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Preliminary Ecological Appraisal and Roost Assessment

Survey site:

Tintagel Farm, Sandhurst Road Wokingham, Berkshire, RG40 3JD

Client:

Christopher Dutton

Survey date:

12th March 2026

Project:

This report is prepared to inform a planning application with the Wokingham Borough Council. The proposal is described as: The demolition of two buildings and the construction of four dwellings and their associated gardens.

PEA survey methodology and legislation can be found in the Arbtech Supplement: **PEA Methodology and Legislation - 2024.**
PRA survey methodology and legislation can be found in the Arbtech Supplement: **PRA Methodology and Legislation - 2024.**

The survey, results, and recommendations contained within this report are valid for 18 months. An updated site visit may be required if the report is to be used any longer than 18 months after completion.

Site Location and Context

The survey site is centred on National Grid Reference SU 80694 65893 and has an area of approximately 0.6305ha. This survey site is located within a wider site boundary which is under the same ownership. The survey site comprises three buildings (B8 & B9 and an outbuilding), vegetated garden, introduced shrubs, mixed woodland, a ditch, a line of trees and scattered trees. It is situated on the outskirts of the town of Wokingham, with residential dwellings to the west, woodland to the east and south and a golf course interspersed with lines of trees to the north. The wider landscape is comprised of the village of Finchampstead to the south, the village of Crowthorne to the south-east, the town of Bracknell to the north-east and the town of Wokingham and the M4 motorway to the north. There are scattered trees within the site and extending into the local garden landscape. Aerial imagery shows the local landscape to have a mixture of urban development and woodlands, with several small copses and woodland swathes in close proximity to the site.

Survey Details

The site survey was undertaken by Beth Ellison-Perrett BSc (Hons) MSc, MRSB, Senior Ecologist, an ecologist with four years of experience, and holder of Natural England survey licences for bats [2023-11066-CL17-BAT] and great crested newt [2024-11998-CL08-GCN].

Date of survey	Temperature (°C)	Humidity (%)	Cloud Cover (%)	Wind (mph)	Rain
12/03/2025	10	76	90	19	None

Survey limitations

It should be noted that whilst every effort has been made to describe the baseline conditions within the survey area, and evaluate these features, this report does not provide a complete characterisation of the site. This assessment provides a preliminary view of the likelihood of protected species being present. This is based on suitability of the habitats on the site and in the wider landscape, the ecology and biology of species as currently understood, and the known distribution of species as recovered during the searches of historical biological records.

A biological records data search has not been undertaken. However, given the location of the site, the nature of the habitats present and the assessed suitability of the site for protected or notable species, it is not anticipated that the purchase of biological records data will add any significant weight or alter the conclusions and recommendations outlined in this report.

No proposed development plans were available at the time of writing this report and therefore a detailed impact assessment could not be made. This report should be updated once the plans are available.

There were no specific limitations to the survey.

Ecological Survey Factor **Conclusion, Impact or Recommendations**	**Detailed using desk study and site survey (carried out under good weather conditions). Any specific limitations noted within relevant section. This table may include further work you will need to commission (if any) to obtain planning permission or comply with legislation for other consent. All clients are expected to read and understand this section, or to contact the lead surveyor for advice.**
Habitats and plants (see habitat map in appendix 1, location plan in appendix 2, proposal plan in appendix 3 and photos in appendix 4). **Botanical species are described with reference to the DAFOR scale (D = Dominant; A = Abundant, F = Frequent, O = Occasional, R = Rare).**	
Summary of Survey Findings (*UKHab codes used)* - **Building (u1b)** - **Artificial unvegetated, unsealed surface (u1c)** - **Built-up areas and gardens- vegetated garden with introduced shrubs (u1 828 847)**	**Local notable habitats** The site does not contain any habitats listed as a habitat of principal importance under Section 41 of the Natural Environment and Rural Communities (NERC) Act (2006). The site contains both deciduous and coniferous woodland which are of good quality and could be of value to local wildlife populations (as detailed in subsequent sections of this table). Other habitats within the site are common and widespread and have low ecological value. Notable habitats are present within 2km, including: • Deciduous woodland – located 80m east • Traditional orchards – located 390m north • Ancient woodland – located 1020m north-east • Lowland heathland – located 1570m south-east **On-site habitat descriptions** **u1b5** – Buildings There are three buildings onsite (B8 and B9 and an outbuilding). B8 and B9 are stable blocks. The buildings were assessed for their habitat value for nesting birds and roosting bats in the subsequent sections below.

