

THAMESFIELD RVG, HENLEY ON THAMES

Preliminary Ecological Appraisal

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PEA
Final
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REPORT

Quality Management

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EXECUTIVE SUMMARY

- RPS was commissioned by Retirement Villages Group to undertake a Preliminary Ecological Appraisal (PEA) at land at Thamesfield Retirement Village, Wargrave Road, Henley on Thames RG9 2LX. This comprised a desk study, Phase 1 Habitat Survey, and a Preliminary Bat Roost Assessment (PBRA), with subsequent bat emergence surveys.
- There are 16 non-statutory sites located within the 2 km search radius of the site, this includes 12 Local Wildlife Sites, one potential Local Wildlife Site, one Woodland Trust Reserve, a Biodiversity Opportunity Area and a Conservation Target Area. The closest LWS site is Branfords Woods which is 0.33km from the site boundary.
- The Phase 1 Habitat Survey identified that the site predominantly comprised amenity grassland, hard standing, and buildings, with the grounds displaying areas of mixed woodland, introduced shrubs, and scattered trees.
- The PBRA identified four buildings (B1, B2, B3 and B6) with high potential and two buildings (B5 and B4) with low potential, and two trees with moderate potential to support roosting bats. Bat droppings were found beneath external features located on B1, B3 and B6 in 2023. A possible bat dropping was found on the exterior of B2 in 2024.
- Bat emergence surveys were carried out in 2023 on buildings which will be affected by the development and a confirmed soprano pipistrelle roost was recorded in B3. A European Protected Species Mitigation Licence from Natural England would be required for works that will affect B3, along with additional mitigation measures that are outlined in this report.

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1 INTRODUCTION

1.1 Purpose and Scope of this Report

- 1.1.1 RPS was commissioned by Retirement Villages Group to undertake a Preliminary Ecological Appraisal (PEA) at Thamesfield Retirement Village, Wargrave Road, Henley on Thames RG9 2LX.
- 1.1.2 To undertake an initial assessment of the potential ecological impact of the proposals, a desk study, Phase 1 Habitat Survey, Preliminary Bat Roost Assessment (PBRA) and a preliminary protected species assessment were carried out. This is termed as a Preliminary Ecological Appraisal Report (PEAR) in accordance with CIEEM (2017). This assessment is considered 'preliminary' until any required protected species, habitat or invasive species surveys are completed, and the results incorporated into a final Ecological Appraisal or Ecological Impact Assessment (EclA) which supports the planning application.
- 1.1.3 The PEA aims to:
- undertake a desk-based review of designated sites and records of protected species and other species that could present a constraint;
 - map and assess the habitats present on site;
 - assess the site for potential to support protected species or other species that could present a constraint, and make appropriate recommendations for further survey work if necessary;
 - provide outline options for mitigation measures as appropriate; and
 - make recommendations for appropriate biodiversity enhancements in line with national and local planning policy.
- 1.1.4 This report pertains to these results only; recommendations included within this report are the professional opinion of an experienced ecologist and therefore the view of RPS.
- 1.1.5 The surveys and desk-based assessments undertaken as part of this review and subsequent report including the Ecological Appraisal Notes are prepared in accordance with the British Standard for Biodiversity Code of Practice for Planning and Development (BS42020:2013).

1.2 Study Area

- 1.2.1 The site is located east of the River Thames on the edge of Henley on Thames. The National Grid coordinates for the centre of the site are approximately SU7660082456.
- 1.2.2 The site is approximately 0.88ha in size and comprised predominantly of buildings, hardstanding, amenity grassland, and introduced shrubs, with some woodland and scattered trees.
- 1.2.3 Aerial imaging available via Google Earth Pro was also reviewed to assess the site in relation to its context in the wider landscape.

1.3 Development Proposals

- 1.3.1 The development proposals involve the redevelopment and/or extension of the main building on site.

1.4 Legislation and Policy

- 1.4.1 Relevant legislation, policy guidance and both Local and National Biodiversity Action Plans (BAPs) are referred to throughout this report where appropriate. Their context and application are explained in the relevant sections of this report.
- 1.4.2 The relevant articles of legislation are:
- The National Planning Policy Framework (NPPF, 2023);
 - Joint Henley and Harpsden Neighbourhood Plan 2016;

- The Conservation of Habitats and Species Regulations 2017;
- The Wildlife and Countryside Act 1981 (as amended);
- The Protection of Badgers Act 1992;
- The Countryside and Rights of Way Act 2000;
- The Hedgerow Regulations 1997;
- The Natural Environment and Rural Communities Act 2006;
- Oxfordshire Biodiversity Action Plan and Conservation Target Areas.

1.4.3 A summary of legislation relevant to protected or other species identified as potential constraints in this report is provided in Appendix A.

2 METHODS

2.1 Desk Study

- 2.1.1 Ecological records within a 2 km radius of the site were requested from Thames Valley Environmental Records Centre (TVERC) and Buckinghamshire and Milton Keynes Environmental Records Centre (BMERC).
- 2.1.2 Data requests were limited to records for protected species recorded within the last ten years and sites of nature conservation interest within 2 km and 5 km of the site. This included a review of existing statutory sites of nature conservation interest, such as Sites of Special Scientific Interest (SSSIs), Special Protection Areas (SPAs), Special Area of Conservation (SACs) and National Nature Reserves (NNRs), and non-statutory sites, such as Sites of Importance for Nature Conservation (SINCs) and Local Wildlife Sites (LWSs).
- 2.1.3 Locations of statutory designated sites were accessed via the government 'MAGIC' website (MagicMap, 2024).
- 2.1.4 A 1:25,000 OS map was used to identify nearby features such as ponds or green corridors that could provide habitat or connectivity to other areas.

2.2 Ecological Appraisal

- 2.2.1 The ecological appraisal consisted of two components: a Phase 1 Habitat survey and a scoping survey for protected species and other species of conservation concern which could present a constraint to development.
- 2.2.2 The Phase 1 Habitat Survey was initially undertaken on 1st September 2022 by Katy Thomas, an RPS Senior Ecologist and Ben Jolliffe, an RPS Ecologist, both experienced in undertaking Phase 1 Habitat Surveys. An update Phase 1 survey was undertaken on the 20th of September 2024 by Ben Jolliffe, to verify the habitats on site and update of necessary.
- 2.2.3 The Phase 1 Habitat surveys followed the standard methodology (JNCC, 2010), and as described in the Guidelines for Preliminary Ecological Assessment (IEEM, 2012). In summary, this comprised walking over the survey area and recording the habitat types and boundary features present.
- 2.2.4 A protected species scoping survey was carried out in conjunction with the Phase 1 Habitat survey. The site was assessed for its suitability to support protected species, in particular Great Crested Newts *Triturus cristatus*, reptiles, birds, Badgers *Meles meles*, bats, and other species of conservation importance that could pose a planning constraint.
- 2.2.5 The surveyor looked for evidence of use including signs such as burrows, droppings, footprints, paths, hairs, refugia and particular habitat types known to be used by certain groups such as ponds. Any mammal paths were also noted down and where possible followed. Fence boundaries were walked to establish any entry points or animal signs such as latrines. Areas of bare earth were inspected for mammal prints. Areas of habitat considered suitable for protected species or those of conservation interest were recorded.

2.3 Preliminary Bat Roost Assessment

- 2.3.1 A PBRA of all buildings and trees on site was undertaken at the same time as the Phase 1 Habitat Survey by Katy Thomas, an RPS Senior Ecologist and Natural England bat class licence holder (licence number: 2021-53781-CLS-CLS).
- 2.3.2 An update PBRA of certain sections of the buildings was also undertaken alongside the update Phase 1 survey in September 2024 by Nicola Pyle, an RPS Ecologist and Natural England bat class licence holder (licence number: 2015-18259-CLS-CLS).
- 2.3.3 The 2022 survey followed best practice as described by the Bat Conservation Trust (Collins, 2016), English Nature's Bat Mitigation Guidelines (Mitchell-Jones, 2004) and the Joint Nature Conservation Committee's Bat Worker's Manual (Mitchell-Jones & McLeish, 2004).
- 2.3.4 The 2024 survey of buildings followed best practice guidelines as described by the Bat Conservation Trust (BCT, 2023).

