

MANSFIELD BOWLING CLUB, CROFTDOWN ROAD CAMDEN

Results of Phase 2 Bat Surveys and Update Reptile Surveys

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1. INTRODUCTION

1.1. Background & Proposals

- 1.1.1. Aspect Ecology has been commissioned by Generator Developments LLP to advise in respect of land at Mansfield Bowling Club (see Plan 4370/ECO1).
- 1.1.2. An application for the development of the site has been submitted to Camden Borough Council (currently being determined) for the development of a leisure facility, in the form of a tennis club, along with a new 2-3 storey building providing 21 residential dwellings, with associated access, parking and landscaping.
- 1.1.3. This application is currently informed by a Phase I survey undertaken in 2014, and specific reptile survey work completed in 2012. The Phase 1 habitat survey previously undertaken recorded the majority of the site to be dominated by buildings, areas of hardstanding and amenity grassland, with hedgerows, trees, areas of scrub, tall ruderal vegetation, and planted garden beds also present. The Phase 1 survey work also identified a single on-site building to support 'low' bat potential and two trees to support low and medium bat potential respectively (see Plan 4370/ECO1), and therefore Phase 2 survey work was recommended to confirm the presence / likely absence of roosting bats within these features.
- 1.1.4. The reptile surveys undertaken in 2012 recorded no reptiles within the site.
- 1.1.5. Given the identification of features of bat potential within the site, Generator Developments LLP has commissioned Aspect Ecology to undertake specific survey work in respect of the building and trees to confirm the presence or likely absence of roosting bats. In addition, although the existing reptile survey work remains valid (with current advice being that survey data used to inform planning applications can be up to 4 years old¹) the opportunity has also been taken to update the reptile surveys within the site.

1.2. Site Characteristics

- 1.2.1. The site is set within a heavily urbanised Borough of Camden, London. The site is bound on all sides by existing residential development and roads, whilst beyond these roads lie existing built development in all directions. The nearest non-urban areas are Parliament Hill, part of Hampstead Heath, which lies approximately 500m to the east, and Dartmouth Park, which lies approximately 300m to the north.
- 1.2.2. Habitats within the site are dominated by buildings, areas of hardstanding and amenity grassland, with buildings, trees, hedgerows, scrub, tall ruderal vegetation and areas of amenity planting also present.

1.3. **Purpose of this report**

1.3.1. This report details the results of the specific survey work undertaken at the site to establish the presence or likely absence of roosting bats and to confirm the results of the update reptile surveys at the site.

¹ https://www.gov.uk/surveys-and-mitigation-plans-protected-species (viewed 26th June 2015)

2. LEGISLATION AND ECOLOGY

2.1. Legislation

Bats

- 2.1.1. All British bats are classed as European Protected Species and therefore receive protection under The Conservation of Habitats and Species Regulations 2010 (as amended), making it an offence to:
 - Deliberately kill, injure or capture bats;
 - Deliberately disturb bats, including in particular any disturbance which is likely to impair their ability to survive, to reproduce or to rear or nurture their young, or their ability to hibernate or migrate, or which is likely to affect significantly their local distribution or abundance;
 - Damage or destroy a breeding site or resting place of a bat.
- 2.1.2. In addition, all British bats are also listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) which contains further provisions making it an offence to intentionally or recklessly:
 - Damage or destroy, or obstruct access to, any structure or place which any bat uses for shelter or protection; or
 - Disturb bats while occupying a structure or place used for that purpose.
- 2.1.3. If proposed development work is likely to destroy or disturb bats or their roosts a licence may need to be obtained from Natural England which would be subject to appropriate measures to safeguard bats.
- 2.1.4. Bats are also UK/Local BAP priority species.