- **Mixed woodland, mainly coniferous (w1h6)** - **Scattered trees (u1 32)** - **Line of trees (u1 33)**	**u1c** - Artificial unvegetated, unsealed surface Extending from the entrance to the site (on the western boundary) to the eastern and northern boundaries is a large area of artificial unvegetated, unsealed surface. It is comprised of gravel and is of negligible habitat value for protected species. **u1 -** Built-up areas and gardens [vegetated garden 828, introduced shrubs 847] Within the centre of the site, are areas of vegetated garden, which is predominately subject to management through mowing, resulting in a sward of approximately 3cm in length. Species composition is comprised of perennial ryegrass (D), creeping buttercup (A), clover (F), daisy (F), dandelion (O), creeping cinquefoil (O), small-flowered cranesbill (O), chickweed (O), ragwort (R), self-heal (R), thistle (R), Yorkshire fog (R) and wood rush (R). Along the boundaries of the vegetated garden are areas of introduced shrubs. These are comprised of dogwood, Indian clusterberry, rhododendron, currant, montbrelia, lavender, Japanese barberry and orange lily. Scattered trees 32 Throughout the site, are scattered trees. These are comprised of silver birch, holly and pine. Of the 31 trees onsite, 23 are small in size and 8 are medium in size. The trees are young to semi-mature in age and represent a fair to good structural condition. Individual trees condition assessment: a) >70% of the trees are native species. b) The tree canopy is predominantly continuous. c) <50% of the trees are mature. d) There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity).

	e) No ecological niches. f) >20% of the tree canopy is oversailing vegetation beneath. Score: 4/6 – Good condition <u>Line of trees 33</u> Towards the southern boundary there is a line of trees. Species composition is comprised of beech, with an understorey of predominately bare ground with the occasional ruderals. The trees are semi-mature in age and represent a fair to good structural condition. Line of trees condition assessment: a) >70% of trees are native species. b) Tree canopy is predominantly continuous with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide. c) No veteran features or natural ecological niches for vertebrates and invertebrates. d) There is no undisturbed naturally vegetated strip of at least 6m, as adjacent to hard standing. e) The trees are in healthy condition as there is major evidence of human activity. Score: 3/5- Moderate condition **<u>w1h6</u>** <u>– Other woodland – mixed – mainly coniferous</u> To the west of the site, is an area of mixed woodland, mainly coniferous, comprised of spruce, yew, oak and silver birch. The understorey is comprised of bracken, holly, bamboo and rhododendron. The trees are young to semi-mature in age and represent a fair to good structural condition. Woodland Condition Assessment: A: Age distribution- Poor

	B: Wild, domestic and feral herbivore damage- Good C: Invasive plant species- Poor D: Number of native tree species- Moderate E: Cover of native tree and shrub species- Poor F: Open space within woodland- Moderate G: Woodland regeneration- Moderate H: Tree health- Good I: Vegetation and ground flora- Poor J: Woodland vertical structure- Poor K: Veteran trees- Poor L: Amount of deadwood- Poor M: Woodland disturbance- Poor Score: 20/39 – Poor condition
Foreseen Impacts	**On-site habitats** The habitats on-site are widespread and not notable, however the proposed development will result in the loss of buildings, vegetated garden habitat and introduced shrubs. Furthermore, 2 trees and a section of the line of trees will be felled to facilitate the development. This is likely to have minimal impact on biodiversity considering the small area of commonplace habitat (vegetated garden) being lost. Furthermore, the trees being felled lack decay features which may provide ecological niches lowering their ecological value. As there are extensive trees within the locality, their loss is unlikely to significantly impact biodiversity. **Notable habitats** No direct impacts to any notable habitats will occur as a result of the proposed development. However, due to the proximity of the site to LMDW (located 80m east), indirect effects (e.g. pollution, dust, litter, surface run off, etc.) could occur during construction.