- 2.3.5 A thorough inspection of the exterior and interior of the buildings, and ground-level assessment of trees on site was carried out (where access was permitted). During the inspection, the ecologist looked for the following signs to indicate the presence of bats:
- Bat droppings;
 - Insect wings (feeding stations);
 - Oil (from fur) and urine stains;
 - Scratch marks;
 - Bat corpses; and
 - Actual sightings of bats.
- 2.3.6 The buildings' suitability for bat roosting was assessed by examining structural features. Structural features that may influence the suitability of a building to support roosting bats include the presence of a roof void, the presence of access points into the building (including gaps beneath barge boards, soffits and fascias, gaps under lead flashing, gaps within masonry and under loose tiles), the complexity and size of any roof void and daytime light levels in the roof void.
- 2.3.7 Trees were assessed for the potential to support bats roosts by checking for features such as holes, cavities or splits, and evidence like dark staining on a tree below a feature caused by the natural oils in the bats' fur, scratch marks around the feature or droppings below.
- 2.3.8 When suitable features were identified, they were inspected for signs indicating use or possible use by bats including tiny scratches, staining and flies around the entry points, bat droppings and feeding remains in, around and below entrances, distinctive smell of bats and the smoothing of surfaces around cavities.
- 2.3.9 The suitability of the buildings and trees for roosting bats was also assessed by examining the surrounding habitat. Important habitat features surrounding the structures which may influence bat roost potential include whether the structure is in a semi-rural or parkland location, its proximity to significant linear habitat features such as a watercourse, mature hedgerow, wooded lane or an area of woodland.
- 2.3.10 Guidance from the Bat Conservation Trust Bat Survey: Good Practice Guidelines (BCT, 2023) on the features of buildings and trees which correlate with their use by bats was considered. Table 2.1 below is taken from the above guidance and describes the category of potential value to roosting bats.

Table 2.1: Guidelines for assessing the potential value of features and habitats to bats

Suitability	Description of Roosting Habitats
None	No habitat features on site likely to be used by any roosting bats at any time of the year (i.e. a complete absence of crevices/ suitable shelter at all ground/ underground levels).
Negligible	No obvious habitat features on site likely to be used by roosting bats; however, a small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of the year. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions, and/ or suitable surrounding habitat to be used on a regular basis or by large numbers of bats (i.e. unlikely to be suitable for maternity and not a classic cool/ stable hibernation site, but could be used by individual hibernating bats).
Moderate	A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions, and surrounding habitat, but unlikely to support a roost of high conservation status (with respect to roost type only, such as maternity and hibernation – the categorisation described in this table is made up irrespective of species conservation status, which is established after the presence is confirmed).
High	A structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, condition, and surrounding habitat. These structures have the potential to support high conservation status roosts, e.g. maternity or classic cool/ stable hibernation site.

- 2.3.11 PBRAs of buildings and trees can be carried out at any time of year; however, summer surveys are more likely to reveal signs of bat activity.

2.4 Bat Emergence Surveys

- 2.4.1 Emergence surveys were carried out on the sections of buildings which will be impacted by the proposed work during June and July 2023, with three surveys taking place in total.
- 2.4.2 Full methodology for these surveys can be found in the associated Thamesfield RVG, Henley on Thames Bat Survey Report produced by RPS in 2023.

2.5 Impact Appraisal

- 2.5.1 The overall ecological appraisal is based on the standard best practice methodology provided by the Guidelines for Preliminary Ecological Appraisal (CIEEM, 2017). The assessment identifies sites, habitats, species, and other ecological features that are of value based on factors such as legal protection, statutory or local site designations such as Sites of Special Scientific Interest (SSSI) or Local Wildlife Sites (LWS) or inclusion on Red Data Book Lists or Biodiversity Action Plans.
- 2.5.2 The assessment also refers to planning policy guidance (e.g., NPPF) where relevant to relate the value of the site and potential impacts of development to the planning process, identifying constraints and opportunities for ecological enhancement in line with both national and local policy.

2.6 Limitations

Desk Based Assessment

- 2.6.1 The desk study data is third party controlled data, purchased for the purposes of this report only. RPS cannot vouch for its accuracy and cannot be held liable for any error(s) in these data.

Survey

- 2.6.2 It should be noted that whilst every effort has been made to provide a comprehensive description of the site, no investigation can ensure the complete characterisation and prediction of the natural environment.
- 2.6.3 The protected/notable species assessment provides a preliminary view of the likelihood of these species occurring on the site, based on the suitability of the habitat, known distribution of the species in the local area provided in response to our enquiries and any direct evidence on the site. It should not be taken as providing a full and definitive survey of any protected/notable species group.
- 2.6.4 Bats exhibit seasonal use of buildings / built structures and trees and, being so mobile, may arrive and start using a site after it has been surveyed or be roosting somewhere else during the period it was surveyed. Additionally, bats can forage in different areas and preferentially commute along different routes in response to several changing physical and environmental factors. Therefore, it should be noted that this survey provides a snapshot of ecological constraints found to be present at the time and should not be relied upon as evidence of presence / absence for periods longer than one year.
- 2.6.5 Bats are difficult to locate in large structures, with so many potential roosting areas, finding the exact roosting site can be difficult, especially male / single bat roosting sites.
- 2.6.6 Full internal access into the roof spaces was not possible due to a limited number of accessible loft hatches.

Accurate Lifespan of Ecological Data

- 2.6.7 The majority of ecological data remain valid for only short periods due to the inherently transient nature of the subject. The survey results contained in this report are considered accurate for one year, assuming no significant considerable changes to the site conditions.
- 2.6.8 A site verification walkover was undertaken in September 2024 to verify the results of the original survey work completed in October 2022.

3 RESULTS

3.1 Designated Sites

- 3.1.1 There are five statutory designated site for nature conservation value within 5 km of the site. The closest site is Harpsden Wood SSSI which is 1.59km from the site boundary and is designated for its mature woodland and uncommon plant species.
- 3.1.2 There are 16 non-statutory sites located within the 2 km search radius of the site, this includes 12 Local Wildlife Sites, one potential Local Wildlife Site, one Woodland Trust Reserve, a Biodiversity Opportunity Area and a Conservation Target Area. The closest LWS site is Branfords Woods which is 0.33km from the site boundary and is designated for its woodland.
- 3.1.3 A summary of these sites is provided in Table 3.1 below and the location of each site is detailed in Figure 3.1.

