



Our Ref: P16/25 – 1B

27 July 2016

Alex Gooch
AMG sarl & AMG Estates Ltd.
Browns Hall
Old Basing
RG24 7DE

Dear Mr Gooch,

The Fisherman's Cottage, 224 Kennet Side, Reading: Ecological Appraisal and Internal / External Bat Building Inspection

Thank you for commissioning EPR to carry out an Ecological Appraisal and bat inspection of the Fisherman's Cottage Public House and garden in Reading, to accompany a planning application, referred to within this document as the 'Site'. I understand that the proposals are for an extension to the pub so as to be able to offer accommodation. This would involve:

- Removal of part of the beer cellar;
- Extension of the building into a part of the garden area to provide accommodation, either three or two storeys high (Option 1 DLK drawings 1969/P10-14 or Option 2, DLK drawings 1969/P15-P17);
- Development of part of the current car parking area for accommodation; and
- Associated parking and landscaping within the current garden area.

Following a desktop study, I visited the Site on 13 June 2016 with Colleen Hope, a licensed bat surveyor, to carry out a walkover survey and an inspection of pub in order to assess its roosting potential for bats.

This letter sets out our findings and discusses ecological constraints and opportunities relating to the proposed redevelopment of the Site. A detailed explanation of the legislation and policy referred to in this letter is set out in **Appendix 1**, and the full appraisal methodology can be found in **Appendix 2**.

Legislation and Planning Policy Context

I have summarised the nature conservation related legislation and planning policy that is of relevance to the above proposals and given further details in **Appendix 1**. Where this may have implications for the planning application, I discuss this where relevant within this letter.

Legislation

The following legislation may be of particular relevance to the proposals and are discussed where relevant within the letter:

- The Conservation of Habitats and Species Regulations 2010 (as amended);
- The Wildlife and Countryside Act 1981 (as amended);
- The Countryside and Rights of Way (CROW) Act 2000; and
- The Natural Environment and Rural Communities (NERC) Act 2006.

National Planning Policy

Relevant policy and guidance for nature conservation includes:

- Section 11 of the National Planning Policy Framework (NPPF);
- Government Circular 06/05: Biodiversity and Geological Conservation (particularly Paragraphs 98 and 99);
- British Standard BS42020:2013 Biodiversity – Code of practice for planning and development (August 2013).

These are discussed further in **Appendix 1**.

Local Planning Policy

Local Planning Policy for the area is set by Reading Borough Council. The Local Plan includes the Core Strategy (adopted in 2008, altered in 2015), Sites and Detailed Policies (adopted 2012, altered 2015) and a Proposals Map (adopted 2012). Policies from this Local Plan of potential relevance to the development proposals (detailed more fully in **Appendix 1**) include:

- Policy CS36: Biodiversity and Geology; and
- Policy DM17: Green Network.

Guidance

Applicable guidance is set out in **Appendix 1**. Government Circular 06/05 Paragraphs 98 and 99 collectively advise that the presence of a protected species is a material consideration, and that where there is the potential for them to be present, surveys to determine their presence or likely absence, and status should normally be undertaken prior to a planning application being determined.

Site Context and Description

The Site is situated in the centre of Reading and is adjacent to the Kennet and Avon Canal as indicated on **Map 1**. The river towpath runs between the northern edge of the Site and the Canal. There is a smaller footpath adjacent to the Site's eastern side where people can access the towpath. The eastern side comprises residential housing and gardens, and the southern edge is bordered by a road (Canal Way), the other side of which is a small area of amenity grassland and trees.

The Site itself contains the Fisherman's Cottage Public house, a parking area and small garden. The garden slopes steeply upwards towards Canal Way, a drop of about 4m.

The geology of the Site consists of a bedrock of various chalk types with superficial deposits of sand and gravel. (see British Geological Survey, 2016). The online Soilscales tool (Land Information System

(LandIS), 2015) shows the soils within the area as 'Soilscape 20' which are 'Loamy and clayey floodplain soils with naturally high groundwater', which are moderately fertile.

With reference to old maps published on the web (see maps.nls.uk) it appears that there was a building on the site in its current position in 1883, though whether this is the same building is not certain.

Zone of Influence

In order to assess potential ecological constraints and opportunities related to future development of this Site, it is necessary to first consider the likely Zone of Influence (ZOI) of the proposals. The ZOI of a proposed development is defined in CIEEM's Ecological Impact Assessment (EcIA) guidelines as '...the area over which ecological features may be subject to significant effects as a result of the proposed project and associated activities' (CIEEM, 2016).

Given the nature and scale of activities that are likely to be associated with this residential scheme, I consider that the ecological ZOI is likely to be limited to the site itself and immediate surroundings. An exception to this may include where changes to habitats and environmental conditions on Site may impact upon wildlife populations within the local area. This may be for example due to loss of dispersal / foraging habitat on Site, upon which a species may depend, and this is taken into consideration where relevant below in the main text.

Desktop Study

With reference to desktop resources including MAGIC, the closest statutory designated site is Highwood Local Nature Reserve (LNR). This used to be part of Woodley Lodge grounds, with mixed lowland woodland and heathland, plus some exotic tree species that were part of an arboretum. It is over 2km from the Site and it is very unlikely to be affected by the proposed development. There are no statutory designated sites nearer to the Site.

A data request was submitted to Thames Valley Environmental Records Centre (TVERC) in order to obtain records of Local Wildlife Sites (LWS), and protected and notable species records within 2km radius of the Site. A 5 km radius from the site was requested for bats, due to the longer distances they commute and forage compared to other protected species, and the proximity of the Kennet and Avon Canal. Species records are indicated on **Maps 2a** and **2b** and discussed in the text below where relevant.

The closest LWS to the Site is Reading Cemetery LWS which is approximately 650m to the south-east. This is very unlikely to be affected by the proposed development. A part of the River Kennet / Kennet and Avon Canal has been designated as a LWS, the closest part of which is approximately 1.4km along the Canal from the Site. Designated in 2004 for its chalk river habitat (a Priority Habitat), it also supports Water Vole, Freshwater Crayfish, Beautiful Demoiselle and various Nationally Scarce species of water plant. The proposed development of the pub is very unlikely to affect this LWS.

The Site is adjacent to one of Reading's Green Networks, which are described as 'interconnected, natural green spaces', connecting with the urban area and linking with the urban fringe and wider countryside (see **Appendix 1**). As well as wildlife sites, Green Networks can include small areas of urban green such as green roofs, parks and landscaping in housing schemes. Green Networks also include potential green links. The Kennet and Avon Canal is part of a Green Network as is the path leading from Canal Way to the canal towpath, adjacent to the Site.

Habitats and Vegetation

The Site is described in detail below and a site plan with photographs is shown as **Map 3**.

The back garden of the pub is on a slope and is currently fairly overgrown with common ruderal species including Bramble, Nettle, Common Thistle, Ribwort Plantain, Creeping Buttercup, Hemp Agrimony, Herb Robert and Garlic Mustard. There are also garden plants such as Fatsia, Red Hot Pokers and Lemon Balm. The garden has accumulated various discarded pieces of furniture, fencing, household items and other debris, and piles of logs and brash. Areas of hardstanding or paving exist outside the pub building. A small patch of Japanese Knotweed exists next to the fence on the western side of the garden.

An overgrown flowerbed / green area at the side of the pub slopes down towards the river at the edge of the car park, next to steps leading to an outside seating area. This area is lined with woodchip and common species such as Barren Brome, Garlic Mustard, Dandelion, Poppy, Forget-me-not, Bramble and Dock.

There are several tables at the front of the pub on the hardstanding adjacent to the canal towpath.

No rare or scarce plant communities of potential conservation interest were identified according to descriptions given in Annex 1 of the Habitats Directive or from the Guidelines for Selecting SSSIs.

Recommendation

Japanese Knotweed is defined as an Invasive Non-native Plant and it is illegal to plant in the wild or cause to grow in the wild, or allow it to spread on to neighbouring land. This can include moving contaminated soil or plant cuttings. I recommend that a specialist Japanese Knotweed contractor is contacted for its removal. It can be treated with herbicides and removed, which can be a lengthy process (see <https://www.gov.uk/guidance/prevent-japanese-knotweed-from-spreading>). It needs to be done very carefully as it can spread easily when disposed of. All parts of the plant and any soil contaminated with parts of it are classified as 'Controlled Waste' and legally need to be removed and disposed of by a licence waste control operator.

It is also extremely difficult to be certain that all Japanese Knotweed material has been removed from the Site and therefore a barrier membrane may be necessary to ensure any remaining fragments cannot grow to penetrate and damage new buildings or areas of hard standing.

Potential for Protected or Valued Species

Bats

The data search from TVERC produced 373 records of bats of at least 10 species within a 5 km radius of the Site. The data is presented on **Map 2a** and summarised in the **Table 1** below. Many of the records are marked as 'confidential' and the information we received in terms of numbers and site specifics is limited.

Table 1: Summary of TVERC data for bat records within a 5km radius of the Site

Species	No. of records of this species	Minimum no. of records with count of more than 1 individual	Maximum count in any one record
Pipistrelle species (undefined)	89	26	400
Common Pipistrelle	29	9	53
Soprano Pipistrelle	39	10	10
Nathusius's Pipistrelle	3	?	1
Long-eared bat species (undefined)	9	0	1
Brown Long-eared Bat	39	5	3
Daubenton's bat	37	28	4
Noctule	27	5	11
Leisler's Bat	2	?	?
Nyctalus sp	2	?	?
Serotine	8	0	1
Natterer's	5	?	?
Myotis sp	29	7	104
Whiskered	1	?	?
Unidentified Bat	34	10	3

External and internal inspections of the building were completed with respect to its potential to support roosting bats following the methods set out under **Appendix 2**. Photos of the building are shown in **Appendix 3** to provide context and visual reference.

External Building Inspection

The Fishermans Arms is a brick built, two-storey building with single-storey elements and slate roofs. It has a with a conservatory and outdoor eating areas and is situated just south of the Kennet and Avon Canal in Reading in a residential area. The building is currently unused although a tenant resides in a flat on the second floor.

The property is constructed of brick and breeze block. The older part of the building fronts onto the river and is two storeys high with a square pitched roof covered in slates and has two chimneys. The single storey elements to the rear have either pitched or sloping roofs and these are believed to be covered in Eternit slates.

The slates and any ridge tiles appeared to be mainly tight fitting with only one gap noted on the main two storey building (above a chimney on the south aspect). Two gaps were noted between slates on one of the single storey buildings as well as a small area of lifted lead flashing however these gaps were at least 5m away from any areas of impact (see **Map 4**).

No signs of bats were seen on any of the external surfaces and few opportunities for bat roosting were noted.

Internal Building Inspection

Two lofts were entered within the building.

