The Kennet Centre

Ecological Impact Assessment (EcIA)

Prepared on behalf of

Lochailort Newbury Ltd.

Final Report

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Contents

MAPS

APPENDICES

Executive Summary

Ecological Planning & Research Ltd was commissioned by Lochailort Newbury Ltd in July 2020 to complete ecology survey and assessment works associated with an application for redevelopment of the Kennet Centre, Newbury, RG14 5EN.

The proposed development includes residential, commercial and office use space along with associated infrastructure. Landscaping is to include green roof areas, communal roof terraces and podium gardens.

A combined Ecological Appraisal and Preliminary Roost Assessment for bats was undertaken on the 30th July 2020. Overall, the habitats on Site were found to be of little nature conservation value, being comprised almost solely of buildings and hardstanding, however they had potential to support protected species including bats and nesting birds. Bats, along with nearby Designated Sites, were identified as Important Ecological Features (IEFs) requiring further assessment within this report.

The preliminary roost inspection identified that parts of the existing Kennet Centre had high suitability to support bat roost/s. In line with industry standard guidelines, emergence/re-entry surveys were conducted to determine the presence/likely absence of any bat roosts. A single Common Pipistrelle bat was recorded on two occasions (04th August and 01st September) emerging from the clay tiled roof above the Sunseekers retail unit adjacent to the multi-storey car park.

The following report sets out an Ecological Impact Assessment of the Proposed Development with regards to these important Ecological Features and includes measure to avoid, mitigate and, if necessary, compensate for significant residual effects. Ecological enhancement measures are also proposed to provide net gains to biodiversity in line with local and national planning policy.

Subject to implementation of the proposed measures outlined within this Ecological Impact Assessment, the proposed development will not result in any significant residual negative effects on the remaining Important Ecological Features within the Zone of Influence (ZoI) of the proposals. The scheme will deliver biodiversity net gain through installation of integrated nest boxes and the implementation of green roofs and terraces designed to maximise benefits for biodiversity.

1. INTRODUCTION

Brief

1.1 Ecological Planning & Research Ltd (EPR) was commissioned by Lochailort Newbury Ltd in July 2020 to undertake a series of bat surveys at the Kennet Centre, Newbury, and subsequently to prepare an Ecological Impact Assessment (EcIA) of the proposals. The EcIA will inform a planning application for redevelopment of the Site into a combined residential and commercial space with associated parking and infrastructure. This report sets out the results of the EcIA, including the ecological baseline, predicted impacts, impact avoidance and mitigation measures and enhancements for wildlife and biodiversity.

Site Location and Context

1.2 The Kennet Centre (referred to as the 'Site') is located within the centre of Newbury with Site access from Market Street (**Map 1**). The Site comprises a shopping centre of multiple units over varying levels, and a multi-storey car park. The main delivery bay is located on the roof of the centre, accessed via Market Street.

1.3 The Site is flanked on all sides by existing shops and flats, with several sites on adjacent streets undergoing current redevelopment. The Kennet and Avon Canal lies approximately 100m to the north, a bridge over it provides pedestrian and vehicular access from the Site to Northbrook Street.

Outline of the Proposed Development

1.4 This report is to accompany both the principial application for the site's redevelopment, and a secondary application proposing retirement units in lieu of the office space. The proposed development is for:

- 379 built to rent dwellings, and
- 23 apartments in standalone buildings, and
- Provision of either office units or 91 retirement living apartments, and
- Associated ancillary residents' facilities, infrastructure and back-of-house provision.

1.5 To facilitate the above, the majority of the Kennet Centre will be demolished. Some units are to be retained and modified, including the multi-story car park and Vue Cinema (**Appendix 1)**.

Relevant Legislation, Policy and Guidance

1.6 The following articles of nature conservation legislation and planning policy are of relevance to the Proposals, and have been considered as part of this assessment:

- The Conservation of Habitats and Species Regulations 2017 (as amended);

- The Wildlife and Countryside Act 1981 (as amended);
- The Countryside and Rights of Way (CROW) Act 2000;
- The Natural Environment and Rural Communities (NERC) Act 2006;
- The National Planning Policy Framework (NPPF)(2019);
- West Berkshire Core Strategy (2006 – 2026);
- West Berkshire District Local Plan 1991 – 2006 (Saved Policies 2007); and
- South East Plan saved policy NRM6.

1.7 In addition to the above, biodiversity objectives detailed in the following documents have been considered:

- Biodiversity 2020: A Strategy for England's Wildlife and Ecosystem Services (DEFRA 2011);
- The 25 Year Environment Plan (DEFRA 2018); and
- The Natural Environment in Berkshire: Biodiversity Strategy 2014 – 2020.
- Berkshire Biodiversity Opportunity Areas (Berkshire Local Nature Partnership 2009)

1.8 Further information on the above is provided in **Appendix 2**.

Consultation

1.9 Gareth Ryman, the Principal Ecologist for West Berkshire Council, was consulted regarding the off-site provision of bat boxes required to mitigate for the loss of the Common Pipistrelle roost during construction. It was agreed that use of off-site council-owned land along the Kennet and Avon Canal corridor would be permitted for use for this purpose.