Table 3.1: Designated sites within 2 km and 5km of the study area

Site name	Type	Approx. area (ha)	Interest Features	Distance from site (km)
Statutory Sites				
Harpsden Wood	SSSI	29.41	The wood is dominated by mature beech, pedunculate oak, ash and sessile oak. Also hazel holly, field maple, rowan and wild cherry are all present. There are several uncommon species such as bird's-nest orchid and narrow-lipped hellebore.	1.59
Temple Island Meadows	SSSI	15.39	Temple Island Meadows consist of a series of slightly improved, sheep grazed, wet meadows. Their location, adjacent to the River Thames, renders them subject to seasonal flooding and waterlogging. Marshy neutral grassland grades into tall fen vegetation with scattered wet alder carr woodland and scrub occurring in the west and south.	1.62
Lambridge Wood	SSSI	74.56	Lambridge Wood is a large area of ancient beech woodland with an exceptionally rich flora located in the Chilterns where this type of woodland is particularly characteristic. Oak, ash cherry and wych elm are commonly found amongst the beech trees. There are many wildflowers indicative of acid soils including heath speedwell, and slender St Johns-wort. Part of the wood has been replanted with beech and conifers.	2.32
Highlands Farm Pit	SSSI	0.60	Highlands Farm Pit is one of a number of quarries in Oxfordshire where quarrying has produced exposures of rocks that are important to our understanding of geological history. Here there is the last available exposure of the gravel floor of a prehistoric channel of the River Thames known as the Ancient Channel.	2.33
Rodbed Wood	SSSI	1.60	The site is wet willow and alder woodland close to the River Thames, fed by a ditch from neighbouring water meadows. The understorey has blackthorn, hawthorn and guelder rose. There is a diverse flora, including the nationally rare summer snowflake. There is a varied bird population and rich invertebrate fauna.	3.69
Non-statutory Sites				
Chilterns Escarpment	BOA		The steeply sloping Chilterns Escarpment runs from Wendover to Bradenham and contains many calcareous grassland and woodland SSSIs. It is adjacent to the Dunsmore Woodlands and Radnage Valley BOAs.	0.29
Branfords Woods	LWS	13.04	This site is an area of long established woodland. Though not considered to be ancient it has the typical appearance of semi-natural woodland with standard trees over hazel coppice.	0.33

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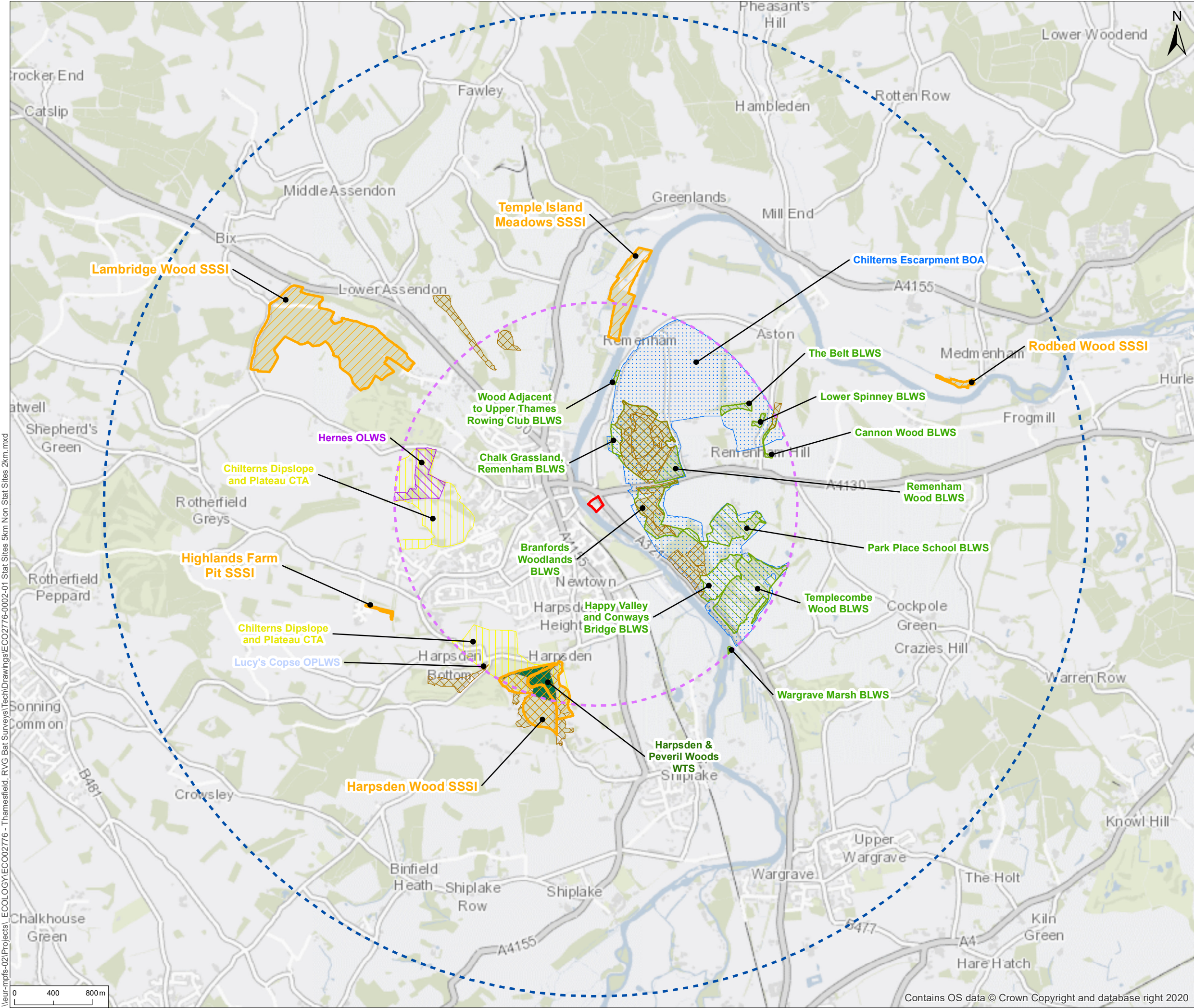
Site name	Type	Approx. area (ha)	Interest Features	Distance from site (km)
Remenham Wood	LWS	37.77	This site is ancient woodland. The centre of the site has been replanted with conifers but there are extensive areas of semi-natural stands towards the edges though some of these have been significantly modified by planting of non-native trees. On the acidic soils there are stands of beech with some oak, cherry and ash. Some rhododendron has been planted in these areas and there is some sweet chestnut coppice. The calcareous areas are also dominated by beech with ash and cherry.	0.45
Chalk Grassland, Remenham	LWS	2.77	The site is mainly lowland calcareous grassland with a mixture of chalk and neutral grassland species and is located on a west facing steep slope next to the Thames River valley. The site varies in species richness, with the most species rich areas found to the south of the field gradually becoming more species-poor grassland towards the north-west.	0.48
Park Place School	LWS	14.56	This site has a variety of habitats. There is parkland, areas of woodland, a bank of chalk grassland at the west edge, a small lake and some ponds. Species associated with long established woodland that have been recorded here include primrose, Solomon's-seal and wood spurge. Wild marjoram and wild basil are found in the chalk grassland. There are chalk tunnels which are a bat hibernaculum which have been regularly monitored and four species have been recorded. The ponds support great crested newt.	0.86
Wood Adjacent to Upper Thames Rowing Club	LWS	0.49	The site is a small, wet woodland, adjacent to the River Thames. The site is predominantly wet woodland. The canopy is locally dominated by alder and crack willow with smaller amounts of ash, grey willow, osier and goat willow. Most of the trees are semi-mature and the canopy is open.	1.17
Chilterns Dipslope and Plateau	CTA	5741.84	A complex area that consists of steep sided chalk valleys that cut through the plateau and key areas of the plateau where the main areas of woodland and heathland remnants are found.	1.18
Happy Valley and Conways Bridge	LWS	10.62	An undulating valley with areas of species rich calcareous grassland on the steep slope, ornamental landscaping, secondary woodland, improved grassland with some calcareous species. Calcareous species include glaucous sedge, thyme, marjoram, agrimony, upright brome, red fescue, clustered harebell, fairy flax and wild basil.	1.19
Hernes	LWS	20.45	Hernes lies along a steep dry valley running through the Chilterns chalk from the west down towards the east. It includes a good range of habitats, including deciduous woodland, scrub and unimproved chalk grassland.	1.50
Harpsden & Peveril Woods	WTR	18.73	The wood is dominated by mature beech, pedunculate oak, ash trees and sessile oak. Also hazel, holly, field maple, rowan, wild cherry all present. There are several uncommon species such as birds nest orchid and narrowleaved hellebore.	1.52
The Belt	LWS	1.85	The Belt is mainly very old beech plantation with some oak, ash and sweet chestnut with a few Scot's pine and larch.	1.53
Templecombe Wood	LWS	28.11	This site consists of old estate woodland surrounding a group of open fields. The woodland is comprised of species such as sycamore, ash, lime and horse chestnut. Yew is abundant. The understorey has some areas of hazel coppice and much cherry laurel in places. A number of species associated with long established woodland are present including locally frequent bluebell, wood anemone and wood spurge.	1.53