The loft above the main two storey building measures approximately 7 x 7m with a floor to apex height of approximately 3.5m. The slates are lined inside with sarking but no felt lining. There is insulation over most of the floor. No signs of bats were found and the apex was filled with a moderate level of cobwebs suggesting nothing had roosted in that area for some time.

The single storey element at the rear has a loft measuring approximately 3 x 15m. As this abuts a retaining wall on the east elevation, there is no pitch but a sloping roof. The loft void has two access hatches. One of these was accessed but due to the low height of the void (sloping from 0-1.5m) and being full of heavy articles it was not entered. Reasonable views could be obtained to a wall at the southern end. No signs of bats were evident. The small loft void at the far southern end was not accessible (this is the loft void above the area which will be demolished).

Based upon the lack of evidence and poor roosting opportunities for bats at The Fisherman's Cottage, the building is considered to have negligible value for bats and the presence of bat roost sites is not anticipated.

Foraging Habitat

The ZOI and area immediately surrounding the building is mainly hardstanding, and unmanaged garden shrubs and plants. These habitat types may support small numbers of foraging bats. Due to the light levels in the area produced by the pub and street lighting, any species which may use these habitats for foraging are expected to be common, light tolerant species. The Kennet and Avon Canal running along the northern edge of the Site, is likely to provide feeding opportunities for bats within the vicinity. The wider area is one of urban residential gardens.

Recommendations

In the unlikely event a bat was present when works were undertaken it would be at risk of killing or injury. Destruction of or damage to a roost could also occur. These outcomes could result in individual offences. As a standard precautionary approach therefore all works should stop immediately if a bat or signs of a bat roosting are found when slates or lead are stripped from the small area of roof being removed. EPR should be contacted and their advice received before proceeding with works in this case.

If works are delayed for more than 12 months, then an ecologist should review the site to ensure that no changes have occurred which could result in the creation of suitable roost sites.

The Fisherman's Cottage is considered to have negligible value for bats and the presence of bat roost sites is not expected. Proposals to demolish a small section of a single storey building will result in **no significant effects on bats** and can proceed as planned.

Reptiles

The sloping back garden of the pub is overgrown, with discarded furniture, pieces of fencing, log piles and other household items. These items were searched underneath for the presence of reptiles and none were found. Usually this type of habitat would be suitable for reptiles, however the Site is small and isolated from other potentially suitable reptile habitat, being surrounded by hardstanding and gardens and a park area, all of which are closely mown. The vegetation within the pub garden has also recently become overgrown, rather than having been there for a long time. I therefore conclude that it is highly unlikely that reptiles are present on Site.

The closest record of a reptile to the Site from TVERC was a Slow-worm approximately 600 m away to the west, the other side of the Canal (see **Map 2b**). The closest Grass Snake was also about 600m away, the other side of the Canal to the north.

Recommendation

No further work regarding reptiles is recommended.

Birds

Only House Sparrow was noted on site during the appraisal. Often found in urban gardens, it has declined in recent years to become Red-listed on the Birds of Conservation Concern (BoCC) list produced by RSPB and BTO (RSPB, 2015).

The Site contains various shrubs and structures covered in Ivy that are suitable for birds to use for nesting.

Records from TVERC show the presence of Swift, Swallow, House Martin, Kingfisher, Dunnock, Song Thrush and Starling within a 2km radius of the Site.

Recommendations

As all species of bird are protected whilst on the nest, any vegetation from the site that requires removal should be cut outside of the nesting season if possible to do so (i.e. prior to the beginning of March or after the end of August). Structures including those covered in Ivy should also be checked for nesting birds prior to removal. If it is not possible to remove vegetation outside of the bird nesting season, shrubs and structures should be inspected by a suitably experienced ecologist immediately prior to felling or removal. If any active nests are discovered, these will need to be left *in situ* until any young birds have fledged.

Invertebrates

There is a high number of records (172) of Stag Beetle from within 2km of the Site (see **Map 2b**). Stag Beetle is a Priority species under the NERC Act (2006) and requires dead wood for part of its life cycle. Dead wood on Site is of very recent origin and it is unlikely to be important for invertebrates and therefore I do not recommend any mitigation work although habitat could be enhanced for this species (see Enhancement Opportunities below).

Also recorded whilst on Site were 7- 8 individual Azure Damselflies, a common species of Damselfly often found in vegetation at the edges of waterbodies. No further work is needed for this species.

Ecological Issues: Constraints and Opportunities for Biodiversity Enhancement

Constraints

These are detailed in the relevant sections above and summarised in **Table 2** below.

Opportunities for Biodiversity Enhancement

In accordance with the aspirations of the NPPF and Local Planning Policy, planners are required to encourage enhancement and restoration of biodiversity through planning decisions. In line with policy on biodiversity gain, particularly with reference to Policy DM 17 on the enhancement of the Green Network, the site could be enhanced in a variety of ways. Bat boxes could be placed in non-illuminated areas, and the planting of night-flowering plants which attract insects would also provide value for

foraging individual bats. I would recommend that other native shrubs of local provenance containing nectar or fruit producing species are included within the planting scheme, to encourage invertebrates.

Ecologically beneficial features could be incorporated on to the building such as integral building roost features for bats, green walls or roofs. Bird boxes on trees within the new gardens, and House Sparrow terraces (communal nest boxes preferred by this species) on part of the new build would also help to increase the biodiversity of the developed site.

Partially buried logs placed in discreet areas within the Site could potentially be of benefit to Stag Beetle, of which there are nearby records (see **Map 2b**). Partially buried logs retain moisture and increase the numbers of visiting insects. Stag Beetles lay eggs near decaying wood, and the buried dead wood ensures a good food supply for their larvae.

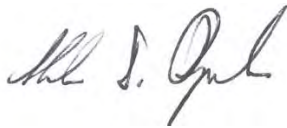
Table 2: Summary of Advice and Recommendations for Mitigation and Biodiversity Enhancement

Habitat / Species group	Required Further Survey or Mitigation	Timing
Bats	As a standard precautionary approach all works to stop immediately if a bat or signs of a bat roosting found during slate/lead stripping from roof being removed. EPR to be contacted and their advice received before proceeding with works in this case. If works delayed for over 12 months, Site to be reviewed by an ecologist to ensure no changes occurred resulting in creation of suitable roost sites.	All year
Nesting Birds	Any proposed vegetation removal to be carried outside of bird breeding season (before March or after end of August) OR vegetation checks to be made and, if found, nests left in situ until after birds have fledged.	Nesting Season Before 1 March or after end August
Japanese Knotweed	Avoid spread on to neighbouring land Specialist contractor for its removal Barrier membrane to prevent any incursion into new build	With new build
Habitat / Species group	Recommended Biodiversity Enhancement	Timing
Bats	Bat boxes or bat access tiles to roof of new buildings Planting night-flowering plants	With new build Landscaping
Breeding Birds	Set up nest boxes including House Sparrow terrace	With new build
Japanese Knotweed	Removal by specialist contractor	Immediate
Other Vegetation	New planting to contain native fruit / nectar producing shrubs. Wildflower planting, for invertebrates	Landscaping
Stag Beetle	Partially buried logs in discreet areas for feeding / nesting material	During landscaping

In summary, the Site currently supports features with limited biodiversity value and it does not currently enhance the value of the Green Corridor. However, with the implementation of the above recommendations the biodiversity value of the Site would be enhanced and bring additional value to the Green Corridor. With the above recommendations, I consider that the development will be able to proceed in accordance with the legislation and the planning policies listed above, particularly in relation to Policy DM 17 for enhancing Reading's Green Network.

I trust that the above provides you with the information that you require, however please do not hesitate to contact EPR if you require further information.

Yours sincerely,



Helen Demopoulos BSc (Hons) MRes MCIEEM
Ecologist, EPR Ltd

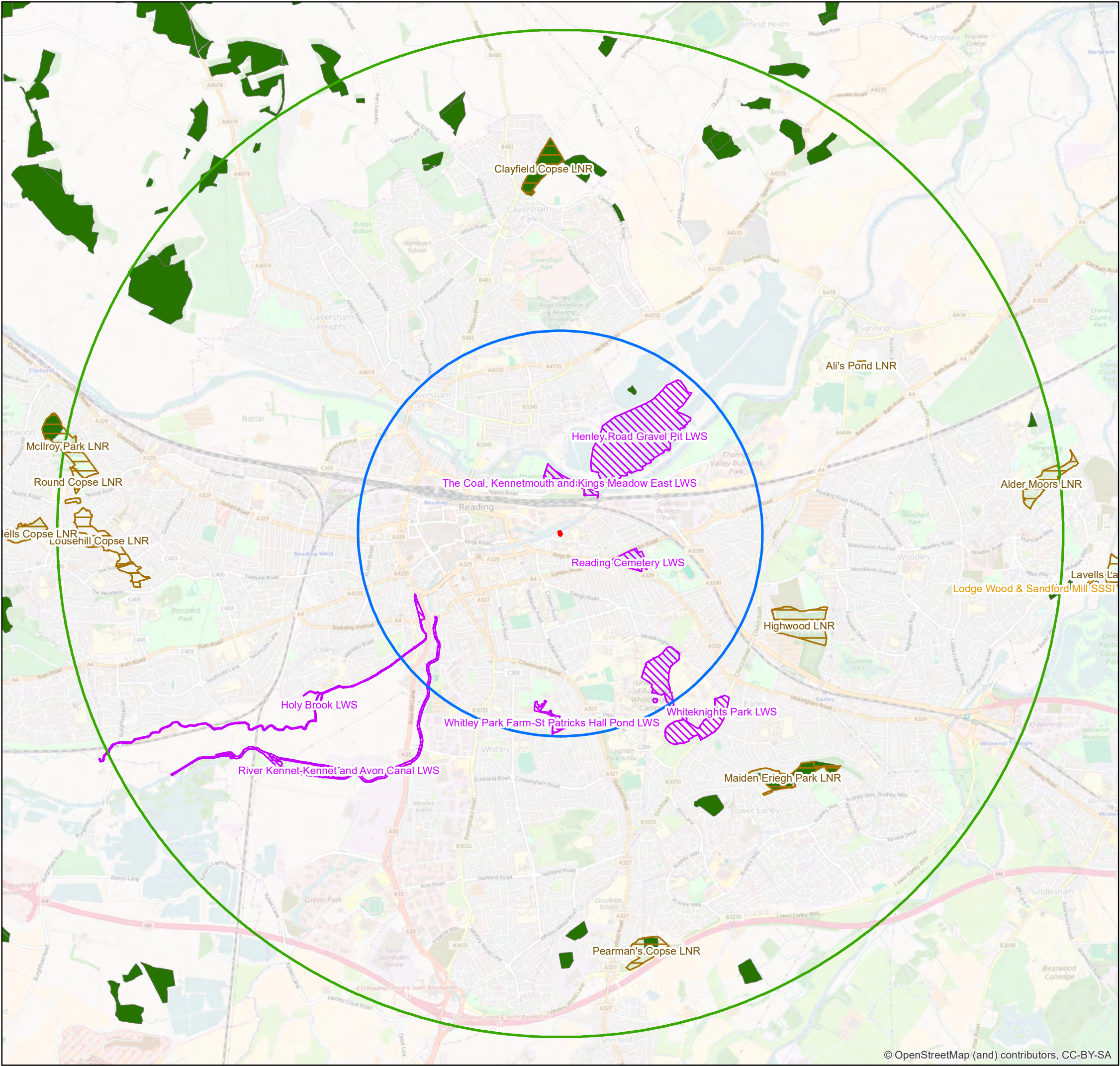
Approved for issue by:



Alison Hogan BSc (Hons) MSc MCIEEM
*Director and Principal Ecological Consultant,
EPR Ltd*

Maps and Appendices

Map 1	Site Location & Nature Designations
Map 2a	Bat Records from TVERC
Map 2b	Protected and Notable Species Records from TVERC
Map 3	Habitats and Features
Map 4	Plan of Building
Appendix 1	Relevant Nature Conservation Related Legislation & Planning Policy
Appendix 2	Appraisal Methodologies
Appendix 3	Photos from Bat Building Inspection



MAP 1 Site Location & Nature Conservation Designations

KEY

- Site boundary
- 2km linear distance from site boundary
- 5km linear distance from site boundary
- Local Nature Reserve (LNR)
- Local Wildlife Site (LWS)
- Site of Special Scientific Interest (SSSI)
- Ancient Woodland

SCALE: 1:37,500 at A3

0 500 1,000 1,500 2,000 Metres



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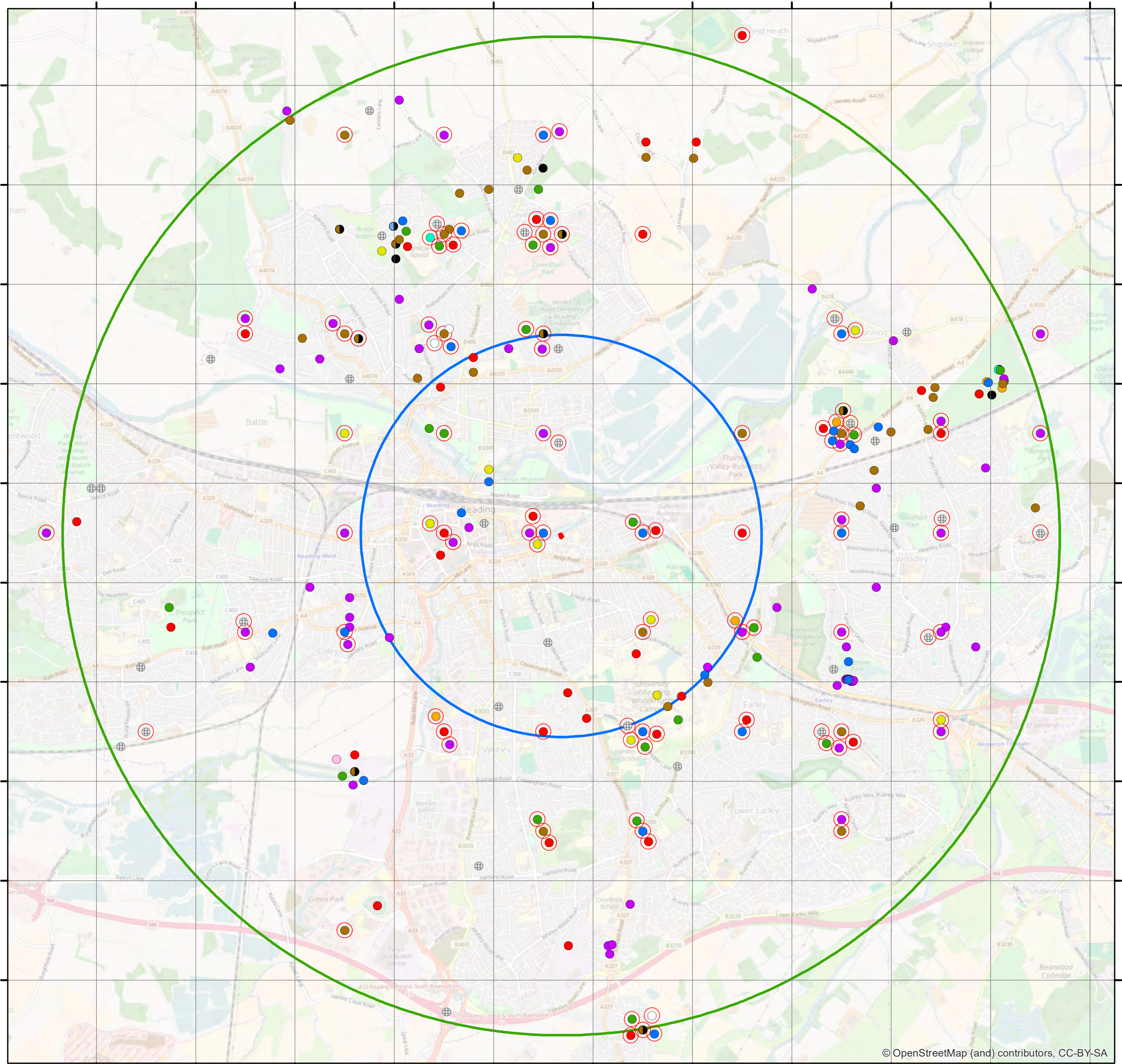
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MAP 2a Bat records within 5 km of the Site

KEY

- Site boundary
- 2km linear distance from site boundary
- 5km linear distance from site boundary
- Record accurate to 1km. Record is placed at centre of 1km grid square.
- Common Pipistrelle
- Soprano Pipistrelle
- Pipistrelle Bat species
- Brown Long-eared Bat
- Long-eared Bat species
- Daubenton's Bat
- Lesser Noctule
- Nathusius's Pipistrelle
- Natterer's Bat
- Noctule Bat
- Nyctalus Bat species
- Serotine
- Whiskered Bat
- Unidentified Bat

SCALE: 1:37,500 at A3

0 500 1,000 1,500 2,000 Metres



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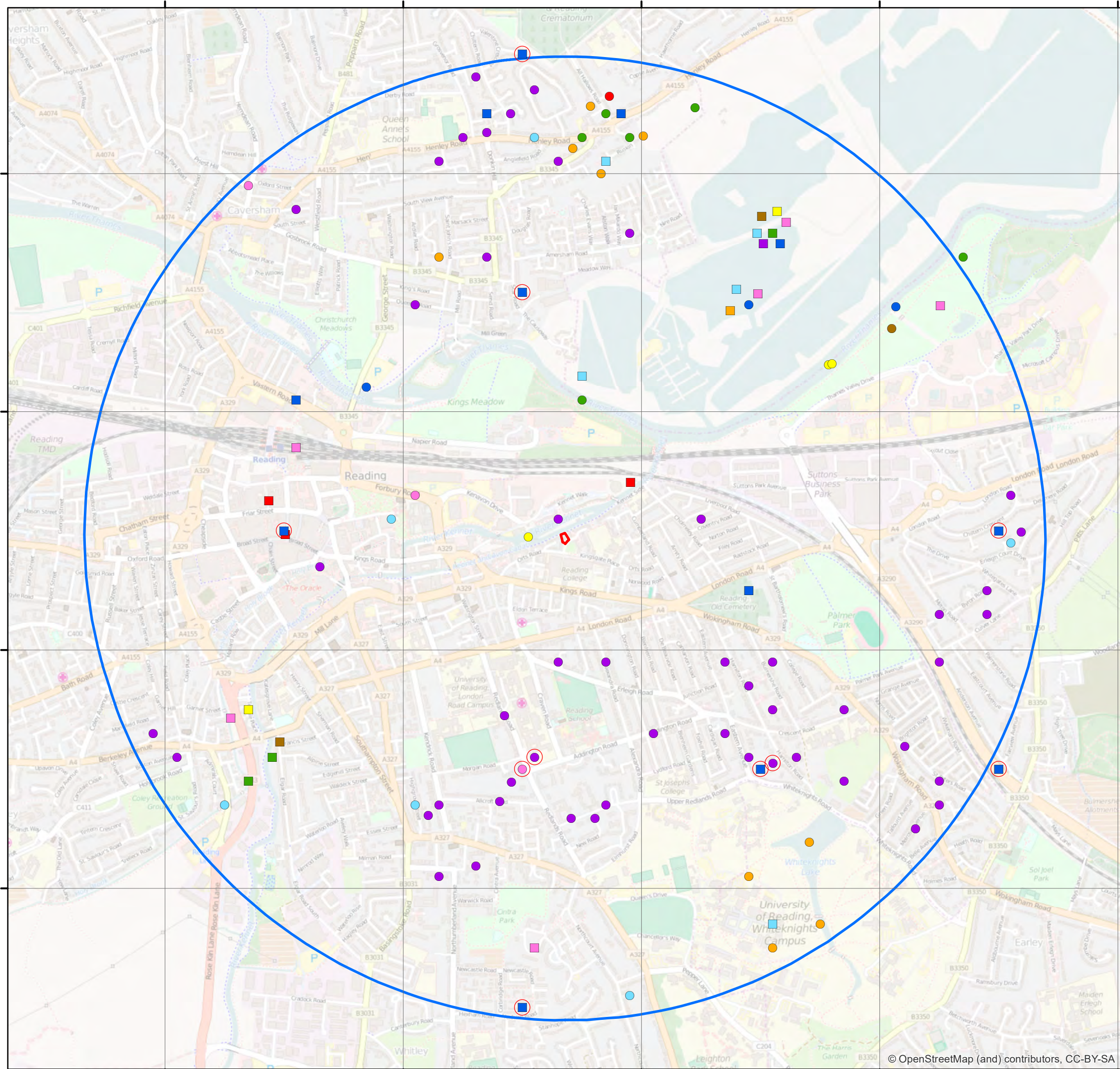
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MAP 2b Relevant Protected and Notable Species Records

KEY

- Site boundary
- 2km linear distance from site boundary
- Record accurate to 1km. Record is placed at centre of 1km grid square.