Recommendations	**On-site habitats** Retained trees should be protected in line with the measures outlined in the British Standard "Trees in Relation to Design, Demolition and Construction to Construction - Recommendations" (BS 5837) (2012). **Notable habitats** Best practice measures to minimise the possibility of pollution affecting the nearby ancient woodland must be implemented during construction. A Construction Environment Management Plan (CEMP) may be required for this. **Biodiversity net gain** The Environment Act (2021) requires all developments (excluding exemptions) to deliver a 10% net gain in biodiversity. The planning application must be accompanied by a landscaping/habitat creation and enhancement strategy, biodiversity net gain calculations and a habitat management and monitoring plan to ensure the proposed development delivers a 10% net gain.
Locality and Designated Sites	
Summary of Survey Findings	**On-site designations** The site is not subject to any designation. **Statutory designated sites (within 2km)** There is one statutory site within 2km of the site, as detailed below: <u>Heath Lake Site of Special Scientific Interest (SSSI) and Local Nature Reserve (LNR)</u> – located 1870m east Heathlake is an area of woodland and heathland. The shallow 7-acre lake is the only acid lake in Berkshire. This means it has a naturally low pH which supports several rare plants, including the water-millfoil and the six-stemmed water crowfoot. The site lies within the impact risk zone for Heath Lake Site of Special Scientific Interest (SSSI). **Statutory designated sites (within 10km)**

	There is one national network sites (SAC, SPA, Ramsar) located within 10km, as detailed below: Thames Basin Special Protection Area (SPA) – located 4.7km east The open heathland habitats overlie sand and gravel sediments which give rise to sandy or peaty acidic soils, supporting dry heathy vegetation on well-drained slopes, wet heath on low-lying shallow slopes and bogs in valleys. The site consists of tracts of heathland, scrub and woodland, once almost continuous, but now fragmented into separate blocks by roads, urban development and farmland. Less open habitats of scrub, acidic woodland and conifer plantations dominate, within which are scattered areas of open heath and mire. The site supports important breeding populations of a number of birds of lowland heathland, especially nightjar and woodlark, both of which nest on the ground, often at the woodland/heathland edge, and Dartford warbler, which often nests in gorse Ulex sp. Scattered trees and scrub are used for roosting. **Non-statutory designated sites** The presence of non-statutory designated sites within 2km of the site cannot be established without data from Thames Valley Environmental Centre.
Foreseen Impacts	**On-site designations** No impacts foreseen. **Statutory and non-statutory designated sites** The site lies within the impact risk zone for Heath Lake Site of SSSI. The Impact Risk Zones for Sites of Special Scientific Interest (SSSI IRZs) indicate that at the location selected, there is potential for all proposed developments to have a harmful effect on terrestrial Sites of Special Scientific Interest (SSSIs) and those Special Areas of Conservation (SACs), Special Protection Areas (SPAs) or Ramsar sites that they underpin.
Recommendations	**On-site designations** None required. **Statutory and non-statutory designated sites**

	The Local Planning Authority (LPA) may be required to consult with Natural England regarding potential impacts to Heath Lake Site of SSSI.
Invasive / Non-native species	
Summary of Survey Findings	No problematic invasive and non-native species recorded on site.
Foreseen Impacts	N/A
Recommendations	No further surveys but remain vigilant.
Invertebrates	
Summary of Survey Findings	The habitats present on-site, including lawns, a ditch and ornamental shrubs and trees, likely provide common invertebrates with opportunities to forage and shelter. The site contains no further notable habitats which may provide niches for specialised or protected invertebrates.
Foreseen Impacts	Buildings, vegetated garden, introduced shrubs, 2 trees and a section of the line of trees will be removed during construction. The loss of habitats onsite is likely to be inconsequential to local invertebrate populations owing to their low value and the presence of more extensive habitat locally.
Recommendations	No further surveys.
Bats	
Summary of Survey Findings	**EPSL data** A search of the magic.gov.uk database for granted EPSLs within a 2km radius of the site has been completed. Displaced bats from licensed sites <2km away from the survey site will find alternative habitat either within the mitigation measures implemented as part of the licence or will relocate to other known roosts sites in close proximity to the licensed site. There are 18 EPSLs within a 2km radius of site, of which only 4 are within 1km of the site. These four are as detailed below:

EPSL reference	Bat species affected	Distance from site	Impacts allowed by licence
EPSM2009-561	Common pipistrelle, soprano pipistrelle and Brown long-eared bat	500m south-west	Destruction of a resting place

2014-3612-EPS-MIT	Soprano pipistrelle	510m south	Destruction of a resting place
EPSM2013-6081 EPSM2013-6081C	Common pipistrelle	660m south-west	Destruction and damage of a resting place
2015-7982-EPS-MIT	Brown long-eared bat	840m south	Destruction of a resting place

