

**Carlton and Campana House**  
Ecological Appraisal

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## Issuing office

Worton Park | Worton | Oxfordshire | OX29 4SX  
 T: 01865 883833 | W: www.bsg-ecology.com | E: info@bsg-ecology.com

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<b>Originated</b>	Jessica Kent	Senior Ecologist	18 July 2017
	Sarah Joscelyne	Ecologist	21 February 2018
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## 1 Summary

<b>Report purpose</b>	<p>Carlton and Campana House are two detached two-storey houses and associated gardens to the north of Harts Lane in Burghclere, Hampshire ('the Site'). This report presents the results of a desk study and extended Phase 1 habitat survey for the Site.</p> <p>It is proposed that the gardens of the current properties will be developed with two new dwellings, and a new shared access off Harts Lane between the existing dwellings.</p>
<b>Date and methods of survey</b>	<p>An extended Phase 1 habitat survey of the Site was conducted on 06 July 2017, including an assessment of the out-buildings on Site and trees for potential to support roosting bats, and a habitat suitability assessment of the two ponds on Site for great crested newt.</p> <p>A habitat suitability assessment was also conducted on 14 July 2017 of two off-site ponds within 250 m of the Site.</p>
<b>Key findings</b>	<p>There are unlikely to be any impacts on designated sites within 2 km of the Site. In addition, the Site supports the following ecological features:</p> <ul style="list-style-type: none"> <li>• The habitats on Site are generally considered to be of limited ecological value. Two ponds have the potential to be Habitats of Principal Importance.</li> <li>• Two oak trees have low potential to support roosting bats.</li> <li>• Mixed semi-natural woodland with glades has the potential to support reptiles, great crested newt and nesting birds.</li> <li>• Four ponds, two on-site and two off-site within 250 m, have the potential to support great crested newt.</li> <li>• An invasive, non-native plant species (variegated yellow archangel).</li> </ul>
<b>Potential impacts and recommendations</b>	<p>The habitats present on Site are generally considered to be of low ecological value. Bats, reptiles, great crested newt, and nesting birds have the potential to be impacted by the proposed development in the absence of mitigation.</p> <p>Recommendations to ensure compliance with relevant legislation and planning policy include:</p> <ul style="list-style-type: none"> <li>• eDNA survey of ponds within 250 m to determine presence of great crested newt</li> <li>• Implementation of a method statement for reptiles</li> <li>• Soft-felling of trees with bat roost potential, should they need to be removed</li> <li>• Clearance of trees and shrubs outside of the nesting bird season (March-August inclusive)</li> <li>• Removal of variegated yellow archangel, which should be disposed of appropriately. Advice from a specialist contractor should be sought</li> <li>• Planting of new native, species-rich hedgerows and trees, including fruit and berry bearing species, to compensate habitat lost as a result of the proposed development</li> <li>• Installation of bat and bird boxes and invertebrate hotels to enhance the Site for these species</li> </ul>

## 2 Introduction

### Site description

- 2.1 The Site is located to the north of Harts Lane in Burghclere, Hampshire (OS Grid Reference SU465609). It currently comprises two detached two-storey houses and associated gardens. The Site is bordered to the north by mixed woodland, to the east and west by further residences and gardens, and to the south by Harts Lane and St Michael's independent preparatory school.

### Description of project

- 2.2 Rivar Ltd is intending to submit an outline planning application for two dwellings located to the rear of Carlton House and Campana House (Appendix 1). A new shared access off Harts Lane will be provided and will run between the existing dwellings. No direct impact to the existing dwellings is anticipated as a result of the proposals. The new dwellings will be constructed in the gardens of Carlton House and Campana House.

### Aims of study

- 2.3 The aims of this study are to present the findings of a desk study and an extended Phase 1 habitat survey of the Site, and to consider possible impacts on biodiversity which could arise from the proposed redevelopment of the Site. The need for further survey, mitigation and enhancement measures are also considered in this report.

### 3 Methods

#### Desk study

- 3.1 Hampshire Biodiversity Information Centre (HBIC) was contacted in June 2017 to request records of statutory nature conservation sites, and records of protected species/species of conservation concern (notable species) within 2 km of the Site. Records of non-statutory designated sites within 0.5 km of the Site were also requested. Data was provided on 13 July 2017.
- 3.2 The desk study also made use of publically available internet resources including the Multi-Agency Geographic Information for the Countryside (MAGIC) database and Bing maps, to review Ordnance Survey data and aerial photographs of the local area, provide contextual information and information on existing European Protected Species Mitigation (EPSM) licences. This was carried out in June and July 2017.
- 3.3 The MAGIC database was reviewed to obtain information on nearby statutory designated sites, including internationally designated nature conservation sites (Special Protection Areas (SPA), Special Areas of Conservation (SAC) and Ramsar sites) within 2 km of the Site boundary. Further information regarding these sites was then obtained where relevant from Natural England's website (Natural England, 2017).

#### Field survey

##### *Extended Phase 1 habitat survey*

- 3.4 The field survey was completed by Senior Ecologist Jessica Kent with an initial visit being made on 06 July 2017. She was assisted by Ecologist Sarah Joscelyne. Weather conditions during the survey were dry, 5% cloud cover with a light breeze; the temperature was 25°C.
- 3.5 The survey was undertaken with reference to industry standard guidelines for Phase 1 habitat survey (JNCC, 2010). During the walkover of the Site all habitats were identified and mapped (Figure 1), and notes were made on the dominant flora. Target notes were made for any additional features of ecological interest (these are presented in Appendix 3).
- 3.6 The survey was "extended" to assess the potential of the Site and areas adjacent to the Site to support protected species or other species of conservation importance, including breeding birds, mammals, amphibians and reptiles.

##### *Preliminary bat roost assessment*

- 3.7 A preliminary bat roost assessment of all buildings and mature trees within the Site which have the potential to be impacted by the proposed development was undertaken on 06 July 2017 by Senior Ecologist Jessica Kent.
- 3.8 A second visit to conduct an internal inspection of Building 6 was carried out on 14 July 2017 by Ecologist Mark Norriss. Weather conditions during the second survey were sunny, 75% cloud cover with a light breeze; the temperature was 20°C.

#### Buildings

- 3.9 An external and, where possible, internal inspection survey of buildings was undertaken during the extended Phase 1 habitat survey in accordance with industry standard survey guidance (Collins, 2016). Building 6 was internally inspected by Mark Norriss on 14 July. The exterior and interior of the buildings were searched from the ground for:
  - a. Features which could provide bats with access into roosting spaces or provide roosting spaces (such as gaps under roofing tiles, gaps in ridge tiles, gaps in soffit boxes, gaps under lead flashing and cracks or crevices in the stonework).

- b. Evidence of the presence of bats such as bat droppings on windows, windowsills, walls and the ground, or staining from bat's fur around possible roost access/egress points.

3.10 Buildings were assigned a category for their potential for roosting bats according to factors such as roosting opportunities and features as summarised in Table 1.

Table 1: Building potential for roosting bats (adapted from Collins, 2016).

Suitability	Roosting Habitat
Negligible	A structure with no or negligible potential roost features (PRFs), which is isolated from suitable foraging habitat.
Low	A structure with one or more PRFs which have a very limited potential to be used by individual opportunistic bats. These features lack the correct dimensions or conditions and/or are not connected to suitable foraging habitat that could be used by a larger number of bats.
Moderate	A structure with one or more PRFs which could be used by bats because of their dimension and conditions. However these features are unlikely to support a roost of high conservation status with respect to roost type only. The structure may also have PRFs which are obscured or not possible to survey from the ground level. The surrounding habitat is continuous and/or well connected to the wider landscape.
High	A structure with one or more PRFs which are obviously suitable for use by a larger number of bats on a more regular basis and potentially for longer periods of time, due to their dimensions and conditions. The surrounding habitat is high quality, continuous and/or well connected to the wider landscape.
Confirmed Roost	Presence of bats or evidence of recent use by bats.

**Trees**

3.11 During the extended Phase 1 habitat survey, all mature trees within the Site were inspected from the ground, using binoculars and a high-powered torch. The following information was recorded: tree species; description of any Potential Roost Features (PRFs) with potential to support roosting bats (such as woodpecker holes, rot holes, splits or cracks, dead limbs, ivy cover and/or flaking bark); and the height and aspect of these features (Collins, 2016).

3.12 Trees were assessed in accordance with the categories set out in Table 2.

Table 2: Criteria for assessing bat roosting potential of trees (adapted from Collins, 2016).

Potential value for bats	Tree description
Negligible	A tree with no or negligible potential roost features (PRFs).
Low	A tree with very limited potential to be used by bats. Any PRFs present have low suitability for bats on account of shallow dimensions or exposure to weather. Possible opportunistic use by individual bats is considered unlikely but cannot be ruled out.
Moderate	A tree with one or more PRFs which could be used by bats, although, based on characteristics (i.e. dimensions, position, shelter) of the features present, and/or lack of suitable nearby habitat, these are considered unlikely to support a roost of high conservation value.
High	A tree with one or more PRFs which are likely to be suitable for use by roosting bats, including features with potential to support a larger numbers of bats on a more regular basis, due to the PRF dimensions and conditions. The surrounding habitat is likely to be suitable for bats, and connected to other suitable habitat features within the landscape.
Confirmed Roost	Presence of bats or evidence of recent use by bats.



