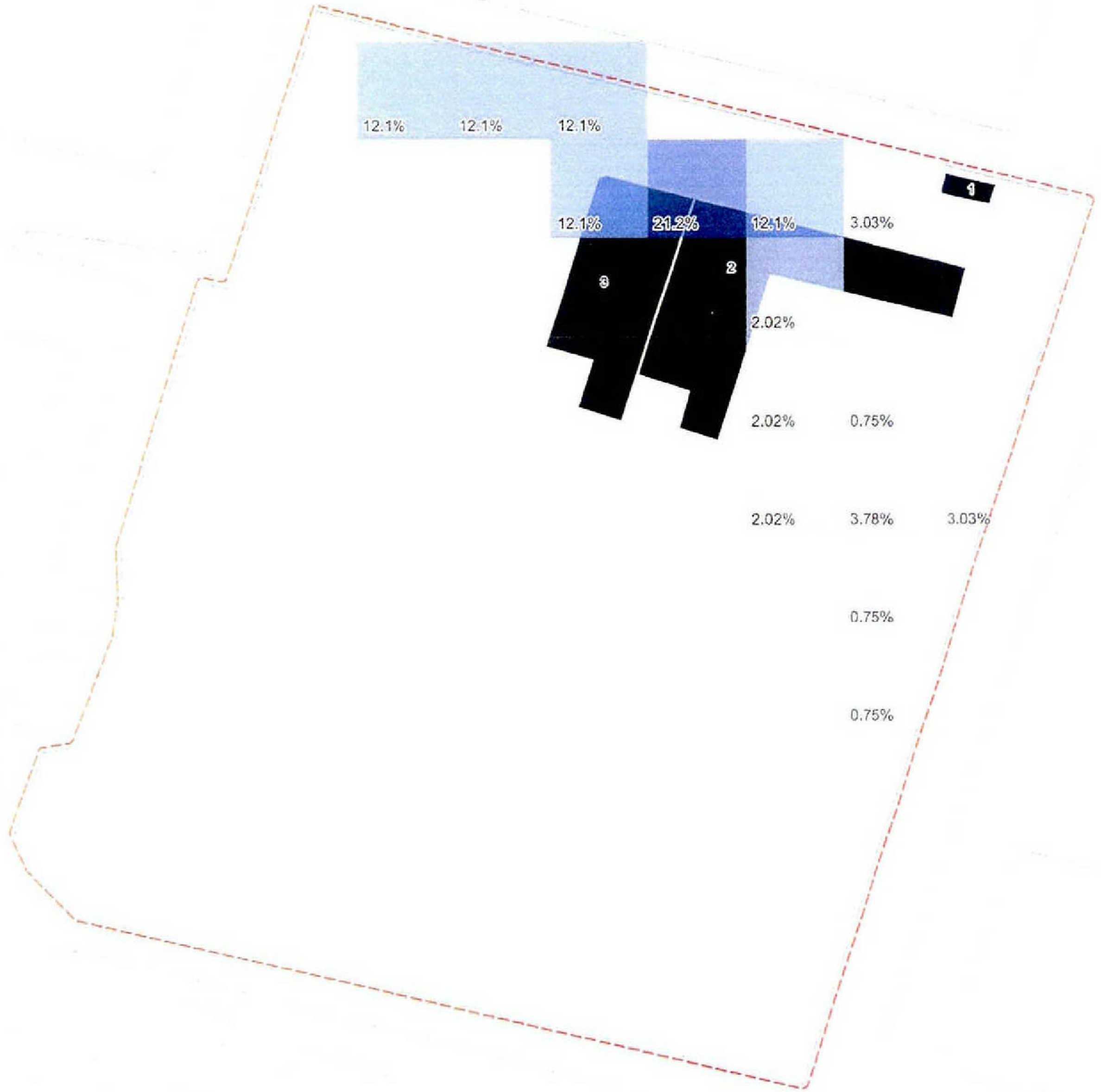
Plans



Key:

No recodrded bat activity

Bat activity: 0 - 7.40 % of all activity from all species

Bat activity: 7.41 % - 14.81 % of all activity from all species

Bat activity: 14.82 % - 22.21 % of all activity from all species

Building (with building ID displayed)

Site boundary

Drn	Description	Rev	App
DI	Bat Activity	0	JS

Roche Garden

Drawing Title:

Bat Survey Results

Client Name: Taylor Wimpey North Thames

Scale: 1:1,000 @ A3 Date: 09/08/10

Drawing Number: 7481/2/2/wor1

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File Path X:Jobs\7481 - Roche Garden, Welwyn Garden City (George Wimpey)\Figures\Phase2 Survey\Bat Survey\7481_2_2_wor1

The figure contains potentially sensitive information relating to the location of species protected by law. Therefore it should be regarded as confidential and not circulated beyond that which is necessary