Foraging and commuting habitat

Habitats recorded on site are assessed to provide foraging and commuting opportunities for bats in the form of woodland and scattered trees. These habitats are likely to provide micro-climatic conditions that support invertebrates that will in turn provide foraging opportunities for local bat populations. Additionally, there is woodland to the east, within the wider site boundary which extends and connects to the adjacent deciduous woodland which could be utilised by foraging and commuting bats. Furthermore, the line of trees towards the southern boundary connects to the tree lines along the road to the west of the site, adding to the continuity of vegetated linear features present in the wider landscape. Bats are well known to utilise linear features to aid navigation whilst travelling between foraging resources and roost sites.

Roosting habitat

Buildings to be impacted by the proposed development are assessed for their suitability to support roosting bats below. There are a total of 2 buildings on site, which were both surveyed as they will be impacted by the proposed development. No evidence of roosting bats was identified on or within any of these buildings.

B8 Building description	***Photographs***
B8 is a detached single-storey wooden-built stable block with a pitched and gabled roof clad in corrugated bitumen felt. The roof felting is in very good condition with no raised sections under which bats could roost. The doors and windows are wooden framed and appear in excellent condition with no suitable bat roosting sites. The building is clad in wooden weatherboarding which is in very good condition with no raised or missing boards under which bats could roost.	

There is no loft space within B8.	
B9 Building description	***Photographs***
B9 is a detached single-storey wooden-built stable block with a pitched and gabled roof clad in corrugated bitumen felt. The roof felting is in very good condition with no raised sections under which bats could roost. The doors and windows are wooden framed and appear in excellent condition with no suitable bat roosting sites. The building is clad in wooden weatherboarding which is in very good condition with no raised or missing boards under which bats could roost. There is no loft space within B9.	

Foreseen Impacts	**Roosting habitat [Buildings]** Bats are very unlikely to be roosting within these buildings and as such, there are not anticipated to be any impacts on bats in this location as a result of the proposed development. **Roosting habitat [Trees]** Buildings, vegetated garden, introduced shrubs, 2 trees and a section of the line of trees will be removed during construction. No features were identified on the trees and as such there are unlikely to be any impact to bats as a result of felling. **Foraging and commuting habitat** The proposed development will result in the loss of small areas of buildings, vegetated garden, introduced shrubs, 2 trees and a section of the line of trees but given their low value and the presence of more extensive areas of foraging and commuting habitat in the locality, this is likely to be inconsequential for bats. **Artificial lighting** The proposed development may lead to an increase in the amount of current lighting of surrounding habitats or the retained building without mitigation. This may disturb commuting bats.

Recommendations	**Roosting habitat [Buildings and trees]** In the unlikely event that a bat or evidence of bats is discovered during the development all work must stop and a bat licensed ecologist contacted for further advice. **Foraging and commuting habitat** No further surveys are required. **Artificial lighting** A low impact lighting strategy will be adopted for the site during post-development which outlines the areas of the site that will be retained as dark corridors. Parameters can be found on the Bat Conservation Trust website: https://www.bats.org.uk/our-work/buildings-planning-and-development/lighting-2 **Suggested biodiversity enhancements** The installation of two bat boxes at the site will provide additional roosting habitat for bats. The bat boxes will be incorporated into the fabric of the new dwelling. They will be suitable for pipistrelles (which have been identified locally through EPSL data). Suitable bat boxes include Habibat Bat Box, Ibstock Enclosed Bat Box or similar alternative brand. Bat boxes should be positioned 3-5m above ground level facing in a south or south-westerly direction with a clear flight path to and from the entrance, away from artificial light.
Birds	
Summary of Survey Findings	**Buildings** No evidence of nesting birds was identified on or within any of the buildings onsite. The buildings (B8-B9) are deemed to provide negligible habitat value for nesting birds due to a lack of suitable nesting sites or access points. **Trees and vegetation**

	No bird nests were identified within the woodland and scattered trees on-site, however they all offer nesting opportunities and nest-building resources for birds. **Barn owls** The site does not appear to provide any suitable nesting sites for barn owls. **Overwintering birds** Due to the small size of the site and the extent and type of the habitats recorded, the site not considered suitable to support a significant assemblage of protected and/or notable birds.
Foreseen Impacts	**Buildings/trees** The proposed development could result in the destruction or the disturbance and subsequent abandonment of active bird nests. **Barn owls** None foreseen. **Overwintering birds** None foreseen.
Recommendations	**Buildings/trees** Any building or vegetation removal should be undertaken outside the period 1st March to 31st August. If this timeframe cannot be avoided, a close inspection of the vegetation should be undertaken immediately, by a qualified ecologist, prior to the commencement of work. All active nests will need to be retained until the young have fledged.