2. ASSESSMENT METHODOLOGY

Introduction

2.1 The approach to Ecological Impact Assessment (EcIA) taken in this report accords with guidance presented in the Chartered Institute of Ecology and Environmental Management (CIEEM) *Guidelines for Ecological Impact Assessment in the United Kingdom and Ireland* (CIEEM, 2019).

2.2 In summary, EPR takes the following step-wise approach to EcIA:

- Prediction of the activities associated with a proposed scheme that are likely to generate biophysical changes which may lead to significant effects (either positive or negative) upon Important Ecological Features (IEFs);
- Identification of the likely Zone of Influence (ZoI) of those activities;
- Scoping to select the ecological features (habitats, species, ecosystems and their functions/processes) that are likely to fall within the predicted ZoIs and be affected by the activities;
- Evaluation of IEFs likely to be affected – both negatively and positively;
- Identification of likely impacts (positive and negative) on IEFs, together with an assessment of the geographic level at which effects are likely to be significant;
- Application of the mitigation hierarchy - refinement of the proposed scheme to incorporate impact avoidance and/or mitigation measures for negative effects on IEFs, and enhancements in order to deliver net gains;
- Assessment of the significance of residual effects and identification of any policy drivers for additional mitigation or compensation in the event of residual significant negative effects; and
- Advice on conformance with policy and legislation.

2.3 Further information regarding the methods for ecological evaluation and impact assessment are provided in **Appendix 2**.

Likely Biophysical Changes and Zone of Influence

2.4 The activities associated with the Proposed Development which are likely to lead to biophysical changes, and could accordingly give rise to ecological impacts, are set out in **Table 2.1** below, which is drawn from Box 9 of the EcIA Guidelines (CIEEM, 2018).

2.5 The Zone of Influence (ZoI) of a proposed development is defined by the EcIA Guidelines as *"… the area(s) over which ecological features may be affected by the biophysical changes caused by the proposed project and associated activities"*.

2.6 In this case, the ZoI of the Proposed Development will encompass different areas, and thus potentially impact upon different ecological receptors, depending upon the spatial extent of the relevant biophysical change (e.g. light, noise, habitat loss, recreational disturbance). The ZoI(s) relevant to this assessment are summarised in **Table 2.1** below.

Table 2.1: Activities and Biophysical Changes associated with the Proposed Development which may give rise to ecological impacts, and associated Zone(s) of Influence.

Activity	Potential Impact	Zone of Influence
Site Clearance and Construction Phase		
Access and travel on / off site	Noise / visual / lighting disturbance of vulnerable species	Site and immediately adjacent land
Assembly and storage areas for machines and materials; construction compounds	Loss and fragmentation of habitats Noise / visual / lighting disturbance to vulnerable species	Site and immediately adjacent land
Site clearance, ground, excavation and structural works, demolition and alteration operations	Loss and fragmentation of habitats Direct harm to vulnerable species Noise / visual /vibration/ lighting disturbance to vulnerable species Dust generation	Site and immediately adjacent land
Lighting of work area	Disturbance to vulnerable species	Site and immediately adjacent land
Drainage	Change of groundwater flows Change of water quality in groundwater Change in habitats fed by groundwater flows	Site and immediately adjacent land, potentially including Kennet and Avon Canal.
Operational Phase		
Access and travel on / off site	Noise / visual / lighting disturbance to vulnerable species	Site and immediately connected roads
Occupation / use of new development	Noise / visual / lighting disturbance to vulnerable species. Wastewater discharge.	Approximately 400m radius of new housing. Hydrologically connected waterbodies.
Increased recreational use of greenspace	Fragmentation of vulnerable habitats by trampling Noise / visual disturbance to vulnerable species by members of the public and/or dogs	Up to 5km radius

3. ECOLOGICAL BASELINE

Overview

3.1 The ecological baseline has been compiled following the programme of surveys set out in **Table 3.1** below. Further information regarding the survey work carried out, including methodologies, metadata and results, is provided in **Appendix 4**.

Table 3.1: Overview of ecological survey programme.

Survey Type	Month	Year
Ecological Appraisal and Preliminary Roost Inspection for Bats	July	2020
Dusk and Dawn Bat Activity Surveys	August – September	2020

Ecological Appraisal and Preliminary Roost Assessment

3.2 The Ecological Appraisal was the starting point in determining the ecological features potentially needing to be considered within this EcIA. A detailed desktop study was carried out prior to the Site visit to gather contextual ecological and geographical information. A data search was commissioned from Thames Valley Environmental Records Centre (TVERC) for records of protected and notable species recorded within a 2km radius of the Site boundary.

3.3 As a result of the desk study, bats were identified as a possible ecological feature requiring further investigation. As such, the Site visit to inform the Ecological Appraisal was conducted in conjunction with a Preliminary Roost Assessment for bats, carried out by Ann Bailey of EPR and Colleen Hope (a Natural England licensed bat worker (CL16) 2015 10265 CLS CLS) on the 31st July 2020.