### **Great crested newt Habitat Suitability Index**

- 3.13 An assessment of suitability of all waterbodies located within 250 m of the Site for great crested newts (GCN) *Triturus cristatus* was undertaken using the Habitat Suitability Index (HSI) assessment. Information on the physical features and characteristics of the waterbodies were collected in order to allow a GCN HSI score to be derived (see Oldham *et al.*, 2000).
- 3.14 Ten suitability indices (SI) were scored in the field and from maps; these include features such as size, quality of surrounding habitat and presence of fish. The resultant scores were then used to calculate the overall HSI for each pond as a number between 0 and 1, with 0 being the least suitable and 1 being the most suitable. The HSI score allows the pond to be placed in one of 5 pre-defined categories defining its suitability for breeding GCN as follows (ARG UK, 2010):
- <0.5 = poor
  - 0.5 – 0.59 = below average
  - 0.6 – 0.69 = average
  - 0.7 – 0.79 = good
  - >0.8 = excellent

### **Badger survey**

- 3.15 Evidence of badger *Meles meles*, including latrines, paths, footprints, foraging holes, hair and setts was searched for throughout the Site.

### **Technical competence and experience**

#### **Jessica Kent MCIEEM, Senior Ecologist, BSG Ecology, Oxford**

- 3.16 The extended Phase 1 habitat survey and preliminary bat roost assessment was undertaken by Jessica Kent BSc (Hons) PhD. Jessica is a practising ecologist with over seven years of applied professional experience. She is a full member of the Chartered Institute of Ecology and Environmental Management (CIEEM).

#### **Sarah Joscelyne, Ecologist, BSG Ecology, Oxford**

- 3.17 Sarah Joscelyne assisted with the ground level tree assessment survey. Sarah is a practising ecologist with two years of applied professional experience.

#### **Mark Norris GradCIEEM, Ecologist, BSG Ecology, Oxford**

- 3.18 Mark Norris assisted with the preliminary building inspection survey. Mark is a practising ecologist with five years of applied professional experience. He is a graduate member of the Chartered Institute of Ecology and Environmental Management (CIEEM).

### **Limitations to methods**

- 3.19 Due to the presence of foliage on the trees surveyed during the ground level tree assessment it was not possible to have a clear view of the trees in their entirety during the survey. This constraint is accounted for in the relevant Recommendations section of this report.

## 4 Results and Interpretation

- 4.1 In this section the results of the desk study, extended Phase 1 habitat survey, preliminary bat roost potential assessment survey and habitat suitability survey for great crested newt are reported.

### Desk study

#### *Statutory designated sites*

- 4.2 One Site of Special Scientific Interest (SSSI) has been identified within 2 km of the Site: Highclere Park SSSI is located approximately 0.9 km to the west of the Site boundary. None of the habitats for which this SSSI has been notified, namely unimproved grassland, pasture woodland and lakes, exist on Site.
- 4.3 One Local Nature Reserve (LNR) has been identified within 2 km of the Site: Herbert Plantation LNR is located approximately 1.1 km to the north-east of the Site boundary. Herbert Plantation comprises a mixed woodland of oak *Quercus sp.*, birch *Betula*, alder *Alnus* and pine *Pinus*. Mixed woodland containing oak and pine is present within the Site boundary.

#### *Non-statutory designated sites*

- 4.4 There are no non-statutory designated sites of nature conservation interest located within 500 m of the Site.

#### *Habitats of Principal Importance*

- 4.5 The desk study identified one Habitat of Principal Importance (HPI)<sup>1</sup> within 500 m of the Site boundary; a traditional orchard approximately 380 m south-west of the Site.

### Field survey

#### *Habitats*

- 4.6 The Site comprises two detached two-storey houses, Carlton House and Campana House. Associated with these houses are front and rear gardens, two ponds, a pool and out buildings. Mixed semi-natural woodland is present to the north-west of the properties within the Site boundary. Habitats are shown in Figure 1.

#### *Amenity grassland*

- 4.7 Amenity grassland, which is regularly mown, is present to the rear of both properties, the front of Campana House and to the south of the hedge along Harts Lane. Some of this grassland will be lost in the proposed development.

#### *Bare ground*

- 4.8 Both properties have areas of bare ground, consisting of both tarmac and gravel to the front for access and parking, and paving to the rear.

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<sup>1</sup> Habitats of Principal Importance are those listed under Section 41 of the NERC Act 2006 for the purposes of conserving biodiversity (see Appendix 2).

## Introduced shrub

### Carlton house

- 4.9 Carlton house has a variety of introduced shrubs. To the front of the house species include laurel *Laurus sp.*, crab apple *Malus sylvestris*, field maple *Acer campestre*, bamboo *Bambusoideae sp.*, *Geranium sp.*, nettle *Urtica dioica*, holly *Ilex aquifolium*, ivy *Hedera helix*, rose *Rosa sp.*, *Fuchsia sp.*, bramble *Rubus fruticosus*, *Hydrangea sp.* and *Mahonia sp.*
- 4.10 Species to the rear of the house include laurel, rose, field maple, privet *Ligustrum sp.*, fern sp., *Rhododendron sp.*, holly, elder *Sambucus nigra* and ash *Fraxinus excelsior*.

### Campana house

- 4.11 Campana house has introduced shrubs in the front and rear gardens including *leylandii sp.*, privet, ornamental maples *Acer sp.* fern sp., *Iris sp.*, butterfly bush *Buddleja sp.*, *Mahonia sp.*, Lilac sp., enchanter's nightshade *Circaea lutetiana* and variegated yellow archangel *Lamiaeastrum galeobdolon subsp. Argentatum*. Variegated yellow archangel is an invasive listed species listed on Schedule 9 of the Wildlife and Countryside Act (WCA) 1981 (as amended).

## Species poor hedge

- 4.12 A species poor hedge (Photograph 1) is located to the south-east of the Site and to the east of Carlton house. Species include laurel, *leylandii sp.* and beech *Fagus sylvatica*, field maple and rowan *Sorbus aucuparia*. and *Thuja sp.* Access in the proposed development will go through the hedge to the south-east of the Site but it is considered to be of limited ecological value.

## Mixed semi-natural woodland

- 4.13 Woodland is located to the north-west of the Site and is currently connected to the rear gardens of Carlton and Campana house. The wooded areas comprise a mix of native and non-native shrubs and trees including laurel, oak, conifer species, holly, beech, elm *Ulmus sp.*, crab apple, apple *Malus sp.*, *Leylandii* and *Rhododendron sp.*
- 4.14 The wooded areas typically have a sparse ground flora with species such as dog's mercury *Mercurialis perennis*, garlic mustard *Alliaria petiolate* lungwort *Pulmonaria officinalis* and bluebell *Hyacinthoides non-scripta* present.
- 4.15 The woodland of Campana house has woodland glades (Target Note 1; Appendix 3).

## Scattered Trees

- 4.16 Scattered trees are found in the gardens of both Carlton and Campana house. Species such as *Leylandii sp.*, grey willow *Salix cinerea*, *Eucalyptus sp.*, rowan, laurel, bamboo and field maple are present.

## Ponds

- 4.17 Ponds are present in both rear gardens of Carlton and Campana house. Pond 1 (Photograph 2) is small, approximately 4m<sup>2</sup> and has an artificial inflow. Plants present include soft rush *Juncus effuses*, *Iris sp.*, water lily *Nymphaeaceae sp.*, willowherb *Epilobium sp.*, foals watercress *Apium nodiflorum* and hornwort *Ceratophyllum demersum*. Pond 2 (Photograph 3) is small, approximately 0.5m<sup>2</sup> and has no macrophyte cover. Depending on the outcome of GCN surveys (Section 5, paragraph 5.16 the ponds have the potential to be HPI).

## Buildings

- 4.18 The Site comprises two detached two-storey houses, Carlton House and Campana House. These houses will not be impacted by the proposed development and are therefore not considered

further. Carlton and Campana house have associated outbuildings in their gardens (which are likely to be impacted by the proposed development); details of these are therefore provided in Table 3. The potential of each of these buildings to support roosting bats is considered in paragraph 4.22.

Table 3: Outbuildings present on Site.

Building	Building type
1	Wendy house. Wooden with a felt roof (Photograph 4).
2	Summer house. Wooden with a felt roof (Photograph 5).
3	Shed. Wooden with a corrugated plastic roof (Photograph 6).
4	Small shed. Wooden with a felt roof (Photograph 7).
5	Large shed. Wooden with a felt roof (Photograph 8).
6	Stable. Breeze block with corrugated tin/asbestos roof (Photograph 9).