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Site name	Type	Approx. area (ha)	Interest Features	Distance from site (km)
Cannon Wood	LWS	9.49	Cannon Wood is a varied, largely ancient woodland site with some conifer plantation, located north-east of Henley-on-Thames. It consists of two parcels of woodland, connected by a thin band of woodland. It is surrounded by arable fields and formal parkland.	1.75
Lower Spinney	LWS	0.81	No information available.	1.75
Wargrave Marsh	LWS	23.36	A relatively large diverse site, which comprises approximately the northern half of an island enclosed by the River Thames and Hennerton Backwater. The western part of the site is composed of un-grazed fen with scattered scrub and trees. The north and centre of the site is composed primarily of wet woodland criss-crossed by damp ditches. The eastern side of the site comprises species-poor semi-improved grassland, with marshy areas grading into fen.	1.95
Lucy's Copse	PLWS	13.04	This site is ancient woodland. It was last surveyed in 1987. Then it was beech high forest on a fairly steep north facing slope with a variety of other species in the canopy including oak, ash and wild cherry. The understorey was varied with hazel coppice and old whitebeam coppice at the edge. The varied ground flora included ransoms and bird's-nest orchid.	1.98

Abbreviations used in Table 3.1; SSSI: Site of Special Scientific Interest; BOA: Biodiversity Opportunity Area; LWS: Local Wildlife Site; WTR: Woodland Trust Reserve; PLWS: Proposed Local Wildlife Site; LGS: Local Geological Site; CTA: Conservation Target Area; ha: hectare; km: kilometer.

Figure 3.1: Designated sites within 2km and 5km



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Notes

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Legend

- Site Boundary
- 2km Buffer
- 5km Buffer
- Statutory Designated Site - Site of Special Scientific Interest (SSSI)
- Non-Statutory Designated Sites:
 - Berkshire Local Wildlife Site (BLWS)
 - Biodiversity Opportunity Area (BOA)
 - Conservation Target Area (CTA)
 - Oxfordshire Local Wildlife Site (OLWS)
 - Oxfordshire Proposed Local Wildlife Site (OPLWS)
 - Woodland Trust Reserve (WTS)
 - Ancient Woodland

NB. A total of five statutory designated sites are located within 5km of the site boundary. All are Sites of Special Scientific Interest (SSSIs) - no other statutory designated sites were found.

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Client	Retirement Villages Group Ltd		
Project	Thamesfield		
Title	Statutory Designated Sites within 5km and Non-Statutory Designated Sites within 2km		
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3.2 Species

3.2.1 Records of protected species were obtained from the TVERC and BMERC. A number of species of conservation importance or otherwise notable were recorded within the 2 km search radius of the site. A summary of these records is provided in Table 3.2.

3.2.2 In order to simplify the results, only records of species from the last 10 years are shown. In addition, only data with a 6 figure grid reference resolution or higher are provided, since locations given at a lower resolution do not allow accurate calculation of distance to the site boundary.

Table 3.2: Species records from the last 10 years within 2 km of the site

Common name	Scientific name	Nearest distance from site (km)	Year of most recent record	Conservation Status
Plants				
Alder Buckthorn	<i>Frangula alnus</i>	0.28	2012	OS
Summer Snowflake	<i>Leucojum aestivum</i>	0.37	2019	NS
Fritillary	<i>Fritillaria meleagris</i>	0.38	2017	NS
Greater Spearwort	<i>Ranunculus lingua</i>	0.39	2013	OS
Loddon Pondweed	<i>Potamogeton nodosus</i>	1.18	2017	VU
Common Cow-wheat	<i>Melampyrum pratense</i>	1.69	2021	NT, OS
Wood Barley	<i>Hordelymus europaeus</i>	1.82	2021	NS
Bluebell	<i>Hyacinthoides non-scripta</i>	1.83	2021	WCA8
Invertebrates				
Stag Beetle	<i>Lucanus cervus</i>	0.02	2020	NERC, UKBAP
Lagoon Spire Snail	<i>Semisalsa stagnorum</i>	0.42	2013	NERC, CR, UKBAP
Invertebrates - Lepidoptera				
Cinnabar	<i>Tyria jacobaeae</i>	0.61	2018	NERC, UKBAP
Small Heath	<i>Coenonympha pamphilus</i>	0.62	2018	NERC, NT, UKBAP
Chalk Hill Blue	<i>Polyommatus coridon</i>	1.38	2019	NT
Small Blue	<i>Cupido minimus</i>	1.60	2017	NERC, NT, UKBAP
Amphibians				
Common Toad	<i>Bufo bufo</i>	0.38	2016	NERC, UKBAP
Grass Snake	<i>Natrix helvetica</i>	0.38	2013	NERC, UKBAP
Great Crested Newt	<i>Triturus cristatus</i>	1.16	2016	EPS, NERC, UKBAP
Slow-worm	<i>Anguis fragilis</i>	1.51	2015	NERC, UKBAP
Birds				
Black-headed Gull	<i>Chroicocephalus ridibundus</i>	0.12	2020	Amber
Mallard	<i>Anas platyrhynchos</i>	0.12	2012	Amber
Common Gull	<i>Larus canus</i>	0.18	2018	Amber
Grey Wagtail	<i>Motacilla cinerea</i>	0.28	2017	Amber
Reed Bunting	<i>Emberiza schoeniclus</i>	0.38	2017	NERC, Amber, UKBAP
Whitethroat	<i>Curruca communis</i>	0.38	2014	Amber
Willow Warbler	<i>Phylloscopus trochilus</i>	0.38	2012	Amber
House Martin	<i>Delichon urbicum</i>	0.51	2013	Red
Red Kite	<i>Milvus milvus</i>	0.51	2013	BDir1, WCA1, NT
Swift	<i>Apus apus</i>	0.51	2019	Red
Kestrel	<i>Falco tinnunculus</i>	0.61	2018	Amber

REPORT

Common name	Scientific name	Nearest distance from site (km)	Year of most recent record	Conservation Status
Lesser Spotted Woodpecker	<i>Dryobates minor</i>	1.16	2020	NERC, Red, UKBAP
Bullfinch	<i>Pyrrhula pyrrhula</i>	1.34	2015	NERC, Amber UKBAP
Common Redpoll	<i>Acanthis flammea</i>	1.34	2013	Red
House Sparrow	<i>Passer domesticus</i>	1.34	2013	NERC, Red, UKBAP
Song Thrush	<i>Turdus philomelos</i>	1.34	2020	NERC, Amber, UKBAP
Sparrowhawk	<i>Accipiter nisus</i>	1.34	2014	Amber
Wood Pigeon	<i>Columba palumbus</i>	1.34	2013	Amber
Greenfinch	<i>Chloris chloris</i>	1.36	2013	Red
Mammals				
Hedgehog	<i>Erinaceus europaeus</i>	0.50	2020	NERC, VU, UKBAP,
Otter	<i>Lutra lutra</i>	1.92	2020	WCA5, NERC, UKBAP
Badger	<i>Meles meles</i>	1.93	2020	PBA
Bats				
Soprano Pipistrelle	<i>Pipistrellus pygmaeus</i>	0.17	2021	EPS, NERC, UKBAP, WCA5
Common Pipistrelle	<i>Pipistrellus pipistrellus</i>	0.26	2020	EPS, WCA5
Daubenton's Bat	<i>Myotis daubentonii</i>	0.28	2019	EPS, WCA5
Brown Long-eared Bat	<i>Plecotus auritus</i>	0.88	2020	EPS, NERC, UKBAP, WCA5
Noctule Bat	<i>Nyctalus noctula</i>	0.88	2020	EPS, NERC, UKBAP, WCA5
Serotine	<i>Eptesicus serotinus</i>	1.60	2019	EPS, WCA5, VU

Abbreviations used in Table 3.2: WCA1: Wildlife & Countryside Act Schedule 1, part 1; WCA5: Wildlife & Countryside Act Schedule 5; WCA8: Wildlife & Countryside Act Schedule 8; NERC: Natural Environment & Rural Communities Act Species of Principal Importance; UKBAP: UK Biodiversity Action Plan; PBA: Protection of Badgers Act 1992; VU: Vulnerable; EN: Endangered; NT: Near Threatened; CR: Critically Endangered; Birds of Conservation Concern 5: Red, Amber; BDir1: Bird Directive Annex 1; EPS: European Protected Species; OS: Oxon Scarce; NS: Nationally Scarce

3.3 Phase 1 Habitat Survey

- 3.3.1 The survey results are presented in the form of a map with the habitat types and boundary features marked (Figure 3.2). An explanation of target notes from Figure 3.2 can be found in Appendix B.
- 3.3.2 Descriptions of the habitat types and boundary features are detailed below. Habitat descriptions are defined by broad habitat types (JNCC, 2010).