Reptiles

- 2.1.5. All 6 species of British reptile are listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). However, a higher level of protection is afforded to Sand Lizard and Smooth Snake than to Adder, Grass Snake, Slow-worm and Common Lizard.
- 2.1.6. For all British reptile species, Section 9 of the Wildlife and Countryside Act 1981 (as amended) contains provisions making it an offence to intentionally:
 - Kill or injure; or to
 - Sell, offer for sale or trade any British reptile.
- 2.1.7. Because Slow-worm, Common Lizard, Grass Snake and Adder are relatively widespread British species, their habitat is not directly protected. Nevertheless, because of their partial protection, disturbing or destroying their habitat whilst they are present may lead to an offence.
- 2.1.8. Section 9 of the Wildlife and Countryside Act 1981 (as amended) also contains provisions making it an offence to intentionally or recklessly:

- Damage or destroy, or obstruct access to, any structure or place which any Sand Lizard or Smooth Snake uses for shelter or protection; or
- Disturb any Sand Lizard or Smooth Snake while occupying a structure or place which it uses for that purpose.
- 2.1.9. In addition, Sand Lizard and Smooth Snake are classed as European Protected Species and therefore receive protection under the Conservation (Natural Habitats &c.) Regulations 1994 (as amended), making it an offence *inter alia* to:
 - Deliberately kill, injure or capture a Sand Lizard or Smooth Snake;
 - Deliberately disturb Sand Lizards or Smooth Snakes, including in particular any disturbance which is likely to impair their ability to survive, to reproduce or to hibernate, or migrate, or which is likely to affect significantly their local distribution or abundance;
 - Deliberately take or destroy the eggs of a Sand Lizard;
 - Damage or destroy a breeding site or resting place of a Sand Lizard or Smooth Snake.
- 2.1.10. If proposed development work is likely to result in an offence a licence may need to be obtained from Natural England which would be subject to appropriate measures to safeguard Sand Lizard/Smooth Snake.

2.2. Ecology

Bats

- 2.2.1. There are at least 17 breeding bat species in Britain. Many of them are considered threatened due to a variety of factors including habitat loss and disturbance/damage to roosts. Of these species, a number regularly use buildings as roost sites.
- 2.2.2. Bats are highly mobile flying mammals, which, in Britain, feed entirely on insects. They are able to fly and feed in the dark by using a system of echolocation that gives them a 'sound picture' of their surroundings.
- 2.2.3. In winter when prey is scarce, British bats hibernate in humid parts of buildings, caves or hollow trees where temperatures are typically stable. They may wake occasionally but only become fully active again in the spring.
- 2.2.4. Female bats gather together in maternity roosts in summer to give birth and rear their single offspring. Like other mammals bats have fur and give birth to live young. Infant bats suckle on their mother's milk for several weeks until they can fly and hunt insects for themselves. Bats are long-lived mammals and some British species are known to live to over twenty-five years of age.

Reptiles

2.2.5. The Smooth Snake and Sand Lizard are very rare reptiles and are largely restricted in distribution to the sandy heaths of Dorset, Hampshire and parts of Surrey. The Sand Lizard also occurs on sand dunes on the Dorset and

Lancashire coast and has recently been re-introduced to some of its former sites in other parts of the country.