### **Protected and notable species**

#### **Bats**

- 4.19 HBIC returned 26 records of bats within the 2 km search area of at least six different bat species; common pipistrelle *Pipistrellus pipistrellus* (2 records, most recent from 2015), soprano pipistrelle *Pipistrelle pygmaeus* (2 records, most recent from 2014), brown long-eared bat *Plecotus auritus* (5 records, most recent from 2001), noctule *Nyctalus noctule* (1 record, from 2012), serotine *Eptesicus serotinus* (4 records, most recent from 2015) and whiskered bat *Myotis mystacinus* (1 record, from 2015). All other records were not recorded to species level. The closest record in the last 20 years is of a brown long-eared bat, 380 m to the east of the Site in 2001. A count of nine bats was recorded.
- 4.20 A search of MAGIC showed that there are three records of EPSM licences for bats within 2 km of the Site. One, approximately 300 m to the east of the Site, and another 1.1 km to the north-east, allows for destruction of a resting place of brown long-eared and common pipistrelle. The third is approximately 1.6 km to the south-east of the Site and allows for destruction of a breeding site of brown long-eared, common pipistrelle and soprano pipistrelle.
- 4.21 Bats are protected under schedule 5 of the WCA of 1981. Noctule, soprano pipistrelle and brown long-eared bats are Species of Principal Importance (SPI) under Section 41 of the NERC Act (2006). Serotine and common pipistrelle are also listed on the Hampshire Biodiversity Action Plan (HBAP).
- 4.22 Buildings 1 to 6 were inspected for evidence of bats or bat roost potential. No evidence of bats was found in buildings 1 to 5 and all were determined to have negligible potential for bats. Building 6 had gaps identified between breeze blocks but these were assessed to be unsuitable for roosting bats. No other features or evidence of bats were identified and building 6 was determined to have negligible potential for bats.
- 4.23 All mature trees within the Site boundary were assessed for bat roost potential. Trees 1 to 4 had been previously indicated to BSG Ecology as likely requiring removal in the proposed development, and the results of the ground level tree assessment for these, as well as any other trees where potential was identified, are provided in Table 4.
- 4.24 Bats are likely to use features such as the woodland edge for foraging and commuting.

Table 4: Ground level tree assessment results

Tree number	Tree species	Features present	Potential value for bats
T1	Oak	Knot hole where a branch has been lost on the southern aspect of the tree under a limb approx. 8 m from ground level (Photograph 10). Some flaking bark.	Low
T2	Oak (split into 2 main trunks)	1 dead limb on northern tree, but no obvious features. Some flaking bark. Not considered to be a PRF.	Negligible
T3	Oak	Some flaking bark. Not considered to be a PRF.	Negligible
T4	Beech	No obvious features.	Negligible
T5	Oak	Flaking bark leaving gap between bark and main tree (Photograph 11).	Low

### Badger

- 4.25 Badger was recorded twice in 2009 within the 2 km search area. Both records are more than 500 m from the Site boundary. No badger signs were noted during the extended Phase 1 habitat survey, however habitats on Site, in particular the woodland, present suitable foraging habitat for this species.

### Amphibians

- 4.26 No records of great crested newt within the 2 km search area were provided by HBIC, and a search of MAGIC showed that there are no records of great crested newt habitat having been damaged or destroyed under Natural England EPSM licences within 2 km of the Site. Great crested newt is a SPI and protected under Schedule 5 of the WCA of 1981.
- 4.27 Four ponds are located within 250 m of the Site (see Figure 2), including two ponds within the Site boundary (Pond 1 and 2). These ponds were assessed for their suitability to support great crested newt. The results of the HSI assessment are shown in Table 5. Both offsite ponds and pond 2 in Campana house garden are considered to be of at least good habitat suitability for great crested newt.
- 4.28 Two records of common toad *Bufo bufo* were returned by HBIC. The closest common toad was recorded 2 m from the Site boundary, in gardens to the west of the Site. Common toad is a SPI.

Table 5: Habitat Suitability Index results for ponds within 250 m of the Site.

Waterbody	Pond 1	Pond 2	Pond 3	Pond 4
Location	SU 4658 6091	SU 4659 6091	SU 4656 6078	SU 4668 6070
Area (m <sup>2</sup> )	4	0.5	25	100
Drying	Never	Never	Sometimes (not annually)	Never
Water quality	Good	Good	Poor	Moderate
Shade	None	25%	50%	50%
Fowl	None	None	None	Minor (present but low impact)
Fish	Major-dense population of	Possible present but no evidence	Absent	Absent

Waterbody	Pond 1	Pond 2	Pond 3	Pond 4
	goldfish			
<b>Ponds within 1 km</b>	8	8	11	11
<b>Terrestrial habitat</b>	Moderate	Moderate	Good- rough grassland	Good – rough grassland and woodland
<b>Macrophyte cover</b>	50% (see 4.16)	0%	90% dominated by sedge	60% - iris and water lily
<b>HSI score</b>	<b>0.54</b>	<b>0.74</b>	<b>0.83</b>	<b>0.98</b>
<b>HSI category</b>	<b>Below average</b>	<b>Good</b>	<b>Excellent</b>	<b>Excellent</b>

### Reptiles

- 4.29 Grass snake *Natrix natrix* (3 records, most recent from 2014), slow worm *Anguis fragilis* (1 record, from 2014) and common lizard *Zootoca vivipara* (1 record, from 2016) have all been recorded within the 2 km search area. The closest grass snake and slow worm were recorded 2 m from the Site boundary, in gardens to the west of the Site. The maximum count of grass snake was 1 and slow worm was 5. Common lizard was recorded 1.8 km to the north-east of the Site. All three species are SPI and protected under Schedule 5 of the WCA of 1981. The Site presents some suitable habitat for reptiles, particularly the edge of woodland habitat and woodland glades of Campana house (Target Note 1).

### Birds

- 4.30 The desk study return 33 species of birds within the 2 km search area. Various species which could be supported by habitats on Site were recorded including house sparrow *Passer domesticus* (2 records, most recent from 2012) which is a SPI. Species listed on the Birds of Conservation Concern Red list such as song thrush *Turdus philomelos*, mistle thrush *Turdus viscivorus*, marsh tit *Poecile palustris*, and starling *Sturnus vulgaris* all have the potential to occur on Site. Several species are also on the HBAP. A full list of bird species is in Table 1, Appendix 4.

### Invertebrates

- 4.31 Records for terrestrial invertebrates were recorded within the 2 km search area. Two species of dragonfly, downy emerald *Cordulia aenea* and keeled skimmer *Orthetrum coerulescens*, were recorded in 2005 from Highclere Park, approx. 800 m to the west of the Site. Both are listed on the HBAP. Downy emerald has the potential to be found on Site as they are typically found in habitats where there are ponds within or close to deciduous woodland with scattered bankside trees.
- 4.32 Nine species of butterfly and moth were also returned from the 2 km search area (Table 2, Appendix 4). Two species, purple emperor *Apatura iris* and silver-washed fritillary *Argynnis paphia* are on the HBAP. All species of butterfly and moth were recorded more than 1.5 km away from Site, however habitats on Site have the potential to support a variety of butterflies, moths and other terrestrial invertebrates.

## 5 Potential Impacts and Recommendations

- 5.1 This section considers the potential impacts of the proposed development on ecological features at the Site. It also provides key recommendations for further survey, mitigation and compensation to ensure compliance with legislation and planning policy. Detail on relevant legislation and planning policy is detailed in Appendix 2
- 5.2 In addition, enhancement measures have been recommended. This is in accordance with the National Planning Policy Framework (NPPF) 2012 which states that “developments should minimise impacts on biodiversity and, where possible, provide a net gain in biodiversity” (paragraph 109) and that “opportunities to incorporate biodiversity in and around developments should be encouraged” (paragraph 188). Biodiversity net gain is also encouraged in Policy EM4 of the Basingstoke and Dean Local Plan (Appendix 2).
- 5.3 The assessment of impacts and the recommendations that are provided are based on the proposed development plan in Appendix 1.

### Statutory designated sites

- 5.4 An additional two residential units would likely cause a minor increase in the number of residents within the local area. It is considered that this increase is unlikely to result in any significant effects on the SSSI and LNR within 2 km of the Site.

### Habitats of Principal Importance

- 5.5 It is not considered that the traditional orchard HPI will be impacted by the proposed development.

### Habitats

- 5.6 The habitats present on Site are generally considered to be of low ecological value. The ornamental planting is of limited ecological importance as many of the species are non-native; however, they include species producing fruits and flowers likely to provide a food resource for invertebrates and birds. The woodland on Site has some ecological value and should be retained where possible. Depending on results of GCN surveys (Paragraph 5.14), ponds 1 and 2 have the potential to be HPI should be retained if possible. If retention is not possible, replacement ponds should be created.
- 5.7 To compensate for the loss of habitats on Site and to provide enhancements to increase biodiversity it is recommended as part of the proposed development:
- New native, species-rich hedgerows should be planted as part of the proposals, consisting of a diversity of fruit and berry bearing species such as hawthorn *Crataegus monogyna*, blackthorn *Prunus spinosa*, bird cherry *Prunus padus*, field maple and beech. Ideally an adjacent 2 m-wide strip of less intensively managed grassland, which would be allowed to develop structurally into tussocks, would be maintained next to the hedgerow(s).
  - New trees should consist of a diversity of native tree species, including fruit and berry bearing species such as oak, hazel *Corylus laevigata*, rowan, wild cherry *Prunus avium*, elder *Sambucus nigra* and crab apple.
  - Amenity grassland/garden areas should be planted with species-rich turf.
- 5.8 In addition, root protection zones should to be implemented in relation to The British Standard for all retained hedgerows and/or trees (BS 5837:2012).