A1.3 Mixed Woodland

- 3.3.3 A strip of mature trees, both broadleaved and coniferous, is present along a section of the northern border of the site.
- 3.3.4 Species identified in this habitat include sycamore *Acer pseudoplatanus*, elder *Sambucus nigra*, silver birch *Betula pendula*, common beech *Fagus sylvatica* and *Cypresses sp.*

A3.1 Broad-leaved Scattered Trees

- 3.3.5 Several mature broad-leaved trees can be found scattered around the site, with the occasional coniferous tree also being present. Due to the ornamental nature of the grounds, a number of uncommon imported species are present.
- 3.3.6 Species identified include: horse chestnut *Aesculus hippocastanum*, common, black walnut *Juglans nigra*, apple *Malus domestica*, black locust *Robinia pseudoacacia*, field maple *Acer campestre*,

dawn redwood *Metasequoia*, japanese cherry *Prunus serrulata*, lime *Tilia x europaea*, ginkgo *Ginkgo biloba*, elder *Sambucus nigra*, hazel *Corylus avellana*, sycamore and silver birch.

G1 Standing Water

- 3.3.7 A tall circular concrete water fountain is located outside of the main entrance to the lobby. No aquatic vegetation is present.

J1.2 Amenity Grassland

- 3.3.8 The large portion of the grounds area of the site comprises regulary managed amenity grassland, in the form of large open recreational lawns.
- 3.3.9 The grass is predominately perennial ryegrass *Lolium perenne* with frequent clover *Trifolium repens* and plantain *Plantago major*, alongside rare occurances of yarrow *Achillea millefolium* and St. John's wort *Hypericum perforatum*.

J1.4 Introduced Shrubs

- 3.3.10 The grounds comprise an ornamental garden, interspersed with well kept lawns, and, as such, display a range of ornamental planting primarily in the form of imported shrubs.
- 3.3.11 Species present include roses, primrose *Primula sp.*, and buddleia *Buddleja sp.*
- 3.3.12 Some invasive species were recorded in the ornamental planting around the site in the form of: montbretia *Crocsmia Sp.*, wall cotoneaster *Cotoneaster horizontalis*, and variegated archangel *Lamiastrum galeobdolon*.

J2.1.2 Intact Species-poor Hedge

- 3.3.13 Sections of regulary managed, species-poor, ornamental hedging are present across the site but the most prominent section borders the patio and driveway south of the main enterance to the buidling. Species include Bay, Box, yew, and Cypress.

J2.2.2 Defunct Species-poor Hedge

- 3.3.14 Sections of regulary managed, species-poor, non-continuous, ornamental hedging are present around the ornamental garden areas off of the central courtyard between the buildings. Species include Bay, Box, and Cypress.

J3.6 Buildings

- 3.3.15 A number of buildings are present on site. Further details are provided in Section 3.5.

J4 Hard Standing

- 3.3.16 The site includes paved access roads, car parks, and footpaths.

Figure 3.2: Phase 1 habitat map



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- Legend**
- Site boundary
 - Survey area
 - Target note
 - Broadleaved scattered trees
 - ~ Intact hedge species-rich
 - Intact hedge species-poor
 - Defunct hedge species-poor
 - Mixed Parkland/scattered trees
 - Standing water
 - A Amenty grassland
 - Introduced shrub/ornamental planting
 - Buildings
 - Other

Rev	Description	By	CB	Date

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Client Retirement Village Group

Project Thamesfield

Title Phase 1 Habitat Map

Status Draft

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Figure Number 2.1

Drawn By MP

Scale @ A3 1:750

PM/Checked By EW

Date Created 19/11/24

Rev 04

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3.4 Ecological Scoping Survey

Plants

- 3.4.1 The species identified during the Phase 1 Habitat Survey were common and widespread or non-native and there were no protected or notable species recorded on site.
- 3.4.2 Small amounts of invasive species were recorded in the ornamental planting around the site in the form of: montbretia *Crocsmia Sp.*, wall cotoneaster *Cotoneaster horizontalis*, and variegated archangel *Lamium galeobdolon*.

Invertebrates

- 3.4.3 Most of the habitats identified on site were likely to support a only common and widespread invertebrates and were therefore considered to be of low value for invertebrates (of site-level importance).

Herpetofauna

Amphibians

- 3.4.4 The habitats on site were considered unsuitable for amphibians. The waterbody present was an ornamental fountain with high concrete sides and no aquatic vegetation present and was unlikely to support amphibians including great crested newt.
- 3.4.5 One pond is present within 250 m of the site, located approximately 125 m to the east. Due to the habitats present between the site and the pond and the unsuitable heavily managed on site habitats, if great crested newts are present in the surrounding area, they are unlikely to be utilising the habitats on site.

Reptiles

- 3.4.6 The site was considered unsuitable for reptiles as the only grassland present was the highly managed amenity grassland. No suitable hibernation habitats were present either and there were no areas that could be used for shelter.
- 3.4.7 The site also has poor connectivity to any nearby habitat that may be suitable for reptiles.

Birds

- 3.4.8 The hedgerows and trees on site provide foraging and nesting habitat for a range of common and widespread breeding birds. The River Thames is located directly adjacent to the wider property, but approximately 30m from the site boundary, therefore offering the opportunity for nesting water birds to be present. The buildings provide some limited habitat for smaller nesting birds. No nesting birds were identified on site during the survey.
- 3.4.9 A number of protected and notable bird species were recorded within 2km of the site, which may be present on site where suitable habitat exists.

Bats

3.5 Preliminary Bat Roost Assessment

- 3.5.1 The results of the PBRA are detailed below, and the locations of buildings / trees surveyed, together with the location of potential roost features (PRFs) are shown on Figure 3.3. Photographs of the buildings and trees are provided in Appendix C.

Buildings

Building 1 (B1)

- 3.5.2 B1 formed a newer section of the main residential building and comprised a three-storey brick-built building with a multi-pitched, hipped slate roof. Windows were present on all elevations.
- 3.5.3 Externally, the building was in good condition; there was only one missing/broken roof tile on the northern side, and there were no obvious cracks/crevices in the brickwork. Windows and doors also appeared to be well-sealed.
- 3.5.4 A glass sky light in the roof was present on the north western elevation of the building. Surrounding the sky light was an area of flat felted roof. Areas around the glass panels of the sky light and the adjoining roof were well-sealed. The area of flat roof adjoined areas of pitched roof which were well sealed with no potential bat roosting features.
- 3.5.5 A small gap running along the wooden soffit on the northern elevation of the building was previously considered to offer low potential for roosting bats. Surveys undertaken in May 2022 did not record any evidence of roosting bats (Temple, 2022) (Feature A).
- 3.5.6 Weep holes were present above the majority of windows and doors on the ground and first floor of B1, along the south eastern, north eastern and north western elevations. Many of the weep holes appeared shallow, however some were noted to recede substantially. A single bat dropping was noted on a window frame directly underneath one weep hole on the first floor (Feature B). It is possible that the weep holes lead into a cavity wall, which would be suitable for roosting bats. No bat droppings were noted during the update PBRA conducted in 2024.
- 3.5.7 Internal access was not possible at the time of survey in 2022, but partial access was achieved in 2024. Breezeblock walls subdivided the loft area, making a full inspection of the roof void difficult. Bitumen felt being present under the roof tiles. Fibreglass insulation was present throughout, and no daylight could be seen within the loft.
- 3.5.8 Overall, the external features of B1 were considered to be of high suitability for roosting bats.