- 2.2.6. The Grass Snake is widely distributed throughout England and Wales and may be found in a wide variety of habitats that include grassland, open woodland, hedgerows and marshland. It is an excellent swimmer and can often be seen hunting frogs, small fish and tadpoles in ponds, ditches, lakes and streams. The Grass Snake is an egg laying species. Eggs are usually laid in decaying vegetation where the decomposition process keeps them warm and speeds development of the embryos. Grass Snakes typically hibernate from October / November to the beginning of March.
- 2.2.7. The Adder is our only venomous reptile, it feeds primarily on small mammals. It generally prefers dry localities ranging from heath and open woodland to upland moors. The live young are born in September and feed on Earth Worms, insects and small lizards until they are large enough to tackle small mammals. Adders hibernate from October to March and commonly hibernate in large clusters in places such as hollows in the ground, dense tree roots and similar habitats, which provide shelter from winter frosts. Despite its bad press the Adder's bite poses no serious threat to a healthy person and bites are rare as Adders are shy creatures that avoid contact with humans.
- 2.2.8. The Common or Viviparous Lizard is the most widespread of the British reptiles. It can be found in a range of habitat types including heaths, grasslands, woodland clearings, gardens and hedge banks. Common Lizards feed on insects and spiders and other invertebrates, which are caught on the ground and amongst vegetation. They are agile climbers and may often be seen sunning themselves on vegetation, logs, tree stumps and walls. Female Common Lizards give birth to around five live young in July or August. Hibernation typically takes place between October/November and February in places such as rotten logs, which give protection from winter frosts and fluctuating winter temperatures.
- 2.2.9. The Slow Worm is a legless lizard that can grow to a maximum length of 40cm. Colouration is typically grey to brown with tiny smooth scales giving it a very smooth, shiny appearance. Even though it superficially resembles a snake the combination of slower movements, distinctly cylindrical body shape, eyelids and broad forked tongue make the Slow Worm easy to distinguish on closer inspection.
- 2.2.10. Slow Worms can inhabit a wide range of habitats, but tend to prefer rough, overgrown grassland with a thick mat of vegetation on the surface to provide cover and allow them to forage with some safety from predators. They bask in the open less frequently than other reptiles and are therefore harder to detect in the field. They feed primarily on slugs. The young are born alive, usually in September and are approximately 7cm in length. It takes 3-4 years for Slow Worms to reach maturity and they can probably reach an age of 20 years in the wild. They typically hibernate in the ground between October / November and February.

3. SURVEY METHODOLOGY

3.1. Bat Survey

3.1.1. *Emergence / re-entry surveys*²

- 3.1.2. Given the presence of a single building of low bat potential and two trees previously recorded to support low and medium bat potential respectively, in line with best practice guidance, survey work in the form of a single dusk or dawn survey has been undertaken to confirm the presence or absence of roosting bats within these features.
- 3.1.3. This survey method aims to identify any roosting bats emerging from or returning to potential roost sites, while also indicating the extent of use. Surveys were carried out during suitable weather conditions, as set out at Table 1 below. Two experienced surveyors were present during the survey, positioned to cover all aspects of the features being surveyed (see Plan 4370/ECO2). Surveyors used Bat Box Duet (and MP3 recorders) and/or EM3 hand held electronic detectors, and were in position from 15 20 minutes prior to sunset, remaining in place for at least two hours, and two hours prior to sunrise.
- 3.1.4. Survey dates for the emergence / re-entry surveys are given in Table 3.1 below, together with timings and weather conditions.

		Weather Conditions					
Date	Survey	Cloud Cover (%)	Temp (°C)	Wind (BF)	Rain		
30.6.15	Dusk Emergence	20	22	1	None		
1.7.15	1.7.15 Dawn re-emergence		17	1	None		

Table 3.1: Details of bat survey visits undertaken at the site; BF = Beaufort Scale.

Analysis of Bat Survey Recordings

3.1.5. Where required, bat calls were analysed using BatSound v.3.30[©] and Analook W v3.7 to verify the species recorded during the survey work. Where recordings could not be reliably attributed to species, calls were identified to genus (such as for *Myotis* species) or, in the case of calls which could not be distinguished between *Nyctalus* sp. and Serotine, these have been labelled as 'big bat' species.

3.2. Update reptile surveys

Specific reptile presence/absence surveys³

3.2.1. Update reptile surveys were carried out based on the methodologies set out within the 'Herpetofauna Workers Manual' JNCC 1998 and within advice sheet 10 'Reptile Survey' Froglife 1999 of suitable habitat within the site to establish the presence/absence of reptiles.