## Protected species

### **Bats**

#### **Buildings**

- 5.9 The buildings on Site have negligible potential to support roosting bats. The removal of these buildings is unlikely to have an adverse impact on bats.

#### **Trees**

- 5.10 Two trees have been identified as having low potential for roosting bats. Further surveys are not considered necessary; however, should the removal of these trees be required for the proposed development, it is recommended that a precautionary soft felling approach is taken.

#### ***Precautionary soft felling***

- 5.11 Trees with PRFs have not been identified as having hibernation potential therefore tree removal should take place between November to February inclusive, i.e. outside the nesting bird period and during the bat hibernation period. The following steps should be followed:
- A toolbox talk, which provides information on the ecological issues at the Site and precautionary method of works, will be given by a Natural England licenced bat ecologist to the arboriculturalist team.
  - The licenced bat ecologist will then oversee the soft felling of the tree/s. Any limbs with features identified as having the potential to support roosting bats will first be removed and lowered to the ground for inspection of presence of bats by the licenced bat ecologist.
  - If features of significance are identified the trunk will be felled in sections and lowered to the ground for inspection of presence of bats by the licenced bat ecologist.
  - Should bats be found then works will cease immediately and Natural England will be consulted on whether there is a requirement for a EPSM licence.

#### **Commuting and foraging habitat**

- 5.12 Desk study results and local EPSM licences demonstrate bats are present in the area. Bats are likely to use features such as the woodland edge for foraging and commuting; however, the amount of foraging and commuting habitat to be lost is not likely to have a significant impact on any bats using the Site and therefore further survey is not considered necessary.
- 5.13 The proposed development will likely increase lighting within the Site. Bats are disturbed by artificial lighting and an increase in lighting could result in commuting routes being interrupted and disruption to foraging patterns. As such it is proposed that lighting in proximity to the woodland will be carefully designed to ensure there is minimal light spill onto this habitat. Lighting should be directed away from the woodland and any other areas of semi-natural vegetation; this could be achieved by using directional hoods.
- 5.14 It is recommended that two Schwegler 1FF bat boxes are included on trees within the woodland to provide enhancement at the Site for bats. Guidance on siting and location of bat boxes should be adhered to<sup>2</sup>.

### **Badger**

- 5.15 Lack of evidence of badger activity within the survey area suggests it is of low importance to the species. Impacts on this species associated with the proposed development are not anticipated and no further survey is recommended.

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<sup>2</sup> [http://www.bats.org.uk/pages/bat\\_boxes.html](http://www.bats.org.uk/pages/bat_boxes.html)



- 5.16 Good practice precautionary measures are, however, recommended to prevent badger (or other species) from becoming trapped in any excavations during the construction phase. This includes either the covering of excavations overnight to prevent access or the fitting of excavations with a safe route of egress at one side (a ramp).

#### **Great crested newt**

- 5.17 The HSI of the four ponds demonstrate habitats are suitable to support GCN at and near to the Site. To determine whether GCN are present on the Site or within 250 m of the Site, it is recommended that an eDNA survey is undertaken of all four ponds to establish presence or absence of this species.
- 5.18 Environmental DNA surveys must be undertaken between mid-April and June; should the presence of GCN be confirmed through the eDNA surveys, further surveys to estimate the population size will be required<sup>3</sup>. The further survey visits, if required, would involve six night-time visits, and return morning visits, to count GCN in suitable weather conditions (above 5°C) to estimate the population size. These surveys must be carried out between mid-March and mid-June, with at least three visits between mid-April and mid-May.

#### **Reptiles**

- 5.19 The woodland glades, where unmanaged rough grassland and tall ruderals are present in the grounds of Campana house, provide suitable habitat for reptiles and given the proximity that grass snake and slow worm have been recorded it is likely that these species are present on Site. However, given the small amount of suitable habitat present on Site it is not considered that further surveys are required.
- 5.20 In the absence of mitigation, clearance of the Site may have the potential to contravene legislation which protects reptiles. Due to the limited extent of habitat within the Site it is considered that it is possible to adopt a precautionary approach to site clearance works to prevent the killing or injury of any reptiles which may be present. A precautionary method statement is recommended, which is likely to focus on mowing of rough grassland areas to make them less suitable, allowing individuals to naturally disperse to more favourable habitat outside the Site, and a hand search of the Site prior to construction work by a suitably qualified ecologist.

#### **Birds**

- 5.21 The Site presents suitable habitat for many bird species within the woodland and gardens. Commonly occurring nesting birds are likely to be supported. In the absence of mitigation, clearance of shrubs and removal of trees could destroy a nest if conducted during the breeding bird season. To avoid impacts on breeding birds, any shrubs or trees should be cleared outside of the nesting bird season (typically, March to August inclusive). Mature trees should also only undergo arboricultural works (if required) outside of the nesting bird season.
- 5.22 In the event that any vegetation clearance cannot be undertaken outside of the bird nesting season a nesting bird check should be undertaken by a suitably qualified ecologist prior to works commencing to determine whether or not nesting birds are present. If nesting birds are found to be present any works judged likely to cause a disturbance will need to be delayed until the young have fledged.
- 5.23 Bird boxes suitable for common species such as blue tit *Cyanistes caeruleus* should be included on trees within the woodland to provide compensation for the loss of nesting habitat. This would include two Schwegler 1B boxes. House sparrows have also been recorded in the area and it is recommended that two Schwegler 1SP boxes are included on the buildings in the development to

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<sup>3</sup> In some cases, the results of the eDNA survey are inconclusive (e.g. because poor water quality may have degraded any DNA present). If this were to be the case, four night-time visits would be necessary in order to determine whether this species is present. If they are present, then a further two visits would be necessary to give the size required for a population estimation. These surveys must be carried out between mid-March and mid-June, with at least three visits between mid-April and mid-May.

provide an enhancement. This would include two Schwegler 1SP boxes. Guidance on siting and location of bird boxes should be adhered to<sup>4</sup>.

### **Invertebrates**

- 5.24 Habitats on Site are not considered to be of high ecological value for invertebrates and therefore loss of habitats is not anticipated to impact invertebrates significantly. No further survey for this species group is recommended.
- 5.25 To enhance the Site for invertebrate species it is recommended that nectar rich shrub planting is incorporated, such as English lavender *Lavandula angustifolia*, rosemary *Rosmarinus officinalis*, firethorn *Pyracantha* species, Japanese spiraea *Spiraea japonica*, Japanese Rose *Rosa rugosa* and Hebe *Hebe* species, to provide food sources for invertebrates.
- 5.26 Construction of a bug hotel such as off-the-shelf options<sup>5</sup> or one constructed in accordance with guidance provided by the RSPB<sup>6</sup>, Buglife<sup>7</sup> and others<sup>8</sup>, will also provide enhancement for invertebrates at the Site.

### **Invasive species of plant**

- 5.27 Variegated yellow archangel is listed under Schedule 9 to the Wildlife and Countryside Act 1981 (as amended). As such, it is an offence to plant or otherwise allow this species to grow in the wild. Inadvertently spreading this plant throughout the Site and into adjacent land during site clearance or construction work could give rise to an offence. It is therefore recommended that this plant is removed from the Site and disposed of appropriately. It is recommended that advice on removal is sought from a specialist contractor.