3.4 The inspection for roosting bat potential revealed multiple roosting features across all levels of the centre on both street and roof level. **Appendix 3** provides detailed results of this inspection. Immediately adjacent units to the Site boundary were considered in the assessment as any demolition of the existing buildings followed by construction of the proposals could have an impact upon bat populations utilising these features. As a result of these findings and in accordance with industry standard guidelines (BCT 2016) further bat survey work in the form of evening emergence surveys and dawn re-entry surveys was recommended and undertaken, the results of which are outlined in sections below.

3.5 The Ecological Appraisal did not highlight the need for any additional targeted survey work for other ecological features, however did identify possible legal considerations pertaining to the redevelopment of the Site. These are discussed further in **Section 7** below.

Desk Study Results - Designated Sites

3.6 Locations of designated sites are shown on **Map 2**.

Internationally Designated Sites

3.7 The River Lambourn Special Area of Conservation (SAC) is designated for the internationally rare habitats (winterbourne chalk stream) and species (Bullhead *Cottus gobio*) that it supports. At its closest point, the SAC is approximately 1.2km from the Site's boundary and is separated

from the Site by existing urban development. Possible impacts to this designated site are discussed further in **Section 4** below.

3.8 The Kennet & Lambourn Floodplain SAC is designated for the population of Desmoulin's Whorl Snail *Vertigo moulinsiana* that it supports. Desmoulin's Whorl Snail is an Annex II species protected under the Conservation of Habitats and Species Regulations 2017 (as amended). At its nearest point, the Site is approximately 2.3km from the SAC. The main threats to the conservation status of this species relate to habitat degradation via inappropriate management. In view of the distance from the Site and the nature of the proposals, a viable impact pathway to effects on this designated site is unlikely and therefore it is not considered further within this EcIA.

3.9 Kennet Valley Alderwoods SAC lies approximately 2.5km west of Site and is designated as it is the largest fragment of alder-ash woodland on the Kennet floodplain and supports a variety of important floral species. Threats to this Site include changes in hydraulic conditions and interspecific faunal relations. In view of the nature of the proposals, a viable impact pathway to effects on this designated site is unlikely and therefore it is not considered further within this EcIA.

Nationally Designated Sites

3.10 There are eight Sites of Special Scientific Interest (SSSI) that fall within the search area. These Sites have been designated as they are Nationally Important for nature conservation. A brief description of these can be found in **Table 3.1** below.

SSSI Site Name	Reason for Designation	Closest Unit	Unit Condition	Adverse condition reason	Approx. Distance from Site
The River Kennet	Supports an important assemblage of habitats and species associated with chalk and lowland clay rivers. Has the highest average number of species per site surveyed of any other lowland river in Britain	3	Unfavourable – No Change	High levels of phosphorus and suspended solids. More restoration work required to restore river morphology.	0.1km
The River Lambourn	Is a lowland chalk river, a nationally rare habitat. Supports nationally scarce species of invertebrate.	3	Unfavourable - Recovering	N/A	1.2km

Greenham and Crookham Commons SSSI SSSI	Largest area of heathland and acid grassland habitats in Berkshire supporting several important floral species. Supports populations of nationally important ground nesting birds, 4 species of reptile and all species of native newt.	1	Unfavourable - Recovering	N/A	2km
Thatcham Reedbeds SSSI	An extensive network of reedbed, fen and species rich alder woodland habitats, supporting a large assemblage of breeding birds and a population of European protected Desmoulin's Whorl Snail	1	Unfavourable - Recovering	N/A	2.5km
Snelsmore Common SSSI	A varied woodland and heathland habitat supporting specialist communities of plants and animals. Including undisturbed peat bogs, wet alder woodlands and an important assemblage of breeding birds.	7	Unfavourable - Recovering	N/A	3.1
Enborne Copse SSSI	A semi-natural broadleaved woodland	1	Unfavourable - Recovering	N/A	3.5km

	which supports a large population of small-leaved lime, a species confined to ancient woodlands and very rare in Berkshire.				
Avery's Pightle SSSI	A species-rich unimproved meadow, a rapidly declining nationally important habitat.	1	Unfavourable - Recovering	N/A	3.7km
Bowdown and Chamberhouse Woods SSSI	A variety of woodland and heathland habitats. The woodland supports a particularly diverse ground flora and important assemblages of breeding birds and invertebrates.	1	Favourable	N/A	3km

3.11 The site is not within the Impact Risk Zone (IRZ) for the River Lambourn SSSI, Bowdown and Chamberhouse Woods SSSI, Avery's Pightle SSSI, Enborne Copse SSSI, Snelsmore Common SSSI or Thatcham Reedbeds SSSI. Development which falls outside of IRZs are less likely to have a significant effect upon the qualifying features of the related designated sites, therefore these SSSIs are not considered further within this report due to the absence of impact pathways to these sites.