	Precautions should be taken with machinery and noise levels when working close to any retained nests so as not to disturb any nearby nesting birds during construction works. At least a 3-5m buffer should be created between any machinery and active nests until the young have fledged. **Barn owls** None required. **Overwintering birds** None required. **Suggested biodiversity enhancements** The installation of a minimum of three bird boxes on mature trees around the site boundaries will provide additional nesting habitat for birds e.g. Schwegler 1B Nest Boxes, Woodstone Nest Box, or a similar alternative brand. Tree boxes should be positioned approximately 3m above ground level where they will be sheltered from prevailing wind, rain and strong sunlight. Small-hole boxes are best placed approximately 1-3m above ground on an area of the tree trunk where foliage will not obscure the entrance hole.
Reptiles	
Summary of Survey Findings	**EPSL data** A review of the MAGIC database returned no granted EPSL records for protected reptiles within 2km of the site. **Habitat suitability** There is no suitable habitat present on site for reptiles due to a lack of habitats such as scrub and rank grassland which would offer refuge for these species. However, the woodland provides elevated value for reptiles as these habitats provide a suitable structure for refuge, whilst also providing foraging and commuting opportunities. However, it is important to note that the site is dominated by frequently managed grassland, introduced shrubs, buildings, and hardstanding of limited value

	to reptiles. These habitats are suboptimal due to an absence of notable habitat structure and diversity, which significantly limits refuge, foraging, and commuting opportunities. The site has good connectivity to further suitable reptile habitat in the wider landscape via woodland to the east and a dry ditch to the north, which runs into the adjacent grassland (golf course). The presence of reptiles on site cannot be discounted, albeit likely limited to low numbers within the wider site boundary. **Wider landscape** The sections of deciduous woodland 80m to the east of the site are of elevated ecological value within the wider landscape and may represent important resources for local reptile populations. These habitats provide optimal foraging, commuting, and refuge opportunities for reptiles and are well connected to further suitable habitat in the wider landscape. The presence of reptiles utilising these adjacent habitats cannot be discounted.
Foreseen Impacts	Buildings, vegetated garden, introduced shrubs, 2 trees and a section of the line of trees will be removed during construction. The loss of such habitats is likely to be inconsequential to local reptile populations owing to their low value and the presence of more extensive habitat locally. The site does not form a connective pathway or stepping stone between areas of suitable reptile habitat in the wider landscape and the development is unlikely to lead to reptile habitat fragmentation.
Recommendations	A precautionary working method will be implemented for widespread reptiles during construction, including the following measures: • Vegetation will be maintained at a short sward (5cm) to discourage reptiles. • Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape. • Best practice pollution prevention measures will be implemented to minimise impacts to nearby habitats. • Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations. • If any reptiles are found in the working area these should be allowed to disperse of their own accord or, if at immediate risk, should be moved by hand to a sheltered, vegetated area away from disturbance. • In the unlikely event that a reptile is identified, works must cease and advise must be sought from a suitably qualified ecologist.

Amphibians

Summary of Survey Findings

EPSL and survey data

A review of the MAGIC database returned no granted EPSL records for great crested newts within 2km of the site. However, the MAGIC database did return two positive class survey licence returns from 2014 which are located 1110m and 1275m north-west. Great crested newts exist in metapopulations and are known to utilise ponds and their connecting terrestrial habitat during their life cycle; great crested newts are typically found within terrestrial habitats up to 500m from breeding ponds (Langton *et al.* 2001). As such, the great crested newt metapopulation known to be present 1110m and 1275m north-west are not suitably connected to the site.

Aquatic habitat suitability (including ponds within 500m)

Great crested newts (GCN) exist in metapopulations and are known to utilise ponds and their connecting terrestrial habitat during their life cycle; great crested newts are typically found within terrestrial habitats up to 500m from breeding ponds (Langton et al. 2001).