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<sup>4</sup> <https://www.rspb.org.uk/birds-and-wildlife/advice/how-you-can-help-birds/nestboxes/nestboxes-for-small-birds/making-and-placing-a-bird-box>

<sup>5</sup> <https://www.birdfood.co.uk/insect-villa.html>

<sup>6</sup> <https://www2.rspb.org.uk/get-involved/activities/give-nature-a-home-in-your-garden/garden-activities/build-a-bug-hotel/>

<sup>7</sup> <https://www.buglife.org.uk/sites/default/files/Build%20a%20bug%20hotel.pdf>

<sup>8</sup> <http://www.wildaboutgardens.org.uk/thingstodo/inaweekend/bug-mansion.aspx>

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## 7 Figures

(overleaf)



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OFFICE: Oxford  
T: 01865 883833  
JOB REF: P17-194

PROJECT TITLE  
CARLTON AND CAMPANA HOUSE

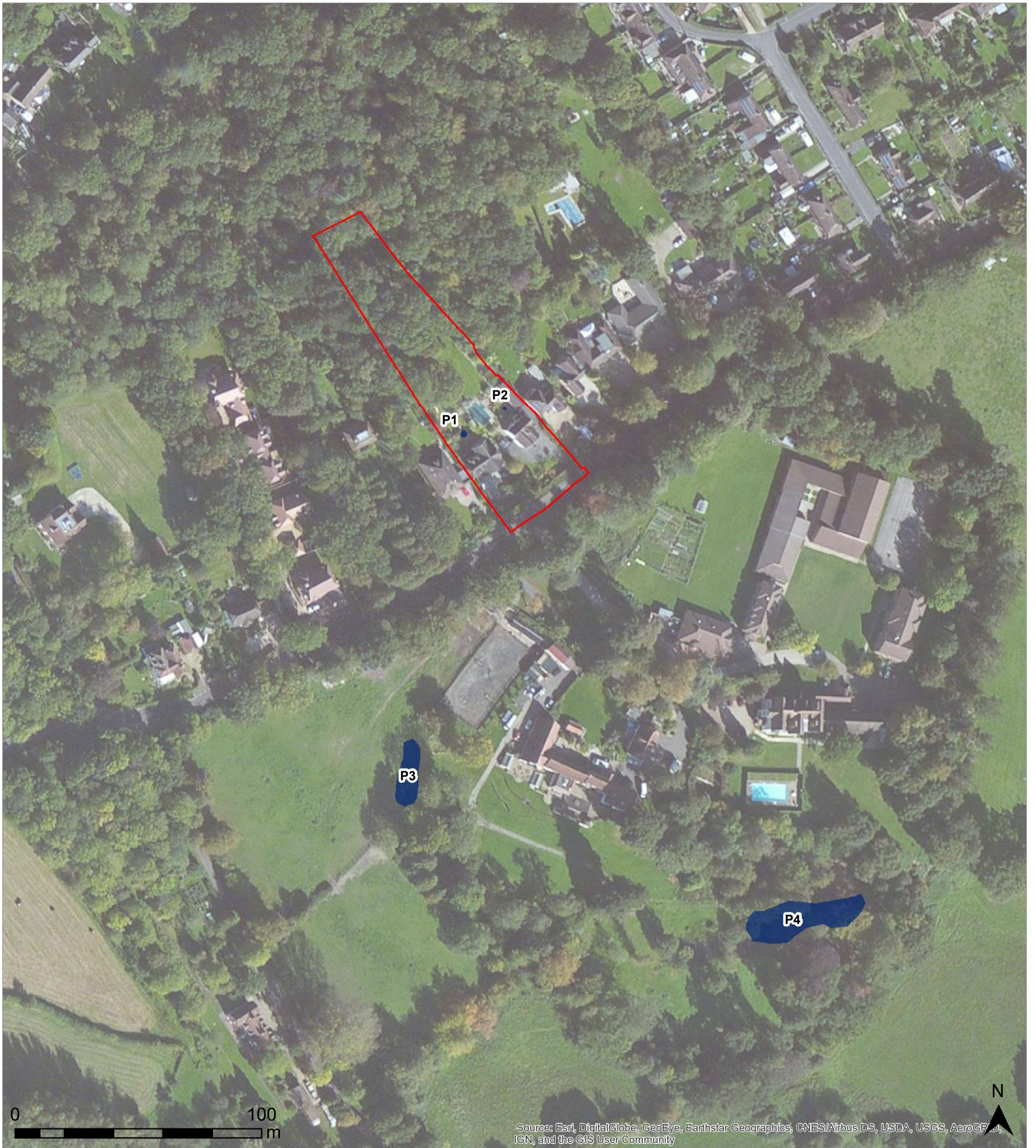
DRAWING TITLE  
Figure 1: Phase 1 Habitat Survey

DATE: 26.02.2018  
DRAWN: MS  
CHECKED: SJ  
APPROVED: AM  
SCALE: 1:500  
STATUS: FINAL

LEGEND

- |   |                             |   |                    |   |                               |
|---|-----------------------------|---|--------------------|---|-------------------------------|
|  | Site Boundary               |  | Introduced shrub   |  | Scattered tree                |
|  | Building                    |  | Bare ground        |  | Target note                   |
|  | Mixed semi-natural woodland |  | Fence              | <b>T1</b>   | Tree with bat roost potential |
|  | Pond                        |  | Dry ditch          |   |                               |
|  | Amenity grassland           |  | Species pool hedge |   |                               |











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LEGEND





- Site Boundary
- Pond



## 8 Photographs

<p><b>Photograph 1:</b> Species-poor hedge</p>	<p><b>Photograph 2:</b> Pond 1</p>
	
<p><b>Photograph 3:</b> Pond 2</p>	<p><b>Photograph 4:</b> Building 1</p>
	
<p><b>Photograph 5:</b> Building 2</p>	<p><b>Photograph 6:</b> Building 3</p>
	



<p><b>Photograph 7: Building 4</b></p>  <p>A photograph of a small, dark brown wooden shed with a gabled roof and a double door. It is situated outdoors with green foliage in the background.</p>	<p><b>Photograph 8: Building 5</b></p>  <p>A photograph of a small wooden building, possibly a shed or workshop, with a gabled roof. It is partially obscured by dense green bushes and trees.</p>
<p><b>Photograph 9: Building 6</b></p>  <p>A photograph of a small, light green building with a dark roof. A large, dry, brushy plant is in the foreground, partially obscuring the building.</p>	<p><b>Photograph 10: Potential bat roosting feature on Tree 1.</b></p>  <p>A photograph of a tree with green leaves. A red circle highlights a specific feature on a branch, which is a potential bat roosting site.</p>
<p><b>Photograph 11: Potential bat roosting feature on Tree 5.</b></p>  <p>A photograph of a tree with green leaves. A red circle highlights a specific feature on a branch, which is a potential bat roosting site.</p>	