3.12 Greenham and Crookham Commons SSSIs are in favourable or favourable recovering condition (83%) and unfavourable no change (17%). The condition assessment of the individual SSSI units indicates that the principal issues with this SSSI relate to a lack of suitable management, in particular scrub control. There is no viable pathway for the proposals to contribute to this issue, so this SSSI is not considered further.

3.13 The Site falls into the IRZ for the River Kennet SSSI which is considered further in **Section 4.**

Local Wildlife Sites

3.14 A total of 10 Local Wildlife Sites (LWS) lie within a 2km radius of the Site (**Map 2**). The closest of these is Northcroft Meadow LWS which is located approximately 750m to the north-west of

the Site, on the opposite side of the River Kennet and the Kennet and Avon Canal. It is designated as a LWS for the species of wet meadow flora and fauna that it supports.

3.15 As LWS, these sites are considered to be of **County Importance.**

Habitats and Vegetation

3.16 The Site is comprised entirely of built development with a single semi-mature tree located on the western side at street level. (**Map 3)**. A few patches of vegetation have established around gutters on the roof, including grasses and Buddleia *Buddleja davidii*. None of these patches are of ecological significance. Several structures on the roof possess features with the potential to support roosting bats and nesting birds, which is discussed further below.

3.17 The Kennet & Avon Canal lies approximately 130m to the north of Site and is within commuting distance for any bats that may be roosting within Site. This section of the river forms a confluence between the River Kennet and the Kennet and Avon Canal. The watercourses return to separation toward the east of central Newbury. The area between the Kennet Centre and Canal to the east is subject to very minimal lighting and provides a suitable dark corridor for commuting bats. This area includes a church garden and river-side garden part of a nearby flat complex. The Kennet and Avon Canal is also well connected to the wider landscape of parks in central Newbury (Northcroft Park and Victoria Park) and to the countryside and woodlands that fringe the town.

Evaluation

3.18 None of the habitats present on site are themselves of ecological value outside of the immediate zone of influence and they are not considered further.

Bats

Desktop Study

3.19 The data search returned records of eight species of bat within 2m of the Kennet Centre. (**Map 4**). Species recorded closest to Site were Common Pipistrelle *Pipistrellus pipistrellus*, Soprano Pipistrelle *Pipistrellus pygmaeus*, Noctule bat *Nyctalus noctula*, Whiskered bat *Myotis mystacinus* and Daubenton's bat *Myotis daubentonii*. Six of the records for Common Pipistrelle bat were roost records, the most recent of which was recorded in 2018 at Ashridge Court, Newbury, approximately 0.3km to the south of Site.

Field Survey

Preliminary Roost Assessment for Bats

3.20 The Preliminary Roost Assessment recorded suitable roosting features across multiple elevations of the Centre on both street and roof level. Due to the size and extent of the Site, individual roosting features were unable to be quantified. As such, **Map 5** illustrates the roosting suitability of the elevations of the centre in accordance with best practice guidelines (BCT, 2016). The single tree on Site was inspected for its potential to support a bat roost and was determined to possess no suitable roosting features and as such is of negligible potential to support roosting bats.

3.21 Several units within the Site boundary possessed high suitability for supporting bat roosts. These units included the Number 96 shop, Coral, One-Stop and the large vacant unit previously occupied by Debenhams. These units are all of brick construction with clay tiled roofs. Roosting features present included weep holes, missing and slipped tiles, missing mortar and gaps within the soffit boards. Loft voids were present above the One-Stop and Coral units, however they were too small to permit access. The Debenhams unit also had a loft void, however due to previous damage to the building and ongoing renovations, it is exposed internally. The internal construction is of metal sheets attached to a steel frame therefore likely suitable roosting features on this unit are restricted to the external features.

3.22 The Kennet Centre multi-story car park also was of high suitability, possessing gaps around windows and soffits, weep holes and missing slate tiles from the roof. The car park will be retained as part of the proposals for the Site's redevelopment.

3.23 Several immediately off-site units had high roosting suitability, these included the Newbury Pub, the Catherine Wheel Pub and the Kebab Corner buildings. The area immediately adjacent to the north of the Site boundary is also included within the high suitability category. The units listed above all possessed roosting features, including slipped roofing tiles, hanging clay tiles and brick walls with weep holes,

3.24 The vacant unit and the adjacent Pizza Express had moderate roosting potential (**Appendix 4**, corresponding position 3 in **Map 5**). This building was constructed of rendered brickwork with a slate roof and possessed fewer roosting features than other units. Gaps in the grouting at the slates were visible from the roof of the Centre.

3.25 The two vacant lots and the adjacent Sundaes Gelato unit possessed low roosting suitability along with the closed-down nightclub building next to the roof access ramp. These units possessed multiple weep holes and gaps in the brickwork. Up on the roof, several of the storage units had lifted sarking around the perimeter of the flat roof, these gaps were adjacent to unlit areas of the Centre so had the potential for use by individual bats.