² Bat Conservation Trust (BCT) "Bat Surveys – Good Practice Guidelines" (2012)

³ Surveys based on: Froglife Advice Sheet 10 (1999) "Reptile Survey - an introduction to planning, conducting and interpreting surveys for snake and lizard conservation."

conducting and interpreting surveys for snake and lizard conse

- 3.2.2. A total of 40 sections of 50x50cm squares of thick roofing felt were placed out at the site on the 9th June 2015, within areas of habitat offering potential opportunities for reptile species (see Plan 4370/ECO3), namely the long sward grassland and ruderal vegetation throughout the site, to act as artificial refugia. Refugia are favoured, as reptiles are ectothermic (cold blooded), and will preferentially use such refugia to raise their body temperature at certain times of the day. Reptiles typically take advantage of the fact that these refugia warm up more quickly than the surrounding areas and during certain times of the day, depending on weather conditions, will sit directly beneath the tins. Hence by checking these refugia at appropriate times the reptiles can be seen, and captured by hand.
- 3.2.3. Reptile survey work was conducted at the site during June and early July 2015. The artificial refugia were checked on 7 separate occasions at appropriate times of the day (morning or early evening where appropriate) during suitable weather conditions (as set out at Table 3 below) to identify the presence or absence of common reptile species at the site.
- 3.2.4. Survey dates for the reptile surveys are given in Table 3.2 below, together with timings and weather conditions.
- 3.2.5. In addition, reptiles were actively searched for in any other suitable locations throughout the site. Likely refuges such as logs, sheets of metal and other material were particularly targeted, where these were present.

Survey	Survey Date	Temp.	Cloud cover	Wind
1	17-June-2015	19ºC	70%	Moderate breeze (Beaufort 4)
2	19-June-2015	20.5°C	5%	Light Air (Beaufort 1)
3	22-June-2015	16ºC	95%	Light Breeze (Beaufort 2)
4	24-June-2015	24°C	80%	Light Air (Beaufort 1)
5	26-June-2015	19ºC	20%	Light Breeze (Beaufort 2)
6	28-June-2015	16ºC	100%	No wind (Beaufort 0)
7	1-July-2015	17ºC	0%	Light Air (Beaufort 1)

Table 3.2: Details of weather conditions of reptile survey visits at the site during June 2015.

4. SURVEY RESULTS

4.1. Bats

- 4.1.1. A single building within the site was previously identified to support low potential for roosting bats (labelled B1 on Plan 4370/ECO2), along with two trees recorded to support low and medium bat potential (labelled T1 and T2 on Plan 4370/ECO2 respectively). During the June 2015 surveys, the building in question was recorded to remain as previously described, being a single storey building of brick construction, with a shallow pitched roof of corrugated asbestos sheeting. A wooden barge board remained present at the eaves of the building, which was recorded to stand away from the brickwork in places. In addition, areas of Ivy cover were recorded on the northern aspect of the building, which was not specifically detailed within the previous report.
- 4.1.2. The two trees (T1 and T2) were recorded to support minimal bat potential with sparse coverings of ivy and no other evident opportunities for bats. However, given the previous appraisal of these trees, a pre-cautionary approach was adopted and survey work undertaken in the form of a single dawn return survey.
- 4.1.3. In line with best practice guidance, a single survey of building B1 was undertaken in June 2015, along with a single survey of the trees. The results of the emergence / re-entry survey work in respect of the buildings are set out in Table 4.1 below.

Building / tree	Date	Sunset / Sunrise	Emerging / returning bats	Species Recorded	First / Last bat Recorded	Activity
В1	30 June 2015	Sunset: 21:21	A single Common Pipistrelle was recorded to have flown from the direction of the northern elevation of the building (having not been seen to arrive from elsewhere) at 21:54 (33 minutes a.ss*), such that it has been recorded as having 'possibly' emerged from the ivy or eaves of the building.	Common Pipistrelle, Soprano Pipistrelle	21:36 (15 mins a.ss*) / 23:32	10 passes recorded, and a single foraging bat
T1	1 July 2015	Sunrise: 04:47	No returning bats	Soprano Pipistrelle	03:53 (only bat recorded)	Single foraging bat recorded

Table 4.1. Results of emerge	nce / re-entry bat	activity survey wo	ork undertaken at
the site.			

T2 1 July 2015 04:47 No returning bats Con Pip	Common 03:24 / 3 passes ipistrelle 04:20 recorded
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a.ss. - after sunset

4.1.4. In summary, a single bat was recorded emerging from the building of low bat potential. No bats were recorded returning to the trees during the survey work undertaken.