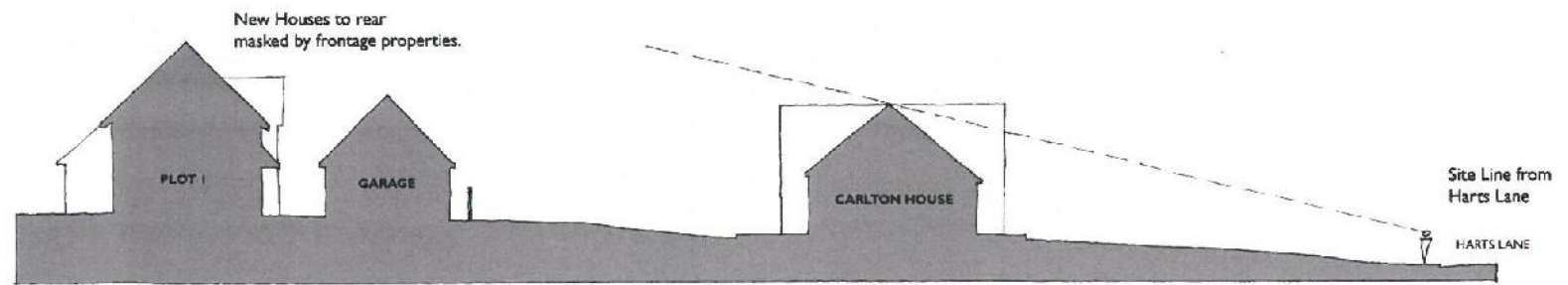


## **Appendix 1: Proposed Development**

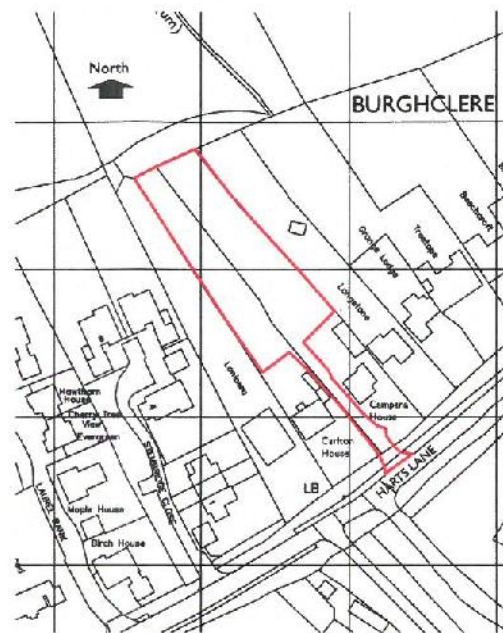




SECTIONAL ELEVATION AA - 1:200@A1



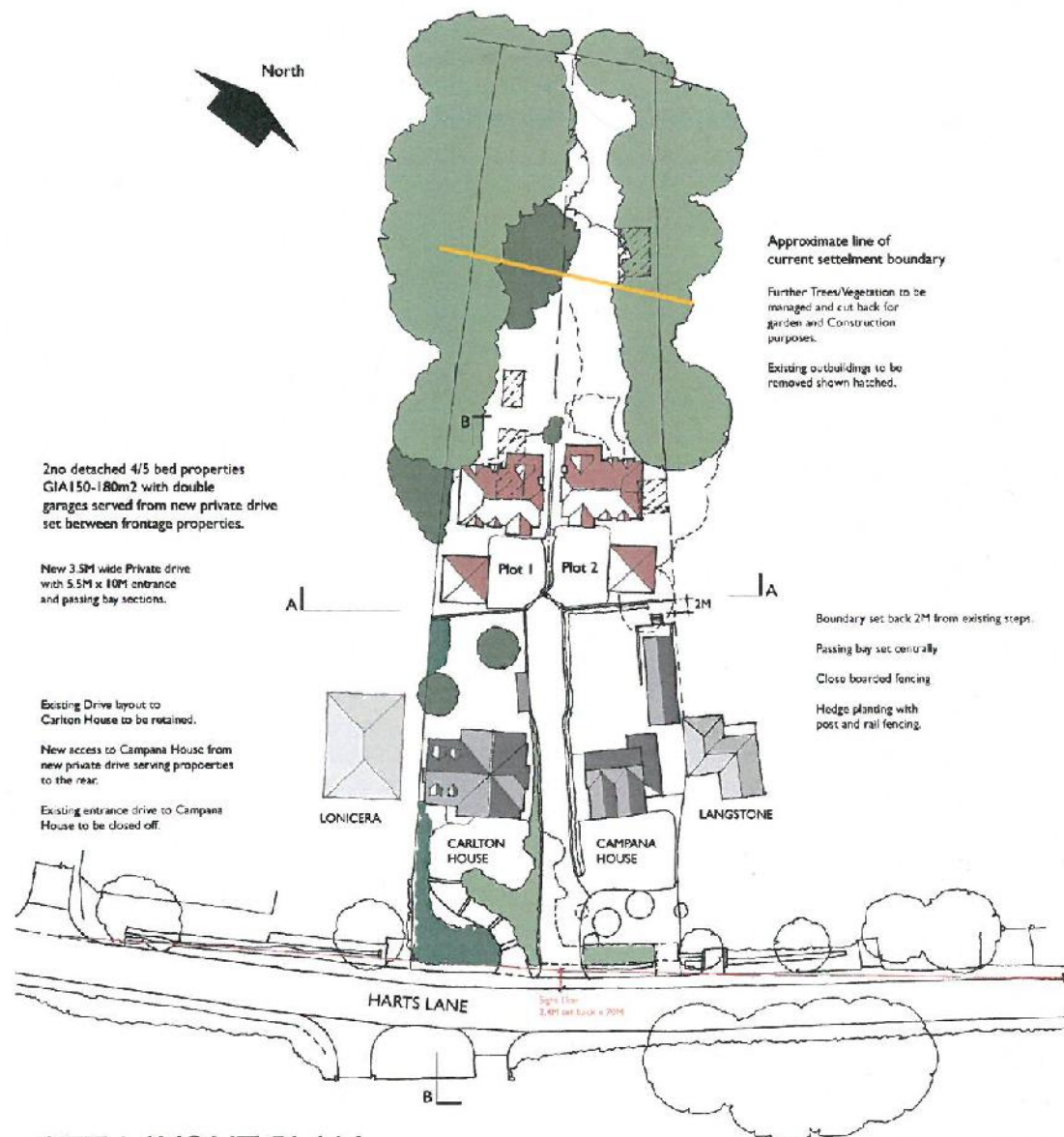
CROSS SECTION BB - 1:200@A1



LOCATION PLAN  
Scale 1:1250 @ A1



EXTRACT FROM LOCAL PLAN INSET MAP 17 - NTS



SITE LAYOUT PLAN  
Proposed Residential Development  
Land to the rear of Carlton and Campana House  
Scale 1:500 @ A1



Aerial View

DRAFT

client	Rivar Ltd
project	Proposed Residential Development Land to the rear of Carlton and Campana House
drawing	Plans Elevations and Sections
project no	A277
drawing no	DPI00
scale	1:200/1:500/1:1250
date	1.03.2018
drawn by	LB
checked by	
copyright	ARK

report any errors or omissions



## Appendix 2: Summaries of Relevant Policy, Legislation and Other Instruments

This section briefly summarises the legislation, policy and related issues that are relevant to the main text of the report. The following text does not constitute legal or planning advice.

### Basingstoke and Dean Local Plan

#### *Policy EM4 – Biodiversity, Geodiversity and Nature Conservation*

1. Development proposals will only be permitted if significant harm to biodiversity and/ or geodiversity resulting from a development can be avoided or, if that is not possible, adequately mitigated and where it can be clearly demonstrated that:
  - a. There will be no adverse impact on the conservation status of key species; and
  - b. There will be no adverse impact on the integrity of designated and proposed European designated sites; and
  - c. There will be no harm to nationally designated sites; and
  - d. There will be no harm to locally designated sites including Sites of Importance for Nature Conservation (SINCs) and Local Nature Reserves (LNRs); and
  - e. There will be no loss or deterioration of a key habitat type, including irreplaceable habitats; and
  - f. There will be no harm to the integrity of linkages between designated sites and key habitats.

The weight given to the protection of nature conservation interests will depend on the national or local significance and any designation or protection applying to the site, habitat or species concerned.

2. Where development proposals do not comply with the above they will only be permitted if it has been clearly demonstrated that there is an overriding public need for the proposal which outweighs the need to safeguard biodiversity and/ or geodiversity and there is no satisfactory alternative with less or no harmful impacts. In such cases, as a last resort, compensatory measures will be secured to ensure no net loss of biodiversity and, where possible, provide a net gain.
3. Applications for development must include adequate and proportionate information to enable a proper assessment of the implications for biodiversity and geodiversity.
4. In order to secure opportunities for biodiversity improvement, relevant development proposals will be required to include proportionate measures to contribute, where possible, to a net gain in biodiversity, through creation, restoration, enhancement and management of habitats and features including measures that help to link key habitats.

Approaches to secure improvements could be achieved through:

- a. A focus on identified Biodiversity Opportunity Areas and Biodiversity Priority Areas as identified in the councils Green Infrastructure Strategy (and subsequent updates) where appropriate; and through
- b. On-site and/ or off-site provision linked to new development in accordance with the council's adopted green space standards.

## National Planning Policy Framework

The Government published the National Planning Policy Framework (NPPF) on 27th March 2012. Text excerpts from the NPPF are shown where they may be relevant to planning applications and biodiversity including protected sites, habitats and species.

In conserving and enhancing the natural environment, the NPPF (Paragraph 109) states that 'the planning system should contribute to and enhance the natural and local environment' by:

- a. Recognising the wider benefits of ecosystem services;
- b. Minimising impacts on biodiversity and providing net gains in biodiversity, where possible contributing to the Government's commitment to halt the overall decline in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;
- c. Preventing both new and existing development from contributing to or being put at unacceptable risk from, or being adversely affected by unacceptable levels of soil, air, water or noise pollution or land instability.

In paragraph 111, the NPPF refers to brownfield land as follows: 'planning policies and decisions should encourage the effective use of land by re-using land that has been previously developed (brownfield land), provided that it is not of high environmental value.'

Paragraph 117 refers to how planning policies should aim to minimise impacts on biodiversity, to: 'identify and map components of the local ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity, wildlife corridors and stepping stones that connect them and areas identified by local partnerships for habitat restoration or creation;' and to 'promote the preservation, restoration and re-creation of priority habitats, ecological networks and the protection and recovery of priority species populations, linked to national and local targets, and identify suitable indicators for monitoring biodiversity in the plan.'

Paragraph 118 of the National Planning Policy Framework advises how, when determining planning applications, local planning authorities should aim to conserve and enhance biodiversity by applying the mitigation hierarchy. The mitigation hierarchy advises that 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.

Where proposals or activities require planning permission, the NPPF states that '...local planning authorities should aim to conserve and enhance biodiversity by applying the following principles:

- d. Proposed development on land within or outside a Site of Special Scientific Interest likely to have an adverse effect on a Site of Special Scientific Interest (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 Sites of Special Scientific Interest;
- e. Development proposals where the primary objective is to conserve or enhance biodiversity should be permitted;
- f. Opportunities to incorporate biodiversity in and around developments should be encouraged;
- g. Planning permission should be refused for development resulting in the loss or deterioration of irreplaceable habitats, including ancient woodland and the loss of aged or veteran trees found outside ancient woodland, unless the need for, and benefits of, the development in that location clearly outweigh the loss; and
- h. The following wildlife sites should be given the same protection as European sites:
  - i. potential Special Protection Areas and possible Special Areas of Conservation
  - ii. listed or proposed Ramsar sites; and

- iii. sites identified, or required, as compensatory measures for adverse effects on European sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites.’

In respect of protected sites, the NPPF requires local planning authorities to make ‘distinctions...between the hierarchy of international, national and locally designated sites so that protection is commensurate with their status and gives appropriate weight to their importance and the contribution that they make to wider ecological networks.’

In paragraph 125 the NPPF states that ‘by encouraging good design, planning policies and decisions should limit the impact of light pollution from artificial light on local amenity, intrinsically dark landscapes and nature conservation.’ This applies to protected species that are a material consideration in the planning process including bats and may also apply to other light sensitive species.