3.26 The brick wall with fibreglass murals to the south of the site and the Vue cinema unit are of negligible suitability for bat roosts. They possessed no features of roosting suitability.

Emergence/Re-entry Surveys

3.27 Dusk emergence and dawn re-entry surveys for bats were undertaken in August – September 2020. To effectively cover all aspects and features with bat roosting potential, for the purposes of the survey the centre was 'divided' into two cross-sectional halves creating an east side and a west side. Each of the two 'sides' were subject to three nights of survey in accordance with industry standard guidelines for structures possessing high suitability. **Appendix 4** details the methodology and metadata of these surveys.

3.28 **Map 6** illustrates the results of the bat surveys. Three species of bat were recorded; Noctule bat, Common Pipistrelle and Soprano Pipistrelle. Of these three, Common Pipistrelle were recorded most frequently, however all three species were recorded in overall low numbers and no significant foraging or commuting behaviour was observed.

3.29 A single Common Pipistrelle was recorded on two occasions (04th August and 01st September) emerging from the clay tiled roof above the Sunseekers retail unit adjacent to the multi-story car park. On both occasions, the bat was then observed foraging around the car park before

heading off south-west to forage. A Common Pipistrelle was also observed on the second dawn survey (16th September) foraging close to re-entry time around the tree in front of the Sunseekers retail unit. This bat did not re-enter however and flew off shortly before sunrise.

Evaluation

3.30 In accordance with the Chartered Institute of Ecology and Environmental Management's (CIEEM) framework for valuing bat roosts in an EcIA, a roost of individual bats of a common species are of Local Level importance, and in view of species and activity recorded during the surveys, the bat assemblage as a whole is also of Local Importance. In the absence of the proposals, the conservation status is likely to be favourable and stable, in view of a lack of significant anticipated change.

Birds

Desktop Study

3.31 The majority of bird species records returned from the data search were for common and widespread species. Habitat within the search area is suitable for supporting assemblages of garden birds and other species which have adapted to exist in urban environments. Notable species returned included Peregrine Falcon *Falco peregrinus*, Starling *Sturnus vulgaris* and Swift *Apus apus*. A number of records were returned for water birds, such as Kingfisher *Alcedo atthis*, due to the proximity of the Site to the Kennet River.

Field Observations

3.32 During the appraisal, several bird species were identified as likely nesting within the ZoI, including Pied Wagtail *Motacilla alba* and Feral Pigeon *Columba livia domestica*. Swift *Apus apus* were also observed foraging over the Site. Nesting opportunities for a variety of common birds are present on the roof of the centre.

3.33 Peregrine Falcon were observed flying over the Site on each dusk survey. This species is protected under Annex 1 of the Birds Directive and Schedule 1 of the Wildlife and Countryside Act and are known from the desktop survey to be nesting on a nearby building to the east. No evidence of their breeding was recorded on Site and they were not observed to land on the Site at any point. Peregrine Falcon require little to no disturbance in order to establish a successful breeding site, as such the regular commercial use of the roof of the Site makes it unsuitable to support a breeding pair. However, the proposals do present an opportunity to enhance the Site for this species, discussed further in the sections below.

Evaluation

3.34 The ZoI of the proposals supports a varied assemblage of common and widespread bird species. The Site itself provides nesting habitat for Pigeon and likely some other species. It is not anticipated that the proposals will have an effect upon the nearby Peregrine Falcon pair. At present, their nesting Site lies in the centre of town near to other areas of construction that have not affected their breeding success. Peregrines in urban environments have a higher rate of successful fledging and nesting than in rural environments (Kettel *et al* 2019) and have been recorded to successfully fledge more chicks in urban habitats than in rural. They are one of the few species to have demonstrated a positive response to urbanisation (Kettel *et al.* 2018).

3.35 As a result of the above, the proposals are not likely to affect the conservation status of the bird assemblage within the ZoI. There are legal considerations relating to nesting birds however and these are discussed further in **Section 7** below,

Survey Constraints

3.36 The weather conditions on each survey met the minimum requirements stipulated by industry standard best practice guidelines. As a result, the conditions at the time of survey present no constraints to the validity of the data.

3.37 Emergence/re-entry surveys could only be undertaken toward the end of the survey season due to project timing constraints. As a result, it is possible that additional transitional roosts used earlier in the year could have been missed during the window of survey. It is not likely that a roost of any significant size or value was missed as no evidence was detected during either the daytime inspection or emergence and re-entry surveys. The surveys were also undertaken during the time of year when maternity colonies have not yet broken up, as such if one was present it is likely to have been detected. Any transitional roosts which may have been undetected are likely to be observed during the update surveys required to inform the EPSL application, following planning consent. It is not anticipated that any roost which may have been undetected would materially alter mitigation measures suggested within this report.