Birds

- Black Redstart
- Dunnock
- House Martin
- House Sparrow
- Kingfisher
- Song Thrush
- Starling
- Swallow
- Swift

Other

- Adder
- Common Toad
- European Eel
- Grass Snake
- Hedgehog
- Otter
- Slow-worm
- Stag Beetle
- Water Vole

SCALE: 1:15,750 at A3

0 250 500 750 1,000 Metres



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MAP 3 Habitats and Features

KEY

- Site boundary
- Ruderals and discarded rubbish etc
- Flowerbed with woodchip
- Buildings
- Hardstanding
- Japanese Knotweed
- Wall
- Wooden fence

SCALE: 1:200 at A3

0 2.5 5 7.5 10 Metres



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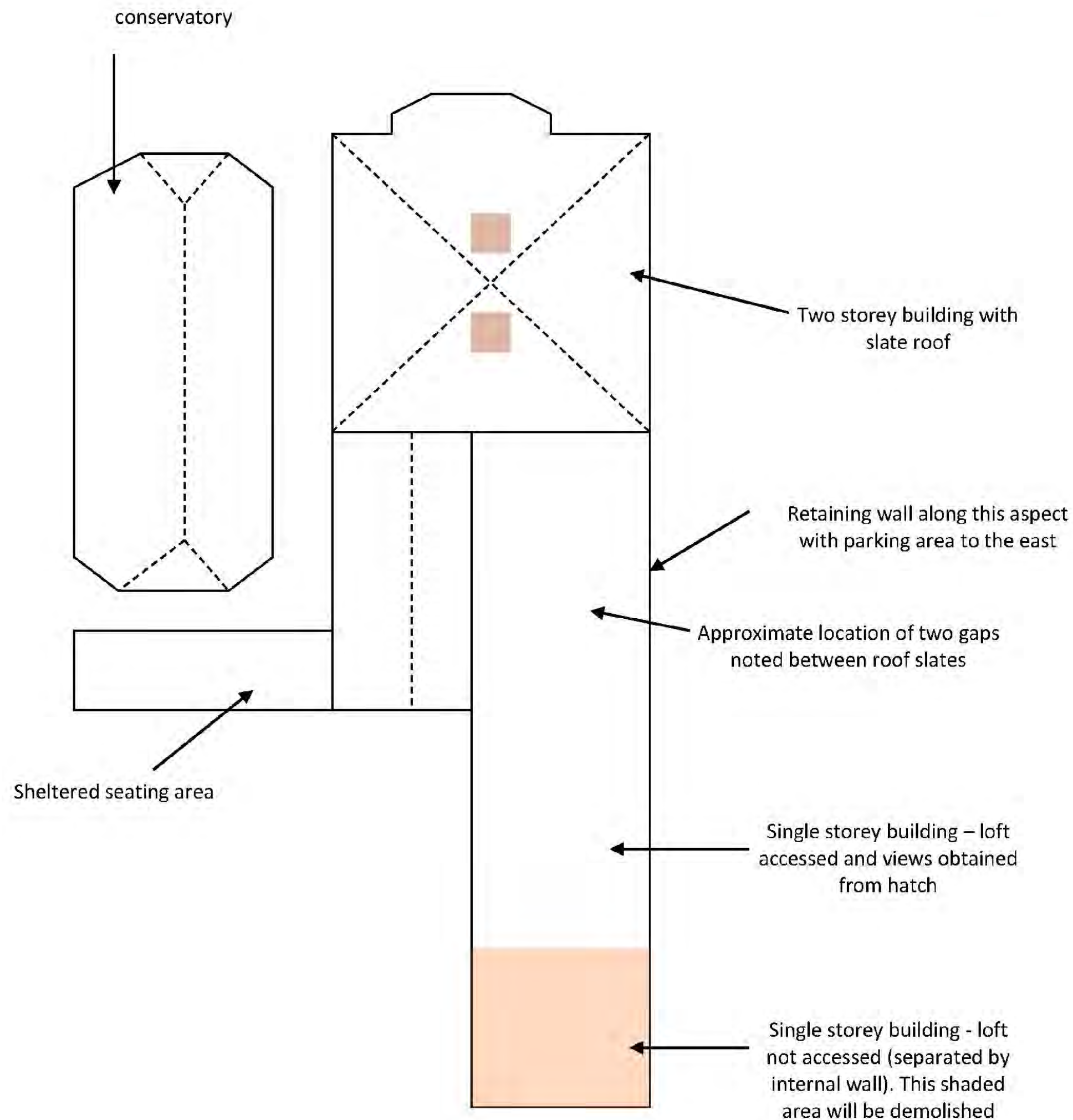
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Appendix 1

Legislation & Planning Policy Relating to Wildlife & Development in England

Contents

KEY WILDLIFE LEGISLATION	
Conservation of Habitats and Species Regulations 2010 (as amended)	
Wildlife & Countryside Act 1981 (as amended)	
Countryside & Rights of Way Act 2000	
The Natural Environment and Rural Communities Act 2006	
 PLANNING POLICY & GUIDANCE	
National Level	
National Planning Policy Framework (NPPF)	
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Invasive Non-Native Species	

This Appendix is intended to provide an overview of the main features of legislation and policy relating to nature conservation in England and the implications for development.

KEY WILDLIFE LEGISLATION

Conservation of Habitats and Species Regulations 2010 (as amended)

The Conservation of Habitats and Species Regulations 2010¹ (known as the “Habitats Regulations”) transpose Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (the European “Habitats Directive”) into UK legislation. These regulations consolidate all the various amendments made to the preceding “Conservation Regulations” 1994 for England and Wales.

The Habitats Regulations were amended by the Conservation of Habitats and Species (Amendment) Regulations 2012.²

The Habitats Regulations provide for the designation of both Special Protection Areas (SPAs) and Special Areas of Conservation (SACs) in the UK, which form part of the Natura 2000 network of protected areas across Europe. The Regulations also prohibit the deliberate capture, killing or disturbance of European Protected Species (EPS), which include *inter alia* Dormouse *Muscardinus avellanarius*, Great Crested Newt *Triturus cristatus*, Otter *Lutra lutra* and all native species of bat, and make it an offence to destroy or damage either the nesting or breeding sites of these species. The above actions can be made lawful through the granting of licenses after Natural England (the licensing authority in England) is satisfied that there are no satisfactory alternatives and that such actions will have no detrimental effect on wild populations of the EPS.

Further information on SPAs, SACs and European Protected Species (Licensing and Protected Species) is provided in the relevant sub-sections of this Appendix.

Wildlife & Countryside Act 1981 (as amended)

The Wildlife and Countryside Act 1981³ is the principal mechanism for the legislative protection of wildlife in Great Britain. Various amendments have occurred since the original enactment. Certain species of bird, animal and plant (including all of the European Protected Species listed above) are afforded protection under Schedules 1, 5 and 8 of the Act. Reference is made to the various Schedules and Parts of this Act (**Table A1.1**) in the section of this Appendix dealing with Legally Protected Species. The Act also contains measures for the protection of the countryside, National Parks, Sites of Special Scientific Interest (SSSIs) and public rights of way as well as preventing the establishment of invasive non-native species that may be detrimental to native wildlife.

¹ The Conservation of Habitats and Species Regulations 2010. Available from: <http://www.legislation.gov.uk/ukxi/2010/490/contents/made>

² The Conservation of Habitats and Species (Amendment) Regulations 2012. Available from: <http://www.legislation.gov.uk/ukxi/2012/1927/contents/made>

³ The Wildlife and Countryside Act 1981. Available from: <http://www.legislation.gov.uk/ukpga/1981/69/contents>

Table A1.1: Key Schedules of the Wildlife & Countryside Act 1981 (as amended)

Schedule	Protected Species
Schedule 1 Part 1	Protects listed birds through special penalties at all times
Schedule 1 Part 2	Protects listed birds through special penalties during the close season
Schedule 5 Section 9.1 (killing/injuring)	Protects listed animals from intentional killing or injuring
Schedule 5 Section 9.1 (taking)	Protects listed animals from taking
Schedule 5 Section 9.2	Protects listed animals from being possessed or controlled (live or dead)
Schedule 5 Section 9.4a	Protects listed animals from intentional damage or destruction to any structure or place used for shelter or protection
Schedule 5 Section 9.4b	Protects listed animals from intentional disturbance while occupying a structure or place used for shelter or protection
Schedule 5 Section 9.5a	Protects listed animals from being sold, offered for sale or being held or transported for sale either live or dead, whole or part
Schedule 5 Section 9.5b	Protects listed animals from being published or advertised as being for sale
Schedule 8	Protects listed plants from: intentional picking, uprooting or destruction (Section 13 1a); selling, offering for sale, possessing or transporting for the purpose of sale (live or dead, part or derivative) (Section 13 2a); advertising (any of these) for buying or selling (Section 13 2b).
Schedule 9	Prohibits the release of species listed in the Schedule into the wild.

Further information on legally protected species, designated wildlife sites and invasive non-native species is provided in the relevant sub-sections of this Appendix.

Countryside & Rights of Way Act 2000

Many of the provisions of the Countryside and Rights of Way (CRoW) Act 2000⁴ have been incorporated as amendments into the Wildlife and Countryside Act (1981) and some provisions have now been superseded by later legislation such as The Natural Environment and Rural Communities Act (2006).

The most relevant changes provided by the CRoW Act include the added protection given to SSSIs and other important sites for nature conservation. Importantly, under the Act it became a criminal offence to "recklessly disturb" Schedule 1 nesting birds and species protected under Schedule 5 of the Wildlife and Countryside Act. It also enabled heavier penalties on conviction of wildlife offences.

⁴ The Countryside and Rights of Way (CRoW) Act 2000. Available from: <http://www.legislation.gov.uk/ukpga/2000/37/contents>

The Natural Environment and Rural Communities Act 2006

The Natural Environment and Rural Communities (NERC) Act 2006⁵ was intended to raise the profile of biodiversity amongst all public authorities (including local authorities, and statutory undertakers) and to make biodiversity an integral part of policy and decision-making processes. The NERC Act also improved wildlife protection by amending the Wildlife and Countryside Act 1981.

Section 40 (S40) of the Act places a 'Biodiversity Duty' on all public bodies to have regard to the conservation of biodiversity when carrying out their normal functions. This includes giving consideration to the restoration and enhancement of species and habitats.

Section 41 (S41) of the Act requires the Secretary of State to publish a list of habitats and species which are of Principal Importance for the conservation of biodiversity in England⁶. Public authorities have a responsibility to give specific consideration to the S41 list when exercising their normal functions. For planning authorities, consideration for Species and Habitats of Principal Importance will be exercised through the planning and development control processes. Further information on species and habitats of Principal Importance is provided in the relevant sub-section of this Appendix.

PLANNING POLICY & GUIDANCE

Listed below is the main planning policy and government guidance that relates to the conservation of nature and development at all levels of government.

National Level

National Planning Policy Framework (NPPF)

The National Planning Policy Framework⁷ sets out the Government's planning policies for England and how these should be applied in local-level policy and decision making. The NPPF has a clear "presumption in favour of sustainable development" (paragraph 14), with a requirement to consider its economic, social and environmental dimensions. This does not apply where development requiring Appropriate Assessment under the Habitats Directive is being considered, planned or determined (paragraph 119).