4.2. Reptiles

Results of specific reptile presence/absence surveys

- 4.2.1. No reptiles were recorded during the specific presence / absence survey work undertaken by a third party in 2012.
- 4.2.2. During the June 2015 surveys, habitats at site were recorded to remain broadly as described within the October 2014 report for the site, with the site dominated by buildings, areas of hardstanding and amenity grassland, with the amenity grassland recorded to remain unmanaged. Accordingly, given the status of the habitats within the site, the opportunity has been taken to update the specific reptile surveys in June and July 2015. The results of these surveys are set out below in Table 4.2.

Survey	Data	Common Lizard		Slow Worm		Grass Snake	
Survey	Date	Adult	Juv	Adult	Juv	Adult	Juv
1	17-June-2015	0	0	0	0	0	0
2	19-June-2015	0	0	0	0	0	0
3	22-June-2015	0	0	0	0	0	0
4	24-June-2015	0	0	0	0	0	0
5	26-June -2015	0	0	0	0	0	0
6	28-June-2015	0	0	0	0	0	0
7	1st-July-2015	0	0	0	0	0	0
Peak Adult Count			0	(ט	()

 Table 4.2: Results of reptile surveys undertaken at the site

4.2.3. As can be seen from Table 4.2, the specific survey work undertaken in respect of reptiles recorded no reptiles within the site.

5. DISCUSSION AND RECOMMENDATIONS

5.1. Bats

- 5.1.1. During the dusk survey on the 30th June 2015, a single Common Pipistrelle was recorded to have flown from the direction of the northern elevation of building B1 (having not been seen to arrive from elsewhere), such that this bat has been recorded as having 'possibly' emerged from this building, either from the Ivy on the northern elevation of the building, or from the eaves of the building. This emergence was recorded at approximately 33 minutes after sunset, which falls within the typical time frame for emerging Pipistrelles, which emerge early in the evening.
- 5.1.2. On the basis of the survey work undertaken, a precautionary assessment evaluates the building to possibly represent a resting place for Common Pipistrelle, most likely an occasional summer day roost, used by small numbers (potentially restricted to a single individual) of Common Pipistrelle with no evidence to suggest it is used as a hibernation or maternity roost. Common Pipistrelle is a common and widespread species throughout Britain⁴ and as such, given the limited use of this building by bats, and in accordance with guidance set out within Natural England's *'Bat Mitigation Guidelines'* (2004), this potential roost is considered to be of no more than low conservation significance.
- 5.1.3. The demolition of this building will destroy the existing possible summer day roost of low conservation importance. Hence to enable demolition to proceed, a licence will likely be required from Natural England. Any licence application must be accompanied by a mitigation strategy to ensure that any bats are safeguarded.
- 5.1.4. Natural England guidance in respect of European Protected Species such as bats, in the form of guidance note WML-G12 states that *'where it is unavoidable that an activity will affect a European Protected Species population, the mitigation should aim to maintain a population of equivalent status on or near the original site.'* Therefore, any mitigation in respect of bats at the site should be <u>proportional</u> to the proposed low scale impact. A detailed mitigation strategy / method statement will be prepared as part of the Natural England licence application (to be drafted and submitted after planning permission is granted). However, it is recommended that the mitigation strategy includes the following key measures.
- 5.1.5. Alternative Roost Sites. In compensation for the loss of building B1, a number of alternative roosting opportunities should be provided for bats at the site in the form of a number of bat boxes on retained trees at the site. Suitable trees are present on the southern and eastern site boundaries.
- 5.1.6. At least 3 bat boxes should be placed out in the site, prior to the demolition of building B1, on retained mature trees. Boxes, such as woodcrete Schwegler No.2F bat boxes, will be erected providing ideal roosting opportunities for smaller British bat species. It is recommended that bat boxes be erected as high up as possible on the main trunks of mature trees, yet still be within reach of a ladder to enable monitoring to be undertaken. Bat boxes should be sited in sheltered wind-free areas, in positions that

⁴ Schofield & Mitchell-Jones (2010) *The Bats of Britain and Ireland*. The Vincent Wildlife Trust.

provide a range of temperature conditions. Furthermore, boxes should be placed where bats can attain direct and free access to them and not in areas where access is restricted by the presence of dense vegetation. Health and safety issues should also be considered when positioning boxes.