There are no ponds within the survey site, however, there is one pond within the wider site boundary. Pond 1 (P1) is located ~7m north of the site and is a man-made pond that is consistently dries out due to a lack of fresh water. The pond measures approximately 8m x 4m and subsequently covers an approximate area of 32m^2. The banks are vertical and vegetated with unmanaged grassland species with the addition of dense areas of sedge, rush and rhubarb. There is no suitable submerged vegetation for egg laying, as although there are sedge and rush present, these cannot be folded to protect GCN eggs from predation. At the time of the survey, there was no water within the pond. As a result of the HSI, P1 has been assessed to provide **Poor** suitability to support great crested newts. The scores for each HSI parameter can be viewed in the table below:

HSI Index	HSI Index Parameter	HSI Score
1 – Location	Zone A	1.0
2 – Pond Area	<50m^2	0.05
3 – Pond Drying	Dries Annually	0.1

4 – Water Quality	Poor	0.33
5 – Shade	61-65%	0.9
6 – Waterfowl	Absent	1.0
7 – Fish	Absent	1.0
8 – waterbody count in wider landscape within 500m	6	0.84
9 – Terrestrial Habitat	Moderate	0.67
10 – Macrophytes	46-50%	0.8
TOTAL	-	**0.481**
CATEGORY	-	**Poor**

A review of the Magic.gov.uk database and aerial imagery indicates that there is a further four ponds located within 500m of the survey site, located 120m north (P2), 375m east (P3), 470m north (P4) and 475m north-east (P5). According to Google Earth (last image in May 2025) P2, appears to have been dry since 2020 and has been colonised by grassland species. The remaining three ponds have potential terrestrial connectivity to the site due to an absence of definitive barriers to dispersal.

Terrestrial habitat suitability

The site provides limited suitable terrestrial habitat for amphibians given the lack of optimal habitat (i.e. scrub, rank grassland). The areas of hard standing and amenity grass offer sub-optimal habitat for terrestrial amphibians. The woodland and tree lines may offer refuge for these species, however, they are adjacent to hard standing and intensively managed grassland. Further, there is suitable terrestrial habitat across the wider landscape, including woodland and tree lines which connect the off-site ponds to each other, reducing the likelihood of amphibians being present on site.

Foreseen Impacts	As P1 was dry at the time of the survey and P2 has been dry since 2020, the likelihood of GCN utilising these ponds is extremely low. Furthermore, the grassland onsite is intensively managed which is suboptimal for GCN due to the consistent short sward

	and it is likely that this habitat is only used for transient periods. The impact to this habitat is unlikely to significantly impact GCN and their breeding or foraging habitat. Furthermore, the closest pond to the site is located 375m east (within a woodland). When completing the rapid risk assessment (Natural England 2015), assuming the whole survey site is to be affected, as the proposed development plans have not yet been finalised, the proposed development produces a **Green risk score**, which states: **Offence Highly Unlikely**.
Recommendations	Owing to the low potential for impacts to great crested newts, further surveys are considered to be disproportionate. A precautionary working method will be implemented for common amphibians during construction, including the following measures: • A staged approach will be adopted for vegetation clearance, whereby the vegetation will be strimmed to 15cm and left overnight to allow any amphibians to disperse. The vegetation can then be cleared to ground level and must be maintained at this level for the duration of construction to deter amphibians from the working area. • Any rubble piles will be dismantled by hand and debris and brash will be stored on pallets or removed from the site to prevent amphibians from utilising these areas. • Best practice pollution prevention measures will be implemented to minimise impacts to nearby aquatic habitats that amphibians could use. • Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations. • If any common amphibians are found in the working area these should be allowed to disperse of their own accord or, if at immediate risk, should be moved by hand to a sheltered, vegetated area away from disturbance. • In the unlikely event that a great crested newt is identified, works must cease and advise must be sought from a suitably qualified ecologist.
Badger	
Summary of Survey Findings	No evidence of badgers was found on site. The site contains suitable habitat of woodland, tree lines and shrubs for badgers to forage and commute. The site is connected to suitable habitat for badgers including woodland and tree lines within the