3.38 The area of roof which the Common Pipistrelle emerged from was able to be observed by surveyors but only at a distance. The nearest point of safe pedestrian access was at surveyor position 8 (**Map 6**) which was a distance away from the roost location. The exact roosting feature on the roof could not be accurately determined due to distance, however the roost could still be located and observed. The surveys have demonstrated that the buildings are unlikely to support anything but a day roost for low numbers of Common Pipistrelle bat and the roosting feature is very likely to be a crevice behind a tile. The surveys completed are sufficient to characterise the roost present, evaluate the bat assemblage and inform a mitigation strategy. Further bat surveys will be required prior to an application for a Natural England mitigation licence and additional detail on the precise roosting feature will be gathered during those surveys

Summary of Important Ecological Features

3.39 With reference to the assessment criteria set out in **Appendix 3,** IEFs that are considered to be of Local importance or greater to be taken forward for impact assessment in **Section 4** are summarised in **Table 3.2** below.

Table 3.2: Important Ecological Features to be considered further in this EcIA.

Feature	Importance
River Lambourn SAC	International
River Kennet SSSI	National
Local Wildlife Sites	County
Bat Assemblage (including Common Pipistrelle using roost on site)	Local

4. IMPACT ASSESSMENT

Introduction

4.1 This section examines the potential for significant ecological impacts and effects on IEFs as a result of the biophysical changes arising from the Proposals, both during the site clearance and construction phase and operational phase. Where impacts are identified, opportunities for impact avoidance and mitigation are explored. If the potential for significant residual effects remains after mitigation, then opportunities for compensation are also set out.

Impact Avoidance by Design

4.2 In accordance with the principle of the mitigation hierarchy, the scheme has been designed to avoid ecological impacts as far as possible in the first instance, thus reducing the need for extensive mitigation measures. In view of the limited ecological interest of the Site, opportunities to adjust the design to avoid impacts are similarly limited.

Mechanisms for Implementing and Securing Mitigation

4.3 Throughout this section reference is made to a suite of plans and strategies which will include and expand upon the key principles of the impact avoidance and mitigation measures described below, and which can be secured through planning conditions or obligations, including:

- European Protected Species Mitigation Licence (EPSL),
- Construction Environmental Management Plan (CEMP);
- Lighting Strategy; and
- Landscape and Ecology Management Plan.

Impact Assessment

The River Lambourn SAC

4.4 At its closest point, the SAC is approximately 1.2km from the Site's boundary and is separated from the Site by existing urban development. As highlighted in the Natura 2000 data form for this site, the most important threats and pressures affecting the site are as follows;

- *H02 – Pollution to groundwater (point sources and diffuse sources)*
- *J02 – Human induced changes in hydraulic conditions*
- *I01 – Invasive non-native species*

Assessment of Impacts and Mitigation - Site Clearance and Construction Phase

4.5 Due to the distance of the Site from the SAC, the proposals are unlikely to present a viable impact pathway to the designated site during the construction phase. Nonetheless construction will be conducted to best practice guidelines and overseen by a CEMP. This document will include procedures for the safe storage of construction related materials and chemicals, as well as procedures for tackling accidental spillages and preventing them from entering the surface

water drainage system and being carried from there to the River Kennet and then on to the River Lambourn.

Assessment of Impacts and Mitigation - Operational Phase

4.6 With reference to the threats and pressures referenced in the SAC data form and the impacts considered in the HRA of the West Berkshire Core Strategy, possible impacts resulting from the proposals include those related to water abstraction and waste-water discharge.

4.7 In relation to potentially significant effects arising from abstraction, it should be noted that, based on the most recent available West Berkshire Infrastructure Delivery Plan, Thames Water state that "There are no known deficiencies in the availability and ability to supply the current and projected demands within any of these areas in the current business plan period (2015 – 2020)", indicating that there are no anticipated issues with water abstraction that could affect this site. Water supply information for the period going forward was not available at the time of writing the report. The River Lambourn SSSI unit 3 (the closest unit to the site), also notes that "There is no damaging abstraction". It should also be noted that the Site is currently utilised as a shopping centre with a significant proportion of catering/restaurants. In view of the age of the buildings and infrastructure, water efficiency is likely to be minimal and there will be an existing baseline water use from the existing uses which will cease with site clearance and demolition.

4.8 In relation to potential effects arising from wastewater discharge, and with reference to the condition assessment of River Lambourn SSSI unit 3 (the closest unit to the site and a component part of the SAC), it can be seen that unit 3 is in unfavourable but recovering condition, with siltation, lack of macrophytes, invasive species and dissolved oxygen identified as issues. The condition assessment does report that the river is meeting the interim target for phosphate, a pollutant from wastewater. In addition, the development will connect to the main sewerage system which will avoid infiltration into groundwater and associated deleterious effects on the SAC. In addition, Core Strategy policy CS5 (Infrastructure) co-ordinates infrastructure delivery to protect environmental quality. The Council maintains an infrastructure delivery plan identifying the key water and wastewater infrastructure projects that are required to support the delivery of the Core Strategy.

4.9 In view of the above, it can be concluded that a significant negative effect on the River Lambourn SAC is unlikely, and it is not considered further.