- 5.1.7. *Lighting.* It is recommended that attention is paid to the lighting design so as to ensure that entrances to the new roosts are not directly lit by new lights.
- 5.1.8. *Watching Brief.* All contractors involved in demolition works should be briefed on the presence of bats and a site wide watching brief maintained at the site to enhance awareness of bats.
- 5.1.9. *Timetable of Demolition and Construction.* A timetable of demolition and construction works will be drafted to ensure potential impacts upon bats are minimised. Measures will include:
 - Given the possible use of the building as an occasional summer day roost, it is recommended that the proposed demolition works be undertaken outside this summer period, where possible. Natural England recommend that work on buildings supporting non-breeding summer roosts is ideally undertaken between 1st September and 1st May⁵ to minimise the potential of disturbing bats;
 - A check survey of building B1 will be undertaken immediately prior to its demolition to ensure no bats are present. All survey work will be undertaken by a suitably qualified professional ecologist;
 - Should bats be recorded as present within the building during the survey then removal of the roofs will be undertaken in 2 sections, with 24 hours left in between the removal of each section to enable bats to disperse naturally. These works will be overseen by a suitably qualified ecologist;
 - All works (including removal of Ivy and removal of roof structures), will be undertaken by hand only, assisted by the use of hand tools;
 - In the unlikely event that bats do not disperse naturally then these will be safely removed by a suitably qualified ecologist or bat worker and placed within a bat box within the site;
 - Demolition of this building will only be undertaken during favourable weather conditions and not during heavy rain, high winds or low temperature.
- 5.1.10. The above mitigation is indicative of what will be set out in full as part of a European Protected Species licence application. The indicative mitigation scheme set out in this report is for the benefit of the Local Planning Authority to demonstrate that Natural England is likely to grant a licence for the demolition of building B1, and thereby allow the Local Planning Authority to determine the planning application in light of the 'three tests'. This is discussed in more detail in Appendix 1.

⁵ English Nature (2004) "Bat Mitigation Guidelines"

5.1.11. In terms of trees, no bats were recorded to emerge from trees T1 or T2. Accordingly it is considered that bats are unlikely to make use of these features. In any case, it is understood that these trees will remain unaffected by the proposals.

5.2. **Reptiles**

- 5.2.1. No reptiles were recorded during specific survey work undertaken at the site in 2012 or 2015.
- 5.2.2. Given the repeated lack of evidence of reptiles using the site during all survey work, and the isolation of the site within a highly urban landscape, it is considered extremely unlikely that the site supports any reptile species. Accordingly, it is considered that this species group poses no constraints to the proposed development.

6. SUMMARY AND CONCLUSIONS

- 6.1. Aspect Ecology has been commissioned by Generator Developments LLP to undertake specific bat and update reptile survey work in respect of the land at Mansfield Bowling Club, Croftdown Road, Camden. The proposals are for the demolition of the existing buildings within the site boundaries, in order to facilitate the development of leisure facilities and a new multi-residential building, with associated access, parking and landscaping.
- 6.2. **Bats.** The habitats at the site provide limited opportunities for bats, and indeed the previous ecology reports for the site recorded only a single building and two trees to support roosting opportunities for this species group. Nevertheless, specific dusk survey work in 2015 recorded a possible emergence of a single Pipistrelle bat from building B1 (previously highlighted to support low bat potential). As such, it is considered that this building is potentially utilised by a single bat (or, at most, very small numbers of bats) as an occasional summer day roost. As such, it is recommended that, in line with current legislation and good practice, a Natural England licence be acquired to facilitate the controlled demolition of this building. Given the low conservation status of the roost (which is utilised only by a common species of bat), and that sufficient mitigation can be provided under the proposed development, it is considered that Natural England will readily grant a licence to facilitate the proposals.
- 6.3. **Reptiles.** The habitats at the site provide some opportunities for reptiles. However the site is isolated by urban surroundings, whilst no evidence of reptiles was recorded on repeated survey efforts undertaken in 2012 and in 2015. As such, it is considered that this species group is likely absent from the site and therefore presents no constraint to development.
- 6.4. **Conclusion.** In conclusion, based on the evidence obtained from detailed survey work, following the implementation of mitigation measures set out within this report, there is no reason to suggest that any reptile species or bat species will be adversely affected by the proposals and accordingly these species groups present no overriding constraint to the proposals.