Section 11 of the NPPF provides guidance on conserving and enhancing the natural environment through the planning system and replaces the preceding *Planning Policy Statement 9 (PPS9): Biodiversity and Geological Conservation*. It specifies that when determining planning applications, local planning authorities should aim to **conserve and enhance** biodiversity by applying the following principles:

- if significant harm resulting from a development cannot be avoided, adequately mitigated or (as a last resort) compensated for, then planning permission should be refused;

⁵ The Natural Environment and Rural Communities Act 2006. Available from: www.legislation.gov.uk/ukpga/2006/16/contents

⁶ The S40 list replaces the previously prepared list of habitats and species of Principal Importance for the conservation of biological diversity in England that was published under Section 74 (2) of the Countryside and Rights of Way Act 2000.

⁷ DCLG (2012). *National Planning Policy Framework*. Available from: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/6077/2116950.pdf

- proposed development that is likely to have an adverse effect on a Site of Special Scientific Interest (either individually or in combination with other developments) should normally be refused;
- planning permission should normally be refused for development resulting in the loss or deterioration of irreplaceable habitats, including ancient woodland and the loss of aged or veteran trees found outside ancient woodland;
- development proposals where the primary objective is to conserve and enhance biodiversity should be permitted;
- opportunities to incorporate biodiversity in and around developments should be encouraged.

In the case of SSSIs and irreplaceable habitats, exceptions *may* be made if it can be clearly demonstrated that the benefits of the development, at this particular site, outweigh the costs in terms of loss or adverse impacts.

Section 11 also specifies that listed or proposed Ramsar sites, potential European sites, and sites identified or required as compensatory measures for adverse effects on designated/listed or potential/proposed European and Ramsar sites should be given the same protection as designated European sites.

Government Circular 06/05: Biodiversity and Geological Conservation

The Government produced Circular 06/05⁸ to provide guidance on the application of the law to the conservation of nature. Although the document is in the process of being updated, Paragraphs 98 and 99 remain relevant as they and set out the following principles and obligations:

- The presence of protected species is a material consideration when determining a development proposal;
- Local authorities should consult with Natural England before granting permission, and consider imposing planning conditions or obligations to secure the long-term protection of the species;
- The presence or otherwise of protected species, and the extent to which they may be affected by the proposed development, must be established before permission is granted;
- Given the delay and cost that may be involved, developers should not be required to undertake surveys for protected species unless there is a reasonable likelihood of the species being present and affected by the development.

⁸ ODPM (2005). *Circular 06/05: Biodiversity and Geological Conservation - Statutory Obligations and Their Impact Within the Planning System*. Available from: <http://www.communities.gov.uk/publications/planningandbuilding/circularbiodiversity>

Good Practice & Standards

DCLG Planning Practice Guidance

Revised and updated Planning Practice Guidance (PPG)⁹ was launched by the Department for Communities and Local Government (DCLG) as a web-based tool in March 2014 to accompany the National Planning Policy Framework. The webpages are set out in an accessible Q&A format. The PPG consolidates and supersedes existing guidance on a range of planning-related topics, clarifies some of the statements made in the NPPF, and provides links to relevant legislation and other sources of advice.

The Guidance outlines a number of important principles in relation to nature conservation and biodiversity, including the need to integrate biodiversity into all stages of the planning process and to consider opportunities to enhance biodiversity and contribute to the Government's commitments and targets set out in *Biodiversity 2020: A strategy for England's wildlife and ecosystem services* (see [below](#)). It also lists a number of issues that should be considered in relation to biodiversity, including local biodiversity plans and strategies, Section 41 species and habitats, the need for ecological surveys, local ecological networks, and statutory obligations with regard to internationally and nationally designated sites – all of which are discussed throughout this Appendix.

The guidance also requires that “an ecological survey will be necessary in advance of a planning application if the type and location of development are such that the impact on biodiversity may be significant and existing information is lacking or inadequate” and recommends that “local planning authorities should only require ecological surveys where clearly justified, for example if they consider there is a reasonable likelihood of a protected species being present and affected by development.”

Other guidance

In addition to the Planning Practice Guidance, various other forms of guidance and standards are available to help manage biodiversity through the development process. Of particular note is *British Standard BS42020:2013 Biodiversity – Code of practice for planning and development*,¹⁰ published in August 2013, which replaces *Planning to Halt the Loss of Biodiversity (PAS 2010): Biodiversity conservation standards for planning in the United Kingdom*.

This document is designed to complement the National Planning Policy Framework and is aimed at organisations concerned with ecological issues throughout the planning process, including local authorities, developers, planners and ecological consultants. It sets out clear, step-by-step recommendations on how to incorporate biodiversity considerations at all stages of the planning process, with a focus on the provision of consistent, high quality and appropriate ecological information, effective decision making, and high standards of professional conduct and competence.

Regional Level

The South East Plan was partially revoked on 25 March 2013. Policy NRM6, which deals with the Thames Basin Heaths Special Protection Area, remains in place and is a material consideration in the determination of planning applications.

⁹ DCLG (2014). Planning Practice Guidance. Available from: <http://planningguidance.planningportal.gov.uk/>

¹⁰ The British Standards Institution (2013). BS42020:2013 Biodiversity – Code of practice for planning and development. Available from: <http://shop.bsigroup.com/ProductDetail/?pid=000000000030258704>

Local Level

Reading Borough Council is working on replacing their current Local Plan. This is currently being written and is expected to be available for consultation during 2017. The main planning policies are found within the current Local Plan which contains:

- *Core Strategy*, which sets out the overall planning strategy and important principles for development in Reading (adopted January 2008, altered January 2015);
- *Reading Central Area Action Plan with Proposals Maps and Appendices* – sets out planning principles for the centre of Reading up until 2026. It contains general policies and details on specific sites to develop and protect (adopted January 2009);
- *Sites and Detailed Policies* – sets out detailed policies to use when considering planning applications, and identifies sites for development and protection (adopted October 2012, altered January 2015); and
- *Proposals Map* – identifies designations from the above documents in map format (adopted October 2012).

Policies relevant to ecology and biodiversity are detailed below.

Core Strategy

Reading forms part of the wider south east region, which supports a 'diverse and high quality natural environment'. The vision for biodiversity and the natural environment in Reading is to maintain and enhance the quality of the Borough's landscapes and biodiversity features. Previously developed land containing significant biodiversity / geological interest will be retained and incorporated into development.

Policy CS36: Biodiversity and Geology

- a) 'Development should retain, protect and incorporate features of biodiversity or geological interest (including protected species and their habitats) found within the application site into their schemes'.

The policy states that where there is recognised biodiversity/geological value, development will not be permitted where there would be a direct or indirect adverse impact on the site, unless it can be demonstrated that:

- i) Development need outweighs the need to protect site value; and
 - ii) Appropriate compensation, impact minimisation, mitigation and compensation are provided.
- b) Local Nature Reserves and Wildlife Heritage Sites (WHS) will be safeguarded and where possible enhanced. Planning permission will not be granted for development that would adversely affect a designated nature reserve or WHS.
 - c) Development that would sever or threaten the integrity of an established wildlife link as shown on an adopted proposals map, will not be permitted. Where applicable, developments should be designed to protect, consolidate, extend and enhance the network of wildlife links and corridors in and adjoining the Borough, working with neighbouring authorities where appropriate.

The policy states that a balance needs to be made between allowing development and preserving the natural environment, and that while 'inappropriate forms of development will be resisted in accordance with PPS 9', there may be situations where alternative sites cannot be identified and development may need to proceed. In these circumstances, features should be retained,

incorporated and where possible, enhanced, and compensation and mitigation should be implemented where appropriate.

Reading Borough contains many sites that are important to the local and strategic context, which need to be protected, although it does not contain any nationally or internationally designated conservation sites. Protected species identified in the Reading Biodiversity Action Plan (BAP) – see below – should also be protected from any direct or indirect harm resulting from development.

The nature conservation value of LNRs and WHSs will also be maintained and managed so that they are protected against adverse effects of development.

Fragmentation and isolation of natural habitats should be avoided, with biodiversity networks protected from development and where possible, strengthened. Proposals which are likely to have an adverse impact on the function of wildlife corridors will therefore be refused permission.

Policy CS38: Trees, Hedges and Woodlands

'Individual trees, groups of trees, hedges and woodlands will be protected from damage or removal, and the Borough's vegetation cover will be extended'.

'The nature conservation value of woodlands will be protected and their quality enhanced, wherever possible. Enhancement and extension of woodlands will be achieved in conjunction with relevant development proposals, and may include measures such as new planting and management plans. Effective management of new woodland areas will be promoted'..

Currently trees are protected through Tree Preservation Orders (TPOs). Significant trees will be protected in conjunction with new developments.

The targets of this policy is to continue retaining trees, hedgerows and woodlands, and to increase woodland cover across the Borough.

Proposals Map

The interactive proposals map shows that Site is adjacent to existing and potential Green Links (Policy DM 17).

A Green Network can be described as a comprising 'interconnected, natural green spaces which connects the urban area and links it with the urban fringe and wider countryside. Networks include protected wildlife sites and nature reserves, and small areas of urban green, e.g. green roofs, pocket parks and landscaping in housing schemes, as well as natural areas in open spaces such as parks and public gardens.

Reading has important wildlife habitats including woodlands, grasslands and wetlands. Policy CS36 of the Core Strategy looks to protect designated areas, and this policy aims to link designated areas and protect and enhance existing and potential links. Reading's important wildlife habitats are the remnants of a once much wider and more connected green network that supported a greater diversity of species and allowed movement across the landscape. Climate change is likely to increase the need for linkages.

The extension and enhancement of the green network, through links and stepping stones (described as small patches of wildlife habitat within an otherwise hostile environment) can be achieved in several ways including:

- The enhancement of existing links;
- The enhancement of existing habitats;
- The provision of new links;
- The provision of new habitats e.g. green roofs, wildlife ponds, nesting sites for birds, and wildlife-friendly landscaping.

Routes shown as Green Links on the Proposals map either show an existing link or an indicative location for where additional Green Links could be located to provide connectivity for wildlife between ecologically important areas. In practice most Green Links shown on the map are a mixture of existing and potential links, i.e. there are existing aspects contributing to the Green Links network, and also significant potential for development to make a further contribution to improve this.

DM17: Green Network

The Green Network comprises Local Wildlife Sites, Local Nature Reserves, Areas of BAP Habitats, Biodiversity Opportunity Areas and designated open space, plus existing and potential Green Links.

This policy states that new development ‘shall demonstrate how the location and type of open space, landscaping and water features provided within a scheme have been arranged such that they maintain or link into the existing Green Network and contribute to its consolidation’. It also states that ‘all new development should maximise opportunities to create new assets and links into areas where opportunities are as yet unidentified on the Proposals Map’.

The policy aims to protect Reading’s existing Green Network and for it to be enhanced and extended. It will contribute to Objective 4 of the Core Strategy by maintaining and enhancing the natural environment. It should be noted that Green Links do not mean or imply public access.