River Kennet SSSI

4.10 At its closest point the River Kennet SSSI lies about 100m from the site. The entirety of the SSSI is in unfavourable no change condition, although it should be noted that the SSSI has not been assessed since 2008. The closest unit is number 3. The adverse condition reasons provided for this unit in 2008 relate principally to suspended solids, high levels of phosphorus and river morphology.

Assessment of Impacts and Mitigation - Site Clearance and Construction Phase

4.11 During demolition and construction on Site there is the potential for accidental pollution and dust to impact the Kennet River. All works will be overseen by a CEMP and will be conducted to best practice guidelines to minimise the risk of pollutants contaminating the water course. As detailed above, the CEMP will include procedures for the safe storage of construction related materials and chemicals, as well as procedures for tackling accidental spillages and preventing them from entering the surface water drainage system and being carried from there to the River Kennet.

Assessment of Impacts and Mitigation - Operational Phase

4.12 The proposals for the development include the construction of 402 new dwellings, it is likely that this will cause an increase in wastewater discharge from the Site once occupied due to the higher occupancy and use of bathrooms. A component of wastewater is phosphates, so there is the potential for the increase in wastewater discharge to the river to contribute to the existing issue of high phosphate levels in the SSSI. The reasons for these waterbodies not achieving good status include:

- Kennet (Lambourn confluence to Enborne confluence) - physical modification, diffuse sources from agriculture and rural land management, and invasive species.
- Lower Kennet (Sheffield Bottom to Reading) – physical modification and dissolved oxygen levels resulting from urbanisation and the water industry.

4.13 The Wastewater Treatment Works (WWTW), which will process the wastewater from the Site, discharges into the Kennet River downstream of Bulls Lock, approximately 2.6km east of Site. The Environment Agency Catchment Data Explorer website shows that watercourses into which the WWTW discharges (Kennet (Lambourn confluence to Enborne confluence) and Lower Kennet (Sheffield Bottom to Reading)) were both classified in 2019 as 'moderate' condition and not failing under the Water Framework Directive. Both dissolved oxygen and phosphate were classified as 'good' in 2019 for the Lower Kennet section of the waterbody. Whilst a direct comparison between the WFD classification and the SSSI condition assessment cannot be made, moderate status suggests that the waterbodies have improved since the most recent condition assessment by Natural England in 2008.

4.14 It is also worth noting that the Environment Agency website (Environment Agency, 2020) notes a number of operational catchment measures, including habitat improvement, habitat restoration, and measures to reduce phosphates that are planned or have been completed which will further improve the status of the waterbodies in the catchment by 2021.

4.15 In addition, the proposals will replace a shopping centre which has an existing baseline of wastewater discharge that will be removed by its demolition. Therefore, the overall increase to the levels of wastewater discharge will be reduced as a result. Policy CS5 (Infrastructure) of the West Berkshire Core Strategy co-ordinates infrastructure delivery to protect environmental quality. The Council maintains an infrastructure delivery plan identifying the key water and wastewater infrastructure projects that are required to support the delivery of the Core Strategy. The NE condition statement for the SSSI also states that further improvements to strip phosphate from Great Bedwyn Treatment Works on the river have taken place since the 2008 condition assessment. This is very likely to have improved the levels of phosphate in the river since the initial assessment. The timeline of compliance published by the European Commission Urban Waste Water website (European Commission, 2016) states that the STW has been compliant in its treatment works since 2012 and that phosphate removal is a factor in its treatment process. As a result of the above, it is unlikely that the proposals will have a significant effect upon the condition of the SSSI, therefore it is not considered further in this EcIA.

Local Wildlife Sites

4.16 A total of 10 Local Wildlife Sites (LWS) lie within a 2km radius of the Site (**Map 2**). The closest of which lies approximately 750m north-west of the Site, on the opposite side of the River Kennet and the Kennet and Avon Canal.

Assessment of Impacts and Mitigation - Site Clearance and Construction Phase

4.17 Due to the distance between the development Site and the LWS, it is not likely that any viable impact pathway exists which could cause a negative effect to these sites during the construction phase.

Assessment of Impacts and Mitigation - Operational Phase

4.18 The most likely impact on LWS is an increase in recreational pressure resulting from the new residents during the operational phase of the development. However, Northcroft Meadows is the closest LWS to the Site and has no permitted public access, along with a further five of the LWS.

4.19 The Kennet Valley West LWS, adjacent to Northcroft Meadows LWS, does have public access however is managed to accommodate recreational impacts. The site is open to the public via a permissive footpath and stock fencing separates the path from the vulnerable habitats. Donnington Grove Park and Mill Pond Field are managed in a similar way, both lying adjacent to Donnington Grove Golf Club.

4.20 The Kennet Centre is nearby to two large public parks which are closer to the Site than any of the LWS. Victoria Park is approximately 250m north east of Site and Northcroft and Goldwell Parks are approximately 500m to the west. Both parks are well managed for providing both greenspace and recreation and it is reasonable to expect that these would be used primarily by any new residents.

4.21 As a result of the above, it is unlikely that the proposals would result in a significant negative effect on these LWS through an increase in recreational pressure.