Building 2 (B2)

- 3.5.9 B2 comprised an older (original) section of the residential building and connected to B1 which lay to the north east of it. This section of building comprised two-storeys of white stonework and masonry, with Juliet balconies, and a multi-pitched, hipped slate roof.
- 3.5.10 Some areas on the north eastern elevation of the building comprised single-storey extensions to the main building, with sections of curved roofs (over protruding windows) and single pitched roofs or 'lean to' roofs. A single chimney stack and ventilation shaft were present on the north western elevation.
- 3.5.11 Externally, B2 was in a poorer condition to that of B1; there were numerous lifted tiles and gaps along the ridgeline (where mortar had fallen out) across the entire length of the roof, notably on the south eastern (Feature C) and south western elevations, which also included some broken tiles (Feature D). These features have the potential to offer suitable roosting opportunities between the tiles and roofing material.
- 3.5.12 Missing mortar was also present along one edge along the south eastern elevation (roof height) with some staining observed on the adjacent bargeboard, possibly leading to gaps under the tiles, or into the soffit (Feature E).
- 3.5.13 Rotten weatherboarding and lifted lead flashing were noted on a higher section of the hipped roof, facing south west (Feature F).
- 3.5.14 A large gap was present under the eaves along the south western elevation of B2, between the top of the wall and soffit; the gap was approximately 5 cm wide in places, however no obvious signs of usage by bats was noted (Feature G).
- 3.5.15 The majority of windows present on B2 were in fairly good condition, however some rotten window frames were present on the south western elevation. Small recesses were present around the frames, however these appeared shallow and therefore unlikely to be suitable for roosting bats (likely subject to draughts) (Feature H).

- 3.5.16 Some large, vertical cracks were present in the stonework along the south western elevation (ground level). These also appeared to be shallow and therefore unlikely to be suitable for roosting bats (Feature I).
- 3.5.17 Along the north eastern elevation of the building, some minor lead flashing and lifted roof tiles were noted (Feature J).
- 3.5.18 A wasp nest was present on the south western corner of B2.
- 3.5.19 Internally, a single roof void (L1) was accessible in B2 which comprised a sealed, plasterboard unit within the main roof structure and was therefore not suitable or accessible to bats.
- 3.5.20 During the update PBRA survey in 2024, one potential bat dropping was noted on an exterior wall but was too high to be accessed for closer inspection.
- 3.5.21 Overall, the external features of B2 were considered to be of high suitability for roosting bats.

Building 3 (B3)

- 3.5.22 An octagonal building (the lounge) was present on the corner of B2 and B4, linked to both via a corridor. The building was of stone construction with decorative pillars and masonry; the roof was slate-tiled with lead flashing along the joints. Together with the two skylights present in the centre of the roof, the building was in overall good condition.
- 3.5.23 A single external feature was noted on the southern elevation of B3, comprising a broken / missing panel in the soffit (Feature K). This led to a hollow within, which could extend around the length of the building. Two bat droppings were noted beneath the feature, one of which was approximately 10 cm below it.
- 3.5.24 Internally, there was no roof void present.
- 3.5.25 Given the presence of the single feature on the southern elevation with bat droppings present beneath, B3 was considered to be of high suitability for roosting bats.

Building 4 (B4)

- 3.5.26 B4 was a newer section of the main residential building, comprising a single-storey, brick-built building with a hipped, slate-tiled roof. A long corridor connected B4 to the adjacent building (B5).
- 3.5.27 Externally, the building was in good condition with no obvious access / egress points for bats. Windows and door frames on all elevations were well-sealed and roof / ridge tiles were largely intact besides the occasional small gap in the mortar along the ridge tiles, with no obvious lifted tiles, or suitable crevices for bats to use.
- 3.5.28 A wasp nest was present on the north western elevation of B4.
- 3.5.29 Internally, two separate roof voids and a basement were present in B4. The basement was well sealed with no obvious PRFs found.
- 3.5.30 The first roof void (L2) measured approximately 3 m x 2 m x 2 m to apex height. The void was bitumen felt-lined and insulated (fiberglass), with breeze block walls and cluttered trusses. There were no access / egress points noted and no evidence of bats was found at the time of the survey.
- 3.5.31 The second roof void (L3) measured approximately 7 m x 3 m x 2 m to apex height and was a similar construction to L2, described above. There were no access / egress points noted and no evidence of bats was found at the time of the survey.
- 3.5.32 Given the low level of external features but lack of internal features suitable for roosting bats, B4 was considered to have negligible potential for roosting bats.

Building 5 (B5)

- 3.5.33 B5 comprised a large two-storey residential building of similar age and construction to B1. It was connected to B4 via a long, built corridor.
- 3.5.34 Overall the building was in good condition with no obvious access / egress points for bats. Windows and door frames on all elevations were well-sealed and roof / ridge tiles were intact, with no obvious

lifted tiles or suitable crevices for bats to use. Like on B4, there were occasional small gaps due to missing mortar around the ridge tiles.

- 3.5.35 Weep holes were present over some windows on the ground floor of the building (Feature L). The majority of the weep holes appeared shallow, thereby limited their suitability for roosting bats. However, as with B1, it is possible that the weep holes lead into a cavity wall, which would offer some potential suitable roosting habitat.
- 3.5.36 Two wasp nests were present on the north western elevation of the building.
- 3.5.37 A single roof void was access in B5 (L4), which measured approximately 7 m x 1.5 m x 2 m to apex height and was a similar construction to L1 and L2, described above. The void was draughty at the time of the survey, with scattered mouse droppings found throughout. There were no access / egress points noted and no evidence of bats was found at the time of the survey.
- 3.5.38 Overall, the external features of B4 were considered to be of low suitability for roosting bats.

Building 6 (B6)

- 3.5.39 B6 was a standalone single-storey lodge located approximately 35 m to the south east of the main residential building. The construction and age of the building are similar to B2, comprising white stonework and masonry, with sections of pitched, sloping and flat roofs. Bay windows adorn the south eastern elevation. A small section of wooden cladding was also present on the south eastern and north western elevations. Several sections of exposed roof felt were present around the entire length of the building.
- 3.5.40 Externally the building was in fairly good condition, however there were numerous lifted ridge tiles and raised lead flashing on the north eastern elevation (Feature M).
- 3.5.41 Adjacent to the bay windows, a large cavity (possibly leading into the roof void) was present beneath the lifted lead flashing, where a sloped section of roof extended away from the wall (Feature N).
- 3.5.42 Along the south eastern elevation, a large gap was present at eaves height along the length of the wall (Feature O). A single bat dropping was noted on the wall below the feature. Smaller gaps were also noted between the wooden cladding and weatherboard on the north western elevation (Feature P).
- 3.5.43 A wasp nest was present in the roof of the porch on the north western elevation.
- 3.5.44 Internal access was not possible at the time of survey.
- 3.5.45 Overall, the external features of B4 were considered to be of high suitability for roosting bats.