BIODIVERSITY PLANS AND STRATEGIES

The NERC Act 2006 places a duty on local authorities to have due regard to biodiversity when exercising their normal functions, and the NPPF requires planning policies to “promote the preservation, restoration and re-creation of priority habitats, ecological networks and the protection and recovery of priority species populations, linked to national and local targets” (paragraph 117). These targets are set out in a range of biodiversity plans and strategies from the international through to the district level. An overview of the key biodiversity plans and strategies in the UK, and their implications for development, are set out below.

National level

The UK Biodiversity Action Plan 2007 (UK BAP) has been superseded by the *UK Post-2010 Biodiversity Framework*¹¹ and individual national biodiversity strategies. The UK framework sets out the overarching vision, strategic goals and priority activities for the UK’s work towards international biodiversity targets (known as the ‘Aichi Targets’), as agreed by 192 parties at the UN Convention

¹¹ JNCC and Defra (on behalf of the Four Countries’ Biodiversity Group) (2012). *The UK Post-2010 Biodiversity Framework*. Available from: http://jncc.defra.gov.uk/pdf/UK_Post2010_Bio-Fwork.pdf

on Biological Diversity in 2010. The Framework's overall vision is that "by 2050, biodiversity is valued, conserved, restored and wisely used, maintaining ecosystem services, sustaining a healthy planet and delivering benefits essential for all people."

In England, *Biodiversity 2020: A strategy for England's wildlife and ecosystem services*¹² is the national biodiversity strategy, which has the stated mission "(...)to halt overall biodiversity loss, support healthy well-functioning ecosystems and establish coherent ecological networks, with more and better places for nature for the benefit of wildlife and people." In order to focus activity and assess performance in achieving this mission, Biodiversity 2020 sets objectives relating to terrestrial and marine habitats and ecosystems, species and people. These include:

- Establishing coherent and resilient ecological networks, described as "a network of high quality sites, protected by buffer zones, and connected by wildlife corridors and smaller, but still wildlife-rich, 'stepping-stone' sites";
- Taking targeted action for the recovery of priority species whose conservation is not delivered through wider habitat-based and ecosystem measures ;
- Establishing Nature Improvement Areas and Marine Protected Areas;
- Bringing more SSSIs into favourable condition;
- Reducing environmental pressures by working with sectors such as agriculture, forestry, planning and development.

A network of 48 Local Nature Partnerships have been set up across England to help deliver these objectives.

Note that as these changes are still relatively new, some local plans and government guidance documents/circulars still refer to the UK BAP and 'UK BAP priority habitats and species'. These habitats and species are listed under Section 41 of the NERC Act, and **remain a material consideration in the planning process**. They are now described as 'Species/Habitats of Principal Importance', though they are also commonly referred to as 'Section 41 Species/Habitats' or simply 'Priority Species/Habitats'. Further guidance is given in the relevant sections below.

Local level

Despite the changes to national level biodiversity policy described above, county and district level Biodiversity Action Plans (BAPs) still apply. The BAP relevant to this area is the Berkshire BAP.

The Berkshire BAP

Berkshire's Nature Conservation Forum (BNCF) is a collection of organisations, groups and individuals working together to conserve, enhance and promote biodiversity in the County. 'A Framework for Biodiversity Action in Berkshire' was published in 1999 and revisions to the Berkshire BAP targets have followed. There are currently targets to maintain, restore and create the following BAP Priority Habitats:

¹² DEFRA (2011). *Biodiversity 2020: A strategy for England's wildlife and ecosystem services*. Available from: <https://www.gov.uk/government/publications/biodiversity-2020-a-strategy-for-england-s-wildlife-and-ecosystem-services>

- Calcareous grassland
- Lowland meadow
- Dry acid grassland
- Purple moor grass and rush pasture
- Lowland heathland
- Ponds
- Eutrophic standing water
- Mesotrophic lakes
- Fen
- Reedbed
- Rivers
- Lowland Mixed Deciduous woodland
- Lowland beech and yew woodland
- Wet woodland
- Lowland wood pasture and parkland
- Hedgerows
- Traditional orchards

Targets were not given for BAP Priority Species as efforts were focused on habitats and landscape scale projects. There are 29 Biodiversity Opportunity Areas (BOAs) in Berkshire which were formally agreed by BNCF in 2008. These BOAs included approximately 85% of Berkshire's BAP Priority Habitats in 2008, and represent areas in which habitat creation and restoration will have the most positive impact.

To enable efficient targeting of resources, BNCF are focussing efforts to deliver Berkshire BAP targets within the BOAs. BAP targets have been apportioned to each of the BOAs and are reviewed and updated on an ongoing basis. Most Berkshire BOAs are located within the wider countryside, so in urban areas BNCF will work towards biodiversity enhancements through Green Infrastructure.

Biodiversity Strategy 2014-2020

In 2014 Berkshire Local Nature Partnership (BLNP) published *The Natural Environment in Berkshire – Biodiversity Strategy 2014 - 2020* which builds on and replaces the Berkshire BAP described above. The aims of this are built on the England Biodiversity Strategy. Relevant national outcomes are:

Outcome 1 – Habitats and Ecosystems on Land

- A. Better wildlife habitats with 90% of priority habitats in favourable / recovering condition, at least 50% of SSSIs in favourable condition, while maintaining at least 5% in favourable / recovering condition.
- B. More, bigger and less fragmented areas for wildlife, with no net loss of priority habitat and an increase in overall extent of priority habitats.
- C. At least 17% of land and inland water conserved through effective, integrated and joined up approaches to safeguarding biodiversity and ecosystem services
- D. Restoring at least 15% of degraded ecosystems as a contribution to climate change mitigation and adaption.

Outcome 3 – Species

An overall improvement of the status of wildlife, preventing further human-induced local extinctions.

Relevant Berkshire objectives to forward these outcomes include:

Objectives for Habitats

- 1.1 Devise a method to record the condition of Berkshire's priority habitat outside of designated sites
- 1.2 Record & report on the condition of Berkshire's Priority habitat outside of designated sites on an annual basis.
- 1.4 Increase habitat connectivity by encouraging targeted habitat creation within the BOAs
- 1.7 To ensure the Local Wildlife System is maintained and improved upon.
- 1.8 Promote the use of BOAs when guiding nature conservation effort and spending.

Objectives for Species

- 2.1 Maintain species records and encourage local recording
- 2.2 Identify key species for Berkshire where specific objectives would assist with species objective plans
- 2.3 Promote implementation of the Invasive Non-Native Species Framework strategy.

Delivering Biodiversity Opportunities

Where practicable, opportunities should also be sought to achieve a **net gain** (i.e. enhancement) of biodiversity. Support for biodiversity enhancement is provided in the Public Authority 'Biodiversity Duty' under the NERC Act 2006 and in the key principles of the NPPF, as described above.

Enhancement projects may not just benefit biodiversity. There are many functional benefits to be won from strategically planned green infrastructure projects such as semi-natural urban green spaces, sustainable urban drainage schemes (SUDS) and green roofs. Planning conditions and obligations are increasingly being used to mandate biodiversity enhancement on or off a development site, either through design or through financial support.

Many ideas for incorporating ecological enhancement into planning and development can be found in the biodiversity action plans and/or strategies relevant to the policy or development area, or through initiatives led by the Local Nature Partnership. At the national level, twelve Nature Improvement Areas were set up in 2012 in order to deliver landscape-scale conservation objectives, and many regions and counties have also identified and mapped 'Biodiversity Opportunity Areas', 'Nature Maps' or 'Strategic Nature Areas' where conservation action such as habitat creation and restoration will deliver the greatest benefits for biodiversity.

Other sources of ideas and opportunities include schemes led by conservation NGOs, such as the Wildlife Trusts' 'Living Landscapes' and the RSPB's 'Futurescapes', which are working in partnership with landowners and local communities across the country to restore ecosystems and ecological networks.

SITES DESIGNATED FOR THE CONSERVATION OF NATURE

There is a hierarchy of nature conservation sites which is based on the level of statutory protection and the administrative level of importance. Other features of nature conservation interest outside designated sites may also be a material consideration in the determination of planning applications.

Statutory Sites

Internationally Important Sites

Ramsar Sites, Special Areas of Conservation (SAC) and Special Protection Areas (SPA)

The Conservation of Habitats and Species Regulations 2010 (as amended) provide the primary legal basis for the protection of Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) in Great Britain. Ramsar sites are, as a matter of national planning policy, subject to the same strict protection. Any plan or project considered likely to affect a SAC, SPA or Ramsar site must be subject to an assessment, as set out under Regulation 61, and Regulation 102 in respect of Land Use Plans.

Ramsar sites are wetlands of international importance. The majority of terrestrial Ramsar sites in England are also notified as SPAs and/or Sites of Special Scientific Interest (SSSIs).

SACs are sites which support internationally important habitats and/or species listed as being of Community Importance in the Annexes of the EU Habitats Directive 1992. SPAs are sites which support internationally important numbers of bird species listed as being of Community Importance in the Annexes of the EU Birds Directive 1979. Together, SACs and SPAs make up the Natura 2000 network of Sites of Community Importance throughout Europe.

Development Control

Development proposals or damaging activities which may affect a European or international site will be subject to rigorous examination by local planning authorities (or other 'competent authority'), through a process commonly referred to as 'Habitats Regulations Assessment'. The onus is on the developer to provide the necessary information to inform this process.

Under the Conservation of Habitats and Species Regulations 2010 (as amended), the competent authority must determine in the first instance whether a proposed development is likely to have a significant effect on the European or Ramsar site, either alone or in combination with other plans and projects.

If a likely significant effect cannot be precluded on the basis of objective information, the competent authority must undertake an 'Appropriate Assessment' to fully assess these implications against the site's conservation objectives. A precautionary approach must be taken with respect to determining whether or not there would be an impact, and the appropriate nature conservation body (in most cases Natural England) should be consulted. Except in certain exceptional circumstances prescribed by the Regulations where there are imperative reasons of overriding public interest for allowing a development to proceed, the competent authority may not undertake or authorise the plan or project until they have established (based on the conclusions of the Appropriate Assessment) that the activity will not adversely affect the integrity of the European or Ramsar site. This should be the case where no reasonable scientific doubt remains as to the absence of such effects.

Nationally Important Sites

Sites of Special Scientific Interest (SSSI)

The Wildlife and Countryside Act 1981 (as amended) and the CROW Act 2000 provide the primary legal basis for the protection of Sites of Special Scientific Interest (SSSI). These sites have been designated to capture the best examples of England's flora, fauna, geological or physiographical diversity.

Development Control

A development proposal that is likely to affect nationally important sites will be subject to special scrutiny by the local authority and Natural England. Certain operations may be permitted. Any potentially damaging operations that could have an adverse effect directly or indirectly on the special interest of the site will not be permitted unless the reasons for the development clearly outweigh the nature conservation and/or geological value of the site itself and the national policy to safeguard such sites.