Bats

4.22 The bat surveys conducted on the Kennet Centre confirmed a roost of a single Common Pipistrelle bat from the clay tiled roof above the Sunseekers retail unit adjacent to the multi-story car park. The surveys also recorded low levels of activity by Soprano Pipistrelle and Noctule Bat.

Assessment of Impacts and Mitigation - Site Clearance and Construction Phase

4.23 During the demolition of the Site in preparation for construction, bats roosting within the Centre are at direct risk of killing or injury. Demolition of the Site will also result in the loss of at least one known roost of Common Pipistrelle. In addition, construction noise, vibration and dust has the potential to negatively affect the bat populations present within the ZoI by dissuading bats from using roosting, foraging and commuting habitats close to construction areas.

4.24 Although the injury or death of individual bats is unlikely to represent a significant impact on the conservation status of the bat assemblage above ZoI level, this would result in an offence under the provisions of the Wildlife and Countryside Act (1981, as amended) and the Conservation of Habitats and Species Regulations 2017 (as amended).

4.25 To mitigate for the risk of killing and injury, destruction of confirmed roosts must be completed under a Natural England European Protected Species Mitigation Licence (EPSL) which will set out sensitive clearance methodology and measures to reduce the likelihood of harm to bats during demolition. The conditions of the licence will be determined by Natural England, following planning permission being granted for the site, but in principle are likely to require the following:

4.26 Update surveys will be completed prior to the submission of the licence application, the results of which will be used to inform the timing and schedule of the demolition strategy for both the roost location and the non-roost locations. Demolition on and immediately surrounding the roost (and any other roost which may be identified) will not take place during the hibernation season (October – April inclusive). Work can be conducted during the maternity period (June, July and August) as no evidence of any maternity roosts have been identified. The time frames above are guides and may be modified depending upon local weather conditions. Where day or night temperatures are below 8°C for extended periods during the five nights prior to works, no destructive works will be conducted as bats may still be hibernating considering weather conditions.

4.27 Demolition of areas with no recorded bat roosts will be undertaken using controls that are proportionate to the risk of bats being present. This will be informed by the update bat surveys to inform the EPSL application but is likely to include demolition of some of the higher risk elements under ecological supervision and a precautionary safe working method statement

4.28 Temporary roosting provision will be provided during demolition to provide roosting locations in the short term and somewhere for the licenced ecologist to relocate bats found during works. Due to the nature and extent of the demolition works required, nowhere on site provides a suitable undisturbed location to install a bat box. Therefore, off-site mitigation has been secured with West Berkshire Council along the Kennet and Avon Canal corridor immediately north of site.

4.29 The negative impacts of disturbance during the construction phase are likely to be short-term and localised, and construction related disturbance would be expected to predominantly occur during daylight hours even in the absence of controls, when bats would not be foraging or commuting. All construction activities will be conducted in accordance with a CEMP and will likely follow a working hours condition imposed by the council.

Assessment of Impacts and Mitigation - Operational Phase

4.30 Once operational, the main impact to the bat assemblage within the ZoI will be as a result of increased artificial lighting. In its current state the Site in some areas is already well lit however dark areas, such as the identified roosting location, are present.

4.31 Lighting around the Proposed Development will be kept as low as safety levels permit. A sensitive lighting strategy will be written and implemented in order to maintain the presence of unlit areas across the development, reduce light-spill and avoid the illumination of compensatory roosting features and other wildlife enhancements. The Strategy will be in accordance with Bats and Artificial Lighting in the UK (Institute of Lighting Professionals, 2018)

Summary of Residual Effects and Compensation

4.32 Following the redevelopment of the Site, subject to the described mitigation and compensation measures, no residual effects are anticipated on any of the Important Ecological Features identified within this report.

4.33 To compensate for the Common Pipistrelle roost lost during demolition, artificial roosting locations suitable for crevice dwelling bats (such as Pipistrelle bats) will be incorporated into the site design of the new development. Integral roost boxes will be located on several elevations of the new development in designated 'dark zones' which will have minimal lighting in order to maintain their suitability as roosting locations. It is recommended that clusters of three 2FR Schwegler Bat Tube (or similar model) are installed at three separate suitable locations on Site. One cluster is to be installed as close to the position of the lost roost as is possible. However due to the early stage of design and the transient nature of Pipistrelle roosts it is recommended that compensatory features are installed at a further two locations on the western elevation closest to the commuting corridor to the river in order to provide reasonable compensation for the disruption and loss of the initial roost.

4.34 Appropriate elevations would be those facing toward suitable foraging and commuting habitat for bats, such as the Kennet and Avon Canal and the Kennet River. As described above, lighting around these features will be sensitively designed to preserve their functionality as suitable roosting locations. There will be no illumination of or light spill over compensatory roosts.

Summary of Impact Assessment

4.35 **Table 4.1** below provides a summary of the potential impacts of the Proposed Development on IEFs, opportunities for impact avoidance and mitigation, or compensation where significant residual effects have the potential to remain.