### **Government Circular ODPM 06/2005 Biodiversity and Geological Conservation**

Paragraph 98 of Government Circular 06/2005 advises that “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. Local authorities should consult Natural England before granting planning permission. They should consider attaching appropriate planning conditions or entering into planning obligations under which the developer would take steps to secure the long-term protection of the species. They should also advise developers that they must comply with any statutory species’ protection provisions affecting the site concerned...”

Paragraph 99 of Government Circular 06/2005<sup>9</sup> advises that “it is essential that the presence or otherwise of protected species, and the extent that they may be affected by the proposed development, is established before the planning permission is granted, otherwise all relevant material considerations may not have been addressed in making the decision. The need to ensure ecological surveys are carried out should therefore only be left to coverage under planning conditions in exceptional circumstances, with the result that the surveys are carried out after planning permission has been granted”.

### **Standing Advice (GOV.UK)**

The GOV.UK website provides information regarding protected species and sites in relation to development proposals: ‘Local planning authorities should take advice from Natural England or the Environment Agency about planning applications for developments that may affect protected species.’ GOV.UK advises that ‘some species have standing advice which you can use to help with planning decisions. For others you should contact Natural England or the Environment Agency for an individual response.’

The standing advice (originally from Natural England and now held and updated on GOV.UK<sup>10</sup>) provides advice to planners on deciding if there is a ‘reasonable likelihood’ of protected species being present. It also provides advice on survey and mitigation requirements.

When determining an application for development that is covered by standing advice, in accordance with guidance in Government Circular 06/2005, Local planning authorities are required to take the standing advice into account. In paragraph 82 of the aforementioned Circular, it is stated that: ‘The standing advice will be a material consideration in the determination of the planning application in the same way as any advice received from a statutory consultee...it is up to the planning authority to decide the weight to be attached to the standing advice, in the same way as it would decide the weight to be attached to a response from a statutory consultee.’

<sup>9</sup> ODPM Circular 06/2005. *Government Circular: Biodiversity and Geological Conservation – Statutory Obligations and their Impacts within the Planning System* (2005). HMSO Norwich.

<sup>10</sup> <https://www.gov.uk/protected-species-and-sites-how-to-review-planning-proposals#standing-advice-for-protected-species>

## Natural Environment and Rural Communities (NERC) Act 2006 – Habitats and species of principal importance

The Natural Environment and Rural Communities (NERC) Act came into force on 1st October 2006. Sections 41 (S41) of the Act require the Secretary of State to publish a list of habitats and species which are of principal importance for the conservation of biodiversity in England. The list has been drawn up in consultation with Natural England as required by the Act. In accordance with the Act the Secretary of State keeps this list under review and will publish a revised list if necessary, in consultation with Natural England.

The S41 lists are used to guide decision-makers such as public bodies, including local authorities and utilities companies, in implementing their duty under Section 40 of the NERC Act 2006, to have regard to the conservation of biodiversity in England, when carrying out their normal functions, including development control and planning. This is commonly referred to as the 'Biodiversity Duty.'

Guidance for public authorities on implementing the Biodiversity Duty<sup>11</sup> has been published by Defra. One of the key messages in this document is that 'conserving biodiversity includes restoring and enhancing species populations and habitats, as well as protecting them.' In England the administration of the planning system and licensing schemes are highlighted as having a 'profound influence on biodiversity conservation.' Local authorities are required to take measures to "promote the preservation, restoration and re-creation of priority habitats, ecological networks and the protection and recovery of priority species. The guidance states that 'the duty aims to raise the profile and visibility of biodiversity, clarify existing commitments with regard to biodiversity, and to make it a natural and integral part of policy and decision making.'

In 2007, the UK Biodiversity Action Plan (BAP) Partnership published an updated list of priority UK species and habitats covering terrestrial, freshwater and marine biodiversity to focus conservation action for rarer species and habitats in the UK. The UK Post-2010 Biodiversity Framework<sup>12</sup>, which covers the period from 2011 to 2020, now succeeds the UK BAP. The UK priority list contained 1150 species and 65 habitats requiring special protection and has been used as a reference to draw up the lists of species and habitats of principal importance in England.

In England, there are 56 habitats of principal importance and 943 species of principal importance on the S41 list. These are all the habitats and species found in England that were identified as requiring action in the UK BAP and which continue to be regarded as conservation priorities in the subsequent UK Post-2010 Biodiversity Framework.

### European protected species (Animals)

The Conservation of Habitats and Species Regulations 2017 consolidates the various amendments that have been made to the original (2010) Regulations, transposing the Habitats Directive (Directive 92/43/EEC) and the Birds Directive (Directive 2009/147/EC), which set out the rules for protection, management and exploitation of European Protected Species and Habitats.

"European protected species" (EPS) of animal are those which are present on Schedule 2 of the 2017 Regulations. They are subject to the provisions of Regulation 43 of those Regulations. All EPS are also protected under the Wildlife and Countryside Act 1981 (as amended). Taken together, these pieces of legislation make it an offence to:

- a. Intentionally or deliberately capture, injure or kill any wild animal included amongst these species
- b. Possess or control any live or dead specimens or any part of, or anything derived from a these species
- c. deliberately disturb wild animals of any such species

<sup>11</sup> Defra, 2007. *Guidance for Public Authorities on Implementing The Biodiversity Duty*. (<http://www.defra.gov.uk/publications/files/pb12585-pa-guid-english-070516.pdf>)

<sup>12</sup> JNCC and Defra (on behalf of the Four Countries' Biodiversity Group). 2012. *UK Post-2010 Biodiversity Framework*. July 2012. (<http://jncc.defra.gov.uk/page-6189>)

- d. deliberately take or destroy the eggs of such an animal, or
- e. intentionally, deliberately or recklessly damage or destroy a breeding site or resting place of such an animal, or obstruct access to such a place

For the purposes of paragraph (c), disturbance of animals includes in particular any disturbance which is likely—

- a. to impair their ability—
  - i. to survive, to breed or reproduce, or to rear or nurture their young, or
  - ii. in the case of animals of a hibernating or migratory species, to hibernate or migrate; or
- b. to affect significantly the local distribution or abundance of the species to which they belong.

Although the law provides strict protection to these species, it also allows this protection to be set aside (derogated) through the issuing of licences. The licences in England are currently determined by Natural England (NE) for development works and by Natural Resources Wales in Wales. In accordance with the requirements of the Regulations (2010), a licence can only be issued where the following requirements are satisfied:

- a. The proposal is necessary 'to preserve public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment'
- b. 'There is no satisfactory alternative'
- c. The proposals 'will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range.'

### ***Definition of breeding sites and resting places***

Guidance for all European Protected Species of animal, including bats and great crested newt, regarding the definition of breeding and of breeding and resting places is provided by The European Council (EC) which has prepared specific guidance in respect of the interpretation of various Articles of the EC Habitats Directive.<sup>13</sup> Section II.3.4.b) provides definitions and examples of both breeding and resting places at paragraphs 57 and 59 respectively. This guidance states that 'The provision in Article 12(1)(d) [of the EC Habitats Directive] should therefore be understood as aiming to safeguard the ecological functionality of breeding sites and resting places.' Further the guidance states: 'It thus follows from Article 12(1)(d) that such breeding sites and resting places also need to be protected when they are not being used, but where there is a reasonably high probability that the species concerned will return to these sites and places. If for example a certain cave is used every year by a number of bats for hibernation (because the species has the habit of returning to the same winter roost every year), the functionality of this cave as a hibernating site should be protected in summer as well so that the bats can re-use it in winter. On the other hand, if a certain cave is used only occasionally for breeding or resting purposes, it is very likely that the site does not qualify as a breeding site or resting place.'

### **Birds**

All nesting birds are protected under Section 1 of the Wildlife and Countryside Act 1981 (as amended) which makes it an offence to intentionally kill, injure or take any wild bird or take, damage or destroy its nest whilst in use or being built, or take or destroy its eggs. In addition to this, for some rarer species (listed on Schedule 1 of the Act), it is an offence to disturb them whilst they are nest building or at or near a nest with eggs or young, or to disturb the dependent young of such a bird.

The Conservation of Habitats and Species Regulations 2017 places duties on competent authorities (including Local Authorities and National Park Authorities) in relation to wild bird habitat.

<sup>13</sup> Guidance document on the strict protection of animal species of Community interest under the Habitats Directive 92/43/EEC. (February 2007), EC.



Regulation 9 requires public bodies to exercise their nature conservation functions so as to comply with the Habitats Directive and the new Wild Birds Directive (as defined in regulation 3(1)). Regulation 10 imposes duties on public bodies in relation to wild bird habitats and regulation 11 requires nature conservation bodies to review and report on whether the obligations under regulation 10 have been met.

These provisions relate back to Articles 1, 2 and 3 of the EC Directive on the conservation of wild birds (2009/147/EC, 'Birds Directive'<sup>14</sup>) (Regulation 10 (2) & (3) require that 'in the exercise of their functions as they consider appropriate' these authorities must take steps to contribute to the 'preservation, maintenance and re-establishment of a sufficient diversity and area of habitat for wild birds in the United Kingdom, including by means of the upkeep, management and creation of such habitat...'