Regionally & Locally Important Sites

Local Nature Reserves

Local Nature Reserves are declared by local authorities under the National Parks and Access to the Countryside Act 1949 as living green spaces in towns, cities, villages and countryside. They provide opportunities for research and education, or for simply enjoying and having contact with nature. LNRs are usually protected from development through local planning documents which may be supplemented by local by-laws.

Non-Statutory Sites

Local Wildlife Sites

Local authorities may designate non-statutory sites for their nature conservation value based on important, distinctive and threatened habitats and species within a national, regional and local context. These sites are not legally protected but are given some protection through the planning system. These sites may be declared as 'County Wildlife Sites', 'Sites of Importance for Nature Conservation' (SINCs), or 'Sites of Nature Conservation Importance' (SNCIs) in local and structure plans. Non-statutory sites are a material consideration when planning applications are being determined. The precise amount of weight to be attached, however, will take into account the position of the site in the hierarchy of sites as set out above. Further information is typically provided in local level planning policy.

Nature Conservation in Areas Outside Designated Sites

Various other features exist outside designated sites that are important for the conservation of nature and which are a material consideration in the planning system.

Habitats of Principal Importance in England

Fifty-six habitat types have been identified as Habitats of Principal Importance in England for the conservation of biodiversity under Section 41 of the NERC Act 2006¹³. The NPPF, Government Circular 06/05, good practice guidance and the NERC Act place a clear responsibility on planning authorities to further the conservation of these habitats. They can be a material consideration in planning decisions, and so developers are advised to take reasonable measures to avoid or mitigate impacts to prevent their net loss and to enhance them where possible. Additional guidance to developers is typically provided in local level planning policy.

Networks of Natural Habitats

Networks of natural habitats link sites of biodiversity importance and provide routes or stepping stones for the migration, dispersal and genetic exchange of species in the wider environment. Examples include rivers with their banks, traditional field boundary systems (such as hedgerows), ponds and small woods. Local planning authorities are encouraged through the NPPF to maintain networks by avoiding or repairing the fragmentation and isolation of natural habitats through planning, policies and development control.

Hedgerows

Hedgerows can act as wildlife corridors that are essential for migration, dispersal and genetic exchange of wild species. Hedgerows that qualify as a Habitat of Principal importance under S41 of the NERC Act 2006 are a material consideration in the planning system.

Under the Hedgerow Regulations 1997, it is an offence to remove a hedgerow without submitting a notice to the Local Planning Authority and waiting for their decision. The Regulations are aimed at countryside hedges and do not apply to hedges around private dwellings or where planning permission has been granted for a project that includes hedge removal. Hedgerows that satisfy wildlife, archaeological, historical or landscape criteria qualify as 'important' under the Regulations. If a hedgerow is not important, the Local Planning Authority may not prevent its removal; however, Local Planning Authorities are required under the Regulations to protect and retain Important hedgerows unless satisfied that the circumstances justify its removal.

Trees & Woodlands

Tree Preservation Orders

Tree Preservation Orders (TPOs) may be declared under the Town and Country Planning Act 1990 and the Town and Country Planning (Trees) Regulations 1999 to protect individual trees and woodlands from development and cutting. TPOs are designed to preserve amenity or landscape conservation. The importance of trees as wildlife habitat may be taken into account, but alone is not sufficient to warrant a TPO. For this reason, TPOs do not fit comfortably under the remit of nature

¹³ The S41 List of Species & Habitats of Principal Importance in England is available from:
<http://www.naturalengland.org.uk/ourwork/conservation/biodiversity/protectandmanage/habsandspeciesimportance.aspx>

conservation. Further guidance on TPOs in relation to development is available from the Department for Communities and Local Government¹⁴.

Ancient Woodland & Veteran Trees

Ancient woods are areas continuously wooded for at least 400 years. Even an ancient wood which has been replanted may still have remnants of ancient woodland wildlife and historical features and has potential to be restored. Ancient woodland is not a statutory designation and does not provide legal protection, but local authorities are advised under the NPPF and NPPG not to grant planning permission for any development that would result in the loss or deterioration of ancient woodland or veteran trees unless the need for, and benefits of, the development outweigh the loss. Local Planning Authorities must take into account Natural England and the Forestry Commission's *Standing Advice for Ancient Woodland and Veteran Trees*.¹⁵

Surface & Ground Waters

Surface waters (including flowing and standing water) and ground water can directly and indirectly impact upon the conservation of nature. Careful planning and the application of the Environment Agency's *Pollution Prevention Guidelines*¹⁶ can help reduce the risk of construction and maintenance work causing pollution to surface and ground waters. Some activities with the potential to impact watercourses or groundwater may require consent under the Water Resources Act 1991.

SPECIES PROTECTION

Legally Protected Species

The species listed in the following subsections are protected by law in England. It is essential to determine the presence or likely absence of legally protected species and the extent to which they may be affected by proposed development. This can best be achieved by undertaking surveys early in the planning process. Mitigation measures are required to minimise disturbance to protected species and may necessitate a licence. Natural England offers further detailed advice which can be applied to planning applications that affect protected species¹⁷.

Mammals

All wild mammals are protected against cruelty under the Wild Mammals (Protection) Act 1996, which makes it an offence to mutilate, kick, beat, nail or otherwise impale, stab, burn, stone, crush, drown, drag or asphyxiate any wild mammal with intent to inflict unnecessary suffering.

The following species of mammal are protected further by law in England:

¹⁴ Office of the Deputy Prime Minister (2000). Tree Preservation Orders: A Guide to the Law and Good Practice. Available from: <http://www.communities.gov.uk/publications/planningandbuilding/tposguide>

¹⁵ Natural England and the Forestry Commission (2014). Standing Advice for Ancient Woodland and Veteran Trees. Available from: http://www.naturalengland.org.uk/Images/ancient-woodland-standing-advice_tcm6-37627.pdf

¹⁶ Environment Agency (2007). Pollution Prevention Guidelines Works and Maintenance In or Near Water: PPG5. Available from: <http://www.environment-agency.gov.uk/netregs/links/107968.aspx>

¹⁷ Natural England. 2011. *Standing Advice for Protected Species*. Available from: <http://www.naturalengland.org.uk/ourwork/planningtransportlocalgov/spatialplanning/standingadvice/default.aspx>

Bats

There are 18 species of bat in the UK, seven of which are Species of Principal Importance in England. All bats and bat roosts are protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). Bats are also a European Protected Species protected under the Habitat Regulations 2010 (as amended). It is an offence to:

- Intentionally or deliberately kill, injure or capture bats;
- Intentionally, deliberately or recklessly disturb bats in such a way as to be likely to significantly affect the ability of any significant group of bats to survive, breed, or rear or nurture their young or the local distribution of or abundance of a species of bat;
- Intentionally, or recklessly damage, destroy or obstruct any place used for shelter or protection (i.e. bat roosts) or intentionally or recklessly disturb a bat whilst it is occupying such a place;
- Damage or destroy a breeding site or resting place of a bat; and
- Possess, sell or transport a bat, or anything derived from it.

Development proposals affecting bats or their roosts require a European Protected Species licence from Natural England.

Birds

49 species of bird are listed as Species of Principal Importance in England. All birds are protected under the Wildlife and Countryside Act 1981 (as amended), making it an offence, with certain exceptions (e.g. game birds), to intentionally kill, injure or take any wild bird and to take, damage or destroy their nests or eggs.

Schedule 1 of the Wildlife and Countryside Act 1981 affords extra protection for a number of species and applies harsher penalties for offences. Any intentional or reckless disturbance of a Schedule 1 bird, whilst it is nesting or rearing dependant young, constitutes an offence.

Reptiles

All four of the widespread British species of reptile, including the Common Lizard *Lacerta vivipara*, Slow-Worm *Anguis fragilis*, Grass Snake *Natrix natrix* and Adder *Vipera berus*, are Species of Principal Importance in England. They are protected under Schedule 5 (Sections 9.1, 9.5a, 9.5b) of the Wildlife & Countryside Act 1981 (as amended) from intentional killing, injury and trade. The habitat of the four widespread reptiles is not legally protected; however the replacement of habitat lost through development may be required through the planning system. Mitigation for these species is not subject to licensing by Natural England but should nonetheless be planned to minimise disturbance.

The Smooth Snake *Coronella austriaca* and the Sand Lizard *Lacerta agilis* are the rarest reptile species in Britain. In addition to the protection that is afforded to the widespread species of reptile listed above, these species are protected further under Schedule 5 (Sections 9.4b and 9.4c) of the Wildlife and Countryside Act 1981 (as amended). They are also European Protected Species protected under the Habitat Regulations 2010 (as amended). This legislation makes it an offence to:

- Intentionally or deliberately kill, injure or capture Sand Lizards or Smooth Snakes;
- Intentionally, deliberately or recklessly disturb Sand Lizards or Smooth Snakes in such a way as to be likely to significantly affect the ability of any significant group of Sand Lizards or Smooth Snakes to survive, breed, or rear or nurture their young or the local distribution or abundance of either species;
- Intentionally or recklessly damage, destroy or obstruct any place used by Sand Lizards or Smooth Snakes for shelter or protection, or intentionally or recklessly disturb a Sand Lizard or Smooth Snake whilst it is occupying such a place;
- Damage or destroy a breeding site or resting place of a Sand Lizard or Smooth Snake;
- Keep, sell, or exchange Sand Lizards or Smooth Snakes or their eggs; and
- Deliberately take or destroy their eggs

Development proposals affecting Smooth Snake or Sand Lizard require a European Protected Species licence from Natural England.

Licences for Development

Licences are required to permit activities prohibited under wildlife legislation, namely the disturbance or capture of protected species or damage to their habitats. Natural England is the licensing authority in England. Licences are only issued for certain purposes, which are set out in the law, and only where there is a valid justification. The licences most relevant to development scenarios are discussed below.

Conservation Licences

In the context of development, conservation licences are normally only relevant to mitigation involving the capture of Water Voles or White-Clawed Crayfish. Conservation licences are granted to permit the trapping and translocation of these species on the condition that the development activity is properly planned and executed and thereby contributes to the conservation of the population of the species.

European Protected Species Licences

A European Protected Species Licence is required from Natural England to undertake any development that is reasonably likely to result in an offence in respect of a European Protected Species protected under Schedule 2 of the Habitat Regulations 2010 (as amended); including *inter alia* all species of bats, Dormouse, Great Crested Newt and Otter. Natural England must be satisfied that the following three tests are satisfied before it will issue a licence covering a European Protected Species:

1. The proposal is necessary to preserve public health or public safety, or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment;
2. There is no satisfactory alternative; and

3. The proposal will have no detrimental effect to the maintenance of the population of the species concerned at a favourable conservation status in their natural range.