3.6 Bat Emergence Surveys

- 3.6.1 Three emergence surveys were undertaken on sections of buildings which will be impacted by the proposed work during June and July 2023.
- 3.6.2 An emergence was recorded from Building 3 during the third survey, in the form of an individual soprano pipistrelle.
- 3.6.3 During these surveys, foraging and commuting bats were recorded along the river, as well as along the treelines and buildings, with common pipistrelles *Pipistrellus pipistrellus* and soprano pipistrelle *Pipistrellus pygmaeus* being most common. Noctule *Nyctalus noctula* was noted in lower numbers, with nathusius' pipistrelle *Pipistrellus nathusii* also being recorded in low numbers.
- 3.6.4 Full results can be found in the associated Thamesfield RVG, Henley on Thames Bat Survey Report produced by RPS in 2023.

Trees

- 3.6.5 Two of the mature trees on site, one horse chestnut and one common beech, possessed moderate bat roosting potential, mostly in the form of knots in the tunk and hollow branches. Neither of these trees will be affected by the proposed works.

Otter and Water Vole

- 3.6.6 No evidence of otter or water vole activity was found on site. There was no suitable habitat for otter holts on site. However, anecdotal evidence suggested that otters were known to be active on an island a short distance down the river but were not known to visit the survey site.
- 3.6.7 No works are being undertaken in the vicinity of the River Thames, with the redline boundary being located approximately 30m from the shoreline, therefore there will be no impacts on water vole or otter if they were present.

Badger

- 3.6.8 There were no signs of badger activity or suitable habitat for badger setts recorded on site.

4 EVALUATION AND RECOMMENDATIONS

4.1 Designated Sites

- 4.1.1 The proposals do not directly affect any statutory or non-statutory designated sites. The closest statutory site is Harpsden Wood SSSI which is 1.59km from the site boundary. Branfords Woods LWS, Remenham Woods LWS and Chalk Grassland, Remenham LWS are within 0.5km of the site boundary.
- 4.1.2 Most of the designated sites are sufficiently far from the site that the proposals would be unlikely to have any effect upon them. However, a number of LWSs are within 0.5km of the site boundary. Therefore, measures should be taken to prevent any pollution events from occurring and to ensure any contaminated soil or water and airborne particles are contained within the project boundary and disposed of appropriately. This would prevent the risk of them reaching any nearby designated sites.

4.2 Habitats

- 4.2.1 The hedgerows and mature trees are being retained within the development proposals. These were considered to be the habitats of greatest value to protected and notable species.
- 4.2.2 It is unlikely that the proposed development would result in an adverse impact on the surrounding habitats. However, good practice guidelines should be included within a Construction Environmental Management Plan (CEMP) and must be put in place and followed to ensure that the surrounding habitats are not adversely affected by the development. These would include but are not limited to:
- Protective fencing installed along retained habitats where they fall outside of construction areas. Best practice guidelines for constructing exclusion zones, barriers and ground protection around trees provided in British Standard 5837:2012 (Trees in Relation to design, demolition, and construction - Recommendations),
 - The sensitive siting of construction compounds, access roads and laydown areas away from retained habitats; and
 - A plan produced to ensure that air or water-borne pollution generated during construction not impact nearby retained habitats or designated sites.
- 4.2.3 The NPPF (2023) states that to minimise impacts on biodiversity, planning policies should promote the preservation, restoration, and re-creation of priority habitats. The habitats that would be lost should be recreated. Ideally this should be carried out onsite. Where this is not possible, opportunities for offsite habitat creation will be explored to ensure a net gain for biodiversity is achieved.
- 4.2.4 Table 4.1 below summarises the habitat types within the site and outlines the potential impacts of the development proposals to each of these habitats.

Table 4.1: Summary of potential habitat impacts

JNCC Code	Habitat Type	Area (m ²) / Length (m)	% of site	Ecological Importance	Potential impact
A1.3	Mixed Woodland	663.8	7.5	High	Suitable for nesting birds – to be retained/ protected during works.
A3.1	Broad-leaved Scattered Trees	N/A	N/A	High	None – to be retained/protected during works.
G1	Standing Water	76.7	0.87	None	None – to be retained/protected during works.
J1.2	Amenity Grassland	1932.49	21.96	Low	Low ecological value – majority of habitat to be retained/protected during works.
J1.4	Introduced Shrubs	1019.72	11.58	Low	Low ecological value – majority of habitat to be retained/protected during works.
J2.1.2	Intact Species-poor Hedge	69.52	N/A	Low	Suitable for nesting birds. To be retained/ protected during the works.

JNCC Code	Habitat Type	Area (m ²) / Length (m)	% of site	Ecological Importance	Potential impact
J2.2.2	Defunct Species-poor Hedge	55.94	N/A	Low	Suitable for nesting birds. Majority to be retained/protected during works.
J3.6	Buildings	2072.01	23.55	High	Suitable for nesting birds and roosting bats. Mitigation required to minimise impact on these protected species.
J4	Bare/ Hard Standing Ground	3031.02	34.4	None	None.

4.3 Species

Plants

- 4.3.1 The species identified during the Phase 1 Habitat Survey were common and widespread and there were no protected or notable species recorded.
- 4.3.2 Therefore, further botanical surveys are not required.
- 4.3.3 It is recommended that the invasive species identified on site should be removed and alternative planting considered in these areas.

Invertebrates

- 4.3.4 Most of the habitats identified on site were likely to support a variety of common and widespread invertebrates. The site was not considered floristically diverse and was therefore considered to be of low value for invertebrates.
- 4.3.5 Considering the habitats on site and the plant species recorded during the Phase 1 Habitat Survey, no further invertebrate surveys are considered necessary.

Breeding Birds

- 4.3.6 Habitats were present within and immediately adjacent to the site which provided foraging and nesting habitat for a range of common and widespread breeding birds.
- 4.3.7 Should any vegetation be removed it is recommended to be done so outside the breeding bird season. It should be noted that whilst the main bird breeding season runs between March and September some birds can nest at any time of year.
- 4.3.8 Advice from a suitably experienced ecologist should be sought in the event that suitable breeding bird habitat needs to be removed.
- 4.3.9 It is recommended that tree and scrub planting is provided on site exceeding the area of any suitable habitat loss. This would provide feeding and nesting opportunities for breeding birds; provide a foraging habitat for common bird species and provide a source of food in the autumn to early winter months.
- 4.3.10 If any clearance was required during the breeding season, the relevant areas should be inspected by a suitably qualified ecologist within 48 hours prior to clearance to check for the presence of nesting birds. If an active nest was present, the nest and vegetation within 5 m of it would need to be retained until the young birds had fledged.
- 4.3.11 If a nest proved to be of a species listed under Schedule 1 of the Wildlife and Countryside Act 1981 (as amended), advice from the inspecting ecologist regarding suitable distances to avoid disturbance of the nest and any birds using it would need to be sought and agreed with clearance contractors. Such buffers would need to remain in place until the young birds had fledged and left the nest.

Bats

- 4.3.12 The PBRA identified four buildings (B1, B2, B3 and B6) with high potential and one building (B5) with low potential and one building (B4) with negligible potential to support roosting bats. Bat

droppings were found beneath external features located on B1, B3 and B6 in 2022. A possible bat dropping was identified on the exterior of B2 during the update survey in 2024.

- 4.3.13 Any proposed development on the buildings had the potential to impact upon roosting bats, based upon the initial findings of the PBRA.
- 4.3.14 Emergence surveys were undertaken on buildings that will be affected by the proposed in June and July 2023. B3 was confirmed as a soprano pipistrelle roost. Full details are provided within the associated Thamesfield RVG, Henley on Thames Bat Survey Report (RPS, 2023).