In relation to the duties placed on competent authorities under the 2017 Regulations, 10 (8) states: 'So far as lies within its powers, a competent authority in exercising any function in or in relation to the United Kingdom must use all reasonable endeavours to avoid any pollution or deterioration of habitats of wild birds (except habitats beyond the outer limits of the area to which the new Wild Birds Directive applies).'

### **Badger**

Badger is protected under the Protection of Badgers Act 1992. This makes it an offence to wilfully kill, injure, take, possess or cruelly ill-treat a badger, or to attempt to do so; or to intentionally or recklessly interfere with a sett. Sett interference includes disturbing badgers whilst they are occupying a sett, as well as damaging or destroying a sett or obstructing access to it. A badger sett is defined in the legislation as "a structure or place, which displays signs indicating current use by a badger".

ODPM Circular 06/2005<sup>15</sup> provides further guidance on statutory obligations towards badger within the planning system. Of particular note is paragraph 124, which states that "The likelihood of disturbing a badger sett, or adversely affecting badgers' foraging territory, or links between them, or significantly increasing the likelihood of road or rail casualties amongst badger populations, are capable of being material considerations in planning decisions."

Natural England provides Standing Advice<sup>16</sup>, which is capable of being a material consideration in planning decisions. Natural England recommends mitigation to avoid impacts on badger setts, which includes maintaining or creating new foraging areas and maintaining or creating access (commuting routes) between setts and foraging/watering areas.

### **Reptiles**

All native reptile species receive legal protection in Great Britain under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). Viviparous lizard, slow-worm, grass snake and adder are protected against killing, injuring and unlicensed trade only. Sand lizard and smooth snake receive additional protection as "European Protected species" under the provisions of the Conservation of Habitats and Species Regulations 2010 (as amended) and are fully protected under the Wildlife and Countryside Act 1981 (as amended).

All six native species of reptile are included as 'species of principal importance' for the purpose of conserving biodiversity under Sections 41 (England) and 42 (Wales) of the NERC Act 2006.

Current Natural England Guidelines for Developers<sup>17</sup> states that 'where it is predictable that reptiles are likely to be killed or injured by activities such as site clearance, this could legally constitute intentional killing or injuring.' Further the guidance states: 'Normally prohibited activities may not be

<sup>14</sup> 2009/147/EC Birds Directive (30 November 2009. European Parliament and the Council of the European Union.

<sup>15</sup> ODPM Circular 06/2005. *Government Circular: Biodiversity and Geological Conservation – Statutory Obligations and their Impacts within the Planning System* (2005). HMSO Norwich.

<sup>16</sup> <http://www.naturalengland.org.uk/ourwork/planningdevelopment/spatialplanning/standingadvice/specieslinks.aspx>

<sup>17</sup> English Nature, 2004. *Reptiles: guidelines for developers*. English Nature, Peterborough.

<http://publications.naturalengland.org.uk/publication/76006?category=31018>



illegal if 'the act was the incidental result of a lawful operation and could not reasonably have been avoided'. Natural England 'would expect reasonable avoidance to include measures such as altering development layouts to avoid key areas, as well as capture and exclusion of reptiles.'

The Natural England Guidelines for Developers state that 'planning must incorporate two aims where reptiles are present:

- To protect reptiles from any harm that might arise during development work;
- To ensure that sufficient quality, quantity and connectivity of habitat is provided to accommodate the reptile population, either on-site or at an alternative site, with no net loss of local reptile conservation status.'

### **Wild mammals in general**

The Wild Mammals (Protection) Act 1996 (as amended) makes provision for the protection of wild mammals from certain cruel acts, making it an offence for any person to intentionally cause suffering to any wild mammal. In the context of development sites, for example, this may apply to rabbits in their burrows.

### **Invasive non-native species**

An invasive non-native species is any non-native animal or plant that has the ability to spread causing damage to the environment.

Under the Wildlife and Countryside Act 1981 (as amended) it is an offence to release, or to allow to escape into the wild, any animal which is not ordinarily resident in and is not a regular visitor to Great Britain in a wild state or is listed under Schedule 9 of the Act.

It is an offence to plant or otherwise cause to grow in the wild invasive non-native plants listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended).

## Appendix 3: Target Notes

### Target Note 1

Woodland edge habitat and woodland glades in the woodland to the rear of Campana House. Rough grassland and tall ruderals are present. Habitat has the potential to support reptiles and great crested newt.

## Appendix 4: Species lists

Table 1: Bird species returned by HBIC as being recorded in the 2 km search area.

Scientific name	Common name	Status
<i>Acanthis cabaret</i>	Lesser Redpoll	BOCC_Red NERC_s41
<i>Alauda arvensis</i>	Skylark	BOCC_Red NERC_s41 HBAP
<i>Alcedo atthis</i>	Kingfisher	EU_Bird_1 WCA_s1p1
<i>Anthus petrosus</i>	Rock Pipit	CR
<i>Aythya marila</i>	Scaup	BOCC_Red NERC_s41 WCA_s1p1
<i>Caprimulgus europaeus</i>	Nightjar	EU_Bird_1 NERC_s41 HBAP CI
<i>Cuculus canorus</i>	Cuckoo	BOCC_Red NERC_s41
<i>Emberiza citrinella</i>	Yellowhammer	BOCC_Red NERC_s41
<i>Emberiza schoeniclus</i>	Reed Bunting	NERC_s41 HBAP
<i>Falco subbuteo</i>	Hobby	WCA_s1p1 HBAP CI
<i>Larus fuscus</i>	Lesser Black-backed Gull	BOCC_Red CR
<i>Linaria cannabina</i>	Linnet	BOCC_Red HBAP
<i>Loxia curvirostra</i>	Common Crossbill	WCA_s1p1 CS
<i>Milvus milvus</i>	Red Kite	EU_Bird_1 WCA_s1p1 HBAP CR
<i>Motacilla cinerea</i>	Grey Wagtail	BOCC_Red
<i>Motacilla flava</i>	Yellow Wagtail	BOCC_Red HBAP CR
<i>Muscicapa striata</i>	Spotted Flycatcher	BOCC_Red NERC_s41 HBAP
<i>Oenanthe oenanthe</i>	Wheatear	CS
<i>Pandion haliaetus</i>	Osprey	EU_Bird_1 WCA_s1p1
<i>Passer domesticus</i>	House Sparrow	BOCC_Red NERC_s41
<i>Phoenicurus ochruros</i>	Black Redstart	BOCC_Red WCA_s1p1 CR
<i>Poecile palustris</i>	Marsh Tit	BOCC_Red
<i>Pyrrhula pyrrhula</i>	Bullfinch	HBAP
<i>Scolopax rusticola</i>	Woodcock	BOCC_Red

<i>Spinus spinus</i>	Siskin	CI
<i>Streptopelia turtur</i>	Turtle Dove	BOCC_Red NERC_s41 HBAP
<i>Sturnus vulgaris</i>	Starling	BOCC_Red
<i>Turdus iliacus</i>	Redwing	BOCC_Red WCA_s1p1
<i>Turdus philomelos</i>	Song Thrush	BOCC_Red HBAP
<i>Turdus torquatus</i>	Ring Ouzel	BOCC_Red NERC_s41
<i>Turdus viscivorus</i>	Mistle Thrush	BOCC_Red
<i>Upupa epops</i>	Hoopoe	WCA_s1p1
<i>Vanellus vanellus</i>	Lapwing	BOCC_Red NERC_s41 HBAP

OCC\_Red: Birds of Conservation Concern Red List; NERC\_s41: Priority Species listed under Section 41 of the Natural Environment and Rural Communities Act 2006; WCA\_s1p1: Schedule 1 Part 1 of the Wildlife and Countryside Act 1981 (as amended); EU\_Bird\_1: Annex I of the Birds Directive; HBAP: Hampshire Biodiversity Action Plan species; CI: County Interest; CR: County Rare; CS: County Scarce.

Table 2: Species of butterfly and moth returned by HBIC as being recorded in the 2 km search area

Scientific name	Common name	Status
<i>Acrionicta psi</i>	Grey dagger	NERC_s41
<i>Apatura iris</i>	Purple emperor	IUCN_GB_2001:NT HBAP CS
<i>Argynnis paphia</i>	Silver-washed fritillary	HBAP CI
<i>Coenonympha pamphilus</i>	Small heath	IUCN_GB_2001:NT NERC_s41
<i>Limenitis camilla</i>	White admiral	IUCN_GB_2001:VU NERC_s41
<i>Paradarisa consonaria</i>	Square spot	nHS
<i>Parastichtis suspecta</i>	Suspected	nHS
<i>Pennithera firmata</i>	Pine carpet	nHS
<i>Pseudatemelia flavifrontella</i>	Yellow-headed tubic	CR

NERC\_s41: Priority Species listed under Section 41 of the Natural Environment and Rural Communities Act 2006; IUCN\_GB\_2001: See IUCN (2001) guidelines, covering Great Britain; HBAP: Hampshire Biodiversity Action Plan species; CI: County Interest; CR: County Rare; CS: County Scarce; nHS: North Hampshire Scarce