Species of Principal Importance in England

943 species have been identified as being of Principal Importance in England for the conservation of biodiversity under Section 41 (S41) of the NERC Act 2006. This list of species includes species found in England which have been identified as requiring action under the now superseded UK Biodiversity Action Plan 2007 (plus the Hen Harrier¹⁸). While these species may not be legally protected, there is a clear responsibility on planning authorities to further their conservation. These species can be a material consideration in development control decisions and so developers are advised to take reasonable measures to avoid or mitigate impacts to prevent the net loss of these species and habitats and to enhance them where possible. Additional guidance to developers is typically provided in level planning policies.

Invasive Non-Native Species

There are a number of species not ordinarily resident to the UK. Those which pose a significant threat to our ecology and economy are listed under Schedule 9 of the Wildlife and Countryside Act 1981 (as amended). For an offence to be committed, a species must be released or allowed to escape into the wild. For example, if a plant listed on Schedule 9 is not adequately controlled by a land owner, once they are aware that it is present, and the species is allowed to spread into adjoining areas, then this could constitute an offence.

Species Control Orders

A new schedule 9A was inserted into the Wildlife and Countryside Act 1981 (as amended) by Sections 23 to 25 of the Infrastructure Act 2015. This gives environmental authorities (in England the Secretary of State, Environment Agency, Natural England and the Forestry Commission) the power to offer 'species control agreements' to landowners in respect of invasive and/or non-native species, such as Japanese Knotweed. If the landowner does not comply with a species control agreement, or refuses to enter into one, the environmental authority may issue a 'species control order', requiring the owner to eradicate or control the species, or to allow the environmental authority access to carry out these operations themselves.

If the owner does not comply with the species control order, the maximum penalty if convicted is a fine of up to £40,000 and/or imprisonment for up to 51 weeks. The environmental authority can also recover costs for carrying out the necessary work themselves.

¹⁸ The Hen Harrier has also been included on the List because without continued conservation action it is unlikely that the Hen Harrier population will increase from its current very low levels in England.

Appendix 2

Appraisal Methodologies

The ecological appraisal has been completed following guidance in The Chartered Institute of Ecology and Environmental Management (CIEEM) *Guidelines for the Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater and Coastal, 2nd Edition* (January 2016).

DESKTOP STUDY METHODOLOGY

A desktop study was carried out in order to gather and refer to existing biodiversity and contextual information with respect to the zone of influence and the wider area. This involved investigation of internet resources, including the Multi-agency Geographic Information for the Countryside (MAGIC) and National Biodiversity Network (NBN), Natural England's Nature on the Map, aerial photos, current Ordnance Survey maps and the Old Maps online database. Reference was also made to local planning strategies, and strategies and initiatives relating to biodiversity.

Thames Valley Environmental Records Centre (TVERC) was commissioned to provide data on statutory and non-statutory designated wildlife sites within 2 km along with existing biological records of protected and/or notable species within 2 km (apart from bats where the requested radius was 5km).

FIELDWORK METHODOLOGY

The field survey was completed by Helen Demopoulos and Colleen Hope (a licenced bat ecologist, licence no. (levels 1-4) CL20 2015-15456-CLS-CLS) of EPR Ltd on 13 June 2016. The Site was inspected in detail, recording habitats and features of potential value to wildlife and an evidence of (or potential for) protected or notable species or habitats. The survey methods used are described below.

Land Use, Habitat Types, Vegetation Communities and Flora

Within the study area the land use, habitat types and landscape features (such as hedgerows and veteran trees) were described and mapped. For each main habitat type the dominant vegetation communities were recorded, along with any notable or indicator plant species, (including Japanese Knotweed where present). A preliminary evaluation of the structure, quality and likely management of each habitat or feature was also carried out.

The survey method used to record this information was based on Phase 1 Habitat Survey methodology (JNCC 2010).

Badgers

Consideration was given to the presence of habitat potentially suitable for supporting Badgers, including woodland and grassland. Potential evidence of the presence of Badgers was looked out for and noted, including earthworks that might be Badger setts, and signs such as dung pits, mammal pathways through ground vegetation and under fences, and hairs on fences.

Bats

Bats use buildings and trees for roosting and breeding and a detailed assessment of the potential for these features to support bats was undertaken during the survey in accordance with best practice guidance, including that set out within the Bat Conservation Trust's *Bat Surveys-Good Practice Guidelines (2016)*. A summary of the methodology used to assess bat roosting potential is given below. *Internal and External Building Inspection for Bats*

The building was inspected externally with binoculars and a Clulite torch, where required. Internal areas of the building (voids) were inspected, where accessible and bats and evidence of bats was looked for, including bats themselves, dead bat carcasses, bat droppings, urine staining, feeding remains, scratching and wear around access points. Where necessary endoscopes were used to investigate small spaces.

Potential roosting areas may include gaps beneath roof or hanging tiles, in soffits, or beneath the end of ridge tiles, but also under the edge of felt on flat roofs. Features considered during the external inspection, to assess the potential of a building to support a bat roost, are listed below in **Table 2a**:

Table 2a *External features*¹⁹

Lower Potential	Higher Potential
Modern construction with few gaps Prefabricated with steel/ sheet materials Flat roof Roof shaded from sun	Pre/ early 20 th Century construction Pitched roof Tiled roof with natural gaps Hanging tiles or wooden cladding Cellar (hibernation potential) Bat evidence (droppings/staining etc)

Preliminary evidence was obtained through noting any staining around potential roost entrances, and looking for bat droppings, for example on window sills. A preliminary evaluation was also undertaken of potential bat foraging habitat in the area, including woodland, pasture, hedges and watercourses.

The internal survey noted potential roosting opportunities for bats which can be factored into assessing the potential of the building to support roosting bats and the likely value of any such roost. If bats/ bat droppings are found, the building is a confirmed roost and it will be necessary to give the building a potential value to bats.

In addition to the features described above, the immediate surroundings of a building, which will influence the potential of a building to support roosting bats, were investigated. **Table 2b** below describes location factors that may affect a building's potential to support roosting bats.

Table 2b *Location factors*²⁰

Lower Potential	Higher Potential
Urban setting with few foraging areas Industrial sites Increased lighting	Rural Setting Close to woodland and/ or water Surrounded by good connective habitat

Assigning potential and value

¹⁹ See Bat Mitigation Guidelines 2004 (Table 5.1) for further examples.

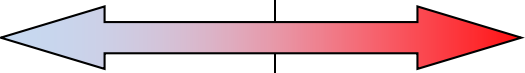
²⁰ See Bat Mitigation Guidelines 2004 for further examples.

Information from the external and internal inspection surveys was used to categorise a building as having negligible, low, medium or high potential to support roosting bats, and the likely value of any such roost. This was then used to contribute to an assessment of the overall potential value of the development site or survey site for bats.

Foraging habitat and commuting corridors

In addition to the various features described above, other features that may be of value to bats include foraging habitat and commuting corridors. These were noted during the Ecological Appraisal. **Table 2e** outlines foraging and commuting features and their potential value to bats.

Table 2e: Foraging and commuting habitat features and their potential to be of value to bats

Lower potential to be of value		Higher potential to be of value
Arable field Hardstanding Defunct species poor hedgerows Isolated trees		Grazed pasture Ancient woodland Ponds with diverse marginal vegetation Wet ditches Species rich dense intact hedgerows

Overall Assessment and Assigning Value

In order to conclude whether further survey is required and if so, to design a suitable survey strategy, the overall **Potential Value** to bats is assessed, considering all of the features likely to be of value to bats (see above), and all roost features present are assigned a probability of being used by bats. This information then informs an assessment of the overall **Potential Value** for bats.

The value of a development site for bats will depend on a variety of factors (as shown in **Figure 2.1** below). Bats are nomadic and require a variety of roosts in addition to foraging areas and commuting routes.

Figure 2.1: Factors affecting the value of a site for bats

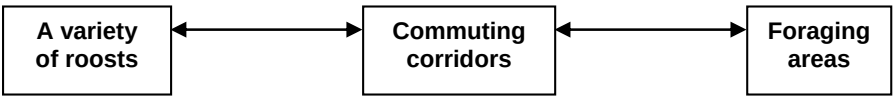
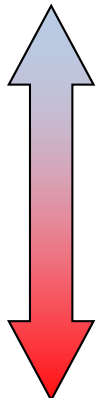


Table 2f below provides an example of the “value continuum” (adapted from BCT *Good Practice Guidelines*, **Table 4.2**).

Table 2f: How habitat features influence the potential value to bats

Potential Value	Site features
LOW  HIGH	- No features likely to be used by bats (for roosting foraging or commuting). - Small number of potential roost sites unlikely to support high numbers, or rarer bat species. No maternity or hibernation potential. - Isolated site with habitats that could be used by small numbers of foraging bats. - Several potential roost sites in buildings, trees or other structures. - Habitat likely to be used by foraging bats - Site connected to the wider landscape by linear features and could be used by commuting bats. - High quality foraging habitat (broadleaved woodland, water courses etc). - High potential roost features with the potential to support maternity roosts and/or rarer species of bat.

Dormouse

The type and quality of habitat with the potential to be suitable for supporting Dormice, such as woodland and hedgerows, was considered during the survey. In particular the presence of oak, hazel and berry-bearing shrubs was noted, and the connectivity of habitat recorded.

Birds

Any birds seen whilst carrying out the survey were recorded, and the type and quality of habitats available for birds was considered, including vegetation suitable for nesting, and habitat with the potential to support valued species, including breeding and wintering birds.

Amphibians

Consideration was given to the presence of habitat potentially suitable for supporting amphibians, including water bodies (ponds, ditches), woodland, scrub and rough grassland, and features such as log piles that might provide hibernation areas. Where appropriate, effort to gather direct evidence of amphibians was undertaken by making a preliminary search eggs by examining vegetation within reach of the margins of water bodies, and for resting animals on land by looking under potential refuges, such as stones, wood and rubbish near to water bodies.

Reptiles

The presence and quality of habitat considered potentially suitable for supporting reptiles was recorded. This included areas providing basking and foraging areas, hibernation and breeding sites, such as rough grassland and scrub, banks, burrows, rubble piles, compost heaps, hedge banks and water bodies.

Invertebrates

Readily identifiable invertebrates seen during the survey were recorded, and habitats and features likely to support noteworthy groups and species were noted, for example herb-rich grasslands, areas of bare ground and deadwood habitats, including woodland and veteran trees.

Appendix 3

Photos from Bat Building Inspection

Photo 1: North elevation of Fishermans Arms	 A photograph of the north elevation of a two-story white building with blue window frames and a bay window. The building has two red brick chimneys and a small balcony. Outdoor seating is visible in the foreground.
Plate 2: South elevation of Fishermans Arms with single storey elements in foreground	 A photograph showing the south elevation of the building, partially obscured by a single-story extension and a garden area with various items and a white dome structure in the foreground.
Plate 3: Loft void above single storey element	 A photograph of the interior of a loft void, showing wooden structural beams and insulation.

Plate 4: View of
river to the north