Bat Mitigation Licence

- 4.3.15 A European Protected Species Mitigation Licence from Natural England would be required for works that will affect B3 (Feature K). When a licence to undertake work or demolition on a building is required, an application form, method statement, work schedule and charge screening form will all need to be completed. There is also the need to provide a reasoned statement to show that the activity fits with the criteria for a mitigation licence and that there is no satisfactory alternative.
- 4.3.16 As the application is for a development, a master plan and habitat management and maintenance plan would be required.
- 4.3.17 All of these would be sent to Natural England who will determine whether to issue a licence within 30 working days.
- 4.3.18 Before any work begins on B3, appropriate mitigation measures and alternative roosting opportunities would need to be created on site.
- 4.3.19 Any demolition should be done when bats are least vulnerable, in September or October, as this avoids bat maternity and hibernation seasons.
- 4.3.20 The PBRA also identified two mature trees with bat roosting potential. However, these are situated well away from the proposed works and will not be affected.

Lighting

- 4.3.21 Bats are nocturnal and adapted to roost and forage in low light conditions therefore any increases in artificial light levels can cause disturbance or disrupt existing flight paths. A sensitive lighting scheme is recommended to ensure any additional lighting during construction and post development does not increase the amount of light on any bat roosting locations, proposed bat boxes, site boundaries and retained habitats to avoid impacting roosting, foraging and commuting bats.
- 4.3.22 Lighting to be installed as part of the development should be in line with Guidance Note 08/18 Bats and Artificial Lighting in the UK, the following will be required:
- LED lighting will be used, and light levels should be kept as low as possible. Metal halide, fluorescent sources should not be used;
 - Lighting will be directed to where it is needed (away from boundary features and existing potential roost features);
 - Only luminaires with an upward light ratio of 0% and with good optical control should be used, luminaires should always be mounted on the horizontal, i.e. no upward tilt;
 - Any external security lighting should be set on motion-sensors and short (one minute) timers;
 - Internal lighting within any new structures should be recessed where installed in proximity to windows to reduce glare and light spill; and
 - Light sources should emit minimal ultra-violet light, peak higher than 550nm and be of a warm white spectrum (ideally <2700 Kelvin)
- 4.3.23 In addition to the mitigation measures described above, it is recommended that bat boxes are installed on retained mature trees or on existing buildings around the site. It is noted that a number of bat boxes are already present on site, but additional boxes could be added and any existing ones could be replaced if their condition has deteriorated since installation.

4.4 Enhancement Opportunities

- 4.4.1 In addition to the mitigation measures outlined above, enhancement measures would also include:
- The provision of bird boxes located within existing hedgerows and on mature trees. Boxes will comprise various designs suitable for species including: robin, wren, blue tit, great tit, coal tit, nuthatch, house sparrow and starling;
- 4.4.2 A Biodiversity Net Gain (BNG) assessment will be required using current guidance from CIEEM, et al (2019). This would involve using the recognised scoring system to assess the habitats on site prior to development and post development. There would be a requirement to show a net gain of approximately 10% and therefore it will be necessary to work with the project team to ensure high value habitats were being re-created. If biodiversity gains cannot be achieved on-site, off-site opportunities would need to be investigated.
- 4.4.3 The information gathered during the Phase 1 Habitat Survey would be used to calculate the baseline biodiversity value of the site. A masterplan/landscaping plan of the site would be used to calculate the biodiversity value of the development.
- 4.4.4 This BNG assessment is detailed in the associated Biodiversity Net Gain Assessment Report (RPS, 2024).

5 CONCLUSIONS

- 5.1.1 Five statutory designated sites were located within 5km of the site, the closest Harpsden Wood SSSI is 1.59km from the site boundary.
- 5.1.2 There are 16 non-statutory sites located within the 2 km search radius of the site, this includes 12 Local Wildlife Sites, one potential Local Wildlife Site, one Woodland Trust Reserve, a Biodiversity Opportunity Area and a Conservation Target Area. The closest LWS site is Branfords Woods which is 0.33km from the site boundary.
- 5.1.3 The Phase 1 Habitat Survey identified that the site predominantly comprised amenity grassland, hard standing, and buildings, with the grounds displaying areas of mixed woodland, introduced shrubs, and scattered trees.
- 5.1.4 The PBRA identified four buildings (B1, B2, B3 and B6) with high potential and one building (B5) with low potential and one building (B4) with negligible potential to support roosting bats. Bat droppings were found beneath external features located on B1, B3 and B6 in 2022. A possible bat dropping was identified on the exterior of B2 during the update survey in 2024.
- 5.1.5 Emergence surveys were undertaken on buildings that will be affected by the proposed in June and July 2023. B3 was confirmed as a soprano pipistrelle roost. Full details are provided within the associated Thamesfield RVG, Henley on Thames Bat Survey Report (RPS, 2023).
- 5.1.6 Therefore, mitigation measures are required prior to any works in the form of the acquisition of a bat mitigation license, as well as the recommended implementation of a sensitive lighting plan and the installation of bat boxes.

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APPENDICES

Relevant Legislation

Birds

All birds, their nests and eggs are afforded protection under the Wildlife and Countryside Act 1981, as updated by the Countryside and Rights of Way Act 2000. It is an offence to:

- intentionally kill, injure or take any wild bird;
- intentionally take, damage or destroy the nest of any wild bird while it is in use or being built; and
- intentionally take or destroy the egg of any wild bird.

Schedule 1 birds cannot be intentionally or recklessly disturbed when nesting and there are increased penalties for doing so. Licences can be issued to visit the nests of such birds for conservation, scientific or photographic purposes but not to allow disturbance during a development even in circumstances where that development is fully authorised by consents such as a valid planning permission.

Bats

All British bat species are fully protected under Schedule 5 of the Wildlife and Countryside Act 1981, as updated by the Countryside and Rights of Way Act 2000. All British bats are also included on Schedule 2 of The Conservation of Habitats and Species Regulations 2017 as European Protected Species. It is an offence to:

- intentionally or recklessly kill, injure or capture bats;
- deliberately or recklessly disturb bats (whether in a roost or not); and
- damage, destroy or obstruct access to bat roosts

A roost is defined as 'any structure or place which [a bat] uses for shelter or protection'. As bats tend to reuse the same roosts, legal opinion is that a roost is protected whether or not bats are present at the time of survey.

A licence will therefore be required by those who carry out any operation that would otherwise result in offences being committed.

The following bat species are listed as being of principal importance for the conservation of biodiversity in England, (commonly referred to as UKBAP Priority species): Barbastelle, Bechstein's, Noctule, Soprano Pipistrelle, Brown Long-eared, Greater Horseshoe, and Lesser Horseshoe.

Target Notes

Target Note	Description
TN1	An ornamental water fountain with tall concrete sides and no water plants present.
TN2	A mature common beech tree with moderate bat roost potential
TN3	A mature horse chestnut tree with moderate bat roost potential
TN4	The locations of invasive plant species across the site

Photographs

Photograph 1: South eastern elevation of B1, showing weep holes present above first floor windows (Feature B). Weep holes were also present over windows / doors on the ground floor.



Photograph 2: South eastern elevation of B2 showing location of features C (lifted tiles), E (missing mortar) and F (rotten weather board and lifted lead flashing).



Photograph 3: South western elevation of B2 with the lounge (B3), adjacent. Showing location of features G (gap along eaves), H (small recesses around window frames) and I (vertical crack in stonework).



Photograph 4: South-western elevation of B2, with the new terrace that has been added since the emergence surveys were carried out in June and July 2023.



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Photograph 5: Broken / missing panel in soffit (Feature K) on south eastern elevation of B3 and location of one bat dropping.



Photograph 6: South eastern elevation of B4



Photograph 7: Section of B5 showing weep holes (Feature L) above ground floor windows.



Photograph 8: South eastern elevation of B6 with bay windows



Photograph 9: North western elevation of B6



Photograph 10: A view of some of the introduced shrubs, with some amenity grassland and scattered trees in the background.



Photograph 11: The horse chestnut on the eastern boundry with bat roosting potential.



Photographs 12 & 13: some of the bat roosting features on the horse chestnut





Photograph 14: A photo from within the mixed woodland along the north-eastern boundary.



Photograph 15: TN1 The ornamental fountain and driveway.