PLANS

PLAN 4370/ECO1

Site Location



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PLAN 4370/ECO2

Location of building and trees with bat potential



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PLAN 4370/ECO3

Reptile Tin Locations



APPENDICES

APPENDIX 1

Consideration of Article 16 Tests

CONSIDERATION OF ARTICLE 16 TESTS OF HABITATS DIRECTIVE IN RELATION TO COMMON PIPISTRELLE BAT

The proposed development will involve the demolition of a single possible non-breeding bat roost within a single building within the site, with this roost considered to comprise a single, or at most very low numbers, of Common Pipistrelle bats, with these species listed as a European Protected Species (EPS). The Local Planning Authority (LPA) has a legal duty under the Conservation of Habitats and Species Regulations 2010 (as amended) in relation to EPS, namely that when determining a planning application for a development which has an impact on EPS, the LPA must take into account the three derogation tests contained within Article 16 the Habitats Directive 1992 at the planning stage. The discussion below sets out how the Development meets these three tests.

Imperative Reasons of Overriding Public Interest

The requirement for new housing is set out at a national level in the Government's Housing Strategy entitled 'Laying the Foundations: A Housing Strategy for England' (HM Government, 2011). This refers to the latest household projections which suggest an annual increase in the number of households by 232,000, whereas in 2009/10 there were only 115,000 new build housing completions. In more general terms, the National Planning Policy Framework (2012), sets out a presumption in favour of sustainable development, advocating that local authorities should plan positively to support local development. The framework also sets out as one of the core planning principles that planning should *"proactively drive and support sustainable economic development to deliver the homes, business and industrial units, infrastructure and thriving local places that the county needs."*

Therefore, there is a clear need for the Proposed Development, and the proposals can be considered to have fulfilled Regulation 53(2)(e) of the Conservation of Habitats and Species Regulations 2010 in that the 'development' is for 'imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment'.

No Satisfactory Alternative

The proposed development is the culmination of a thorough design process, which has taken into account environmental constraints and opportunities and the views of local residents and other stakeholders. As part of this process, the proposed development layout has sought to maximise the number of dwellings provided in order to meet the housing need set out above, whilst ensuring due weight is given to environmental constraints..

The proposed development will result in the removal of a single building recorded to possibly support a roost of low conservation importance. The removal of this building is required for the following reasons:

- The building to be demolished currently dominates the site. The demolition of this building and replacement with new dwellings will enable a higher housing density on site, and thus represents a more efficient use of land; and
- The replacement of this building with dwellings of a similar size and architectural style to those elsewhere on site will result in a higher quality and more coherent design.

If the site was not developed (the 'do nothing option'), this would reduce the contribution to housing need identified above, and potentially place pressure on sites of greater ecological value, and would therefore not be a satisfactory option.

Favourable Conservation Status of the species must be maintained

In order to minimise the risk to bats during demolition works, a number of safeguarding measures will be implemented, to be detailed in the method statement accompanying an EPS licence application, and as summarised within the current report. Such measures would include sensitive timing of works (to be undertaken outside of the vulnerable periods), pre-works inspections, 'soft stripping' (i.e. removal by hand) of features identified as having potential to support roosting bats, under ecological supervision where required, and briefings of construction staff.

Following implementation of these measures, it is considered that the Pipistrelle population possibly currently present within the site will be fully safeguarded. Furthermore, creation of new areas of habitat and new roosting opportunities should allow the expansion of the existing populations and ensure the long-term favourable conservation status of this species within the site and the local area.

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