	immediate area and woodland in the further landscape. Although no evidence indicating the presence of badgers was recorded during the site survey, the site does have connectivity to the wider landscape for badgers. As such, the future presence of badgers foraging and commuting for transient periods cannot be discounted.
Foreseen Impacts	Buildings, vegetated garden, introduced shrubs, 2 trees and a section of the line of trees will be removed during construction. The loss of onsite habitats is likely to be inconsequential to local badger populations owing to their low value and the presence of more extensive habitat locally. However, construction activities could result in the death or injury of badgers, if present. Although, a full impact assessment will need to be undertaken when plans become available.
Recommendations	Owing to the nature of the proposed development and the low potential for impacts to bat roosts, further badger surveys are considered to be disproportionate. A precautionary working method will be implemented during construction, including the following measures: • Heras fencing will be erected around the working area to prevent encroachment into retained habitats where badger setts could be present. • Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape. • The use of night-time lighting will be avoided, or sensitive lighting design will be implemented to avoid light spill on to retained habitats which badgers could use. • Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations. In the unlikely event that a badger sett is identified, works must cease and advise must be sought from a suitably qualified ecologist.
Riparian animals	
Summary of Survey Findings	A review of the MAGIC database returned no granted EPSL records for otters or water voles within 2km of the site. There are no water courses on or connected to the site. There are also no riparian habitats present on site or within an influencing distance.
Foreseen Impacts	No impacts are anticipated on riparian animals as a result of the proposed development.

Recommendations	None required.
Hazel dormouse	
Summary of Survey Findings	**EPSL data** A review of the MAGIC database returned no granted EPSL records for hazel dormice within 2km of the site. **Habitat suitability** For isolated habitats in the UK, research indicates that dormice require 20ha of woodland habitat to support a viable population (Bright *et al.* 1994). The site is located within a section of woodland which is approximately 20ha in size. However, onsite, there is limited habitats as dormice typically utilise a three-dimensional habitat structure as to commute between feeding and breeding sites whilst avoiding predation. The site does have woodland, however; the woodland is comprised of a single storey of trees with a limited understorey. As such habitats on site are considered unsuitable for hazel dormice and therefore the likelihood of this species being present on site is considered acceptably low.
Foreseen Impacts	No impacts are anticipated on hazel dormice as a result of the proposed development.
Recommendations	None foreseen.
Other e.g. hedgehog	
Summary of Survey Findings	Habitats recorded on site are assessed to provide foraging, commuting, and refuge opportunities for hedgehogs in the form of woodland, grassland and treelines, albeit limited. However, no evidence indicating the presence of hedgehogs was recorded on site. Although no evidence indicating the presence of hedgehogs was recorded during the site survey, the site does have connectivity for the wider landscape for hedgehogs. As such, the future presence of hedgehogs foraging and commuting for transient periods cannot be discounted.
Foreseen Impacts	Buildings, vegetated garden, introduced shrubs, 2 trees and a section of the line of trees will be removed during construction. The loss of onsite habitats is likely to be inconsequential to local hedgehog populations owing to their low value and the presence of more extensive habitat locally. However, construction activities could result in the death or injury of hedgehogs, if present. Although, a full impact assessment will need to be undertaken when plans become available.

Recommendations	Similar to the badgers, a precautionary working method will be implemented during construction, including the following measures: • Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape. • The use of night-time lighting will be avoided, or sensitive lighting design will be implemented to avoid light spill on to retained habitats which hedgehogs could use. • Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations. If any hedgehogs are found in the working area these should be allowed to disperse of their own accord or, if at immediate risk, should be moved by hand to a sheltered, vegetated area away from disturbance. **Suggested biodiversity enhancements** The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for hedgehogs: • Planting fruit bearing trees and species-rich grassland to increase foraging opportunities. • Creation of brash piles or installation of hedgehog houses in shady areas. • Installation of gaps under boundary fencing to enable hedgehogs to move freely through the site.

Appendix 1: Survey/Habitat map

Appendix 2: Location map

Appendix 3: Proposed plan

Appendix 4: Habitat Photos

Artificial unvegetated, unsealed surface	
Photograph	**Description**
	Artificial unvegetated, unsealed surface onsite (mainly in the centre of the site)
Vegetated garden	
Photograph	**Description**
	Amenity grass lawn on site (to west of the site)
Introduced shrubs	
Photograph	**Description**

	Introduced shrubs on site (along the boundaries of the vegetated garden)
Scattered trees	
Photograph	**Description**
	Scattered trees present on site

Mixed woodland, mainly coniferous	
Photograph	**Description**
	Mixed, mainly coniferous woodland (to the west of the site)
Line of trees	
Photograph	**Description**
	A line of beech trees (to the south of the site)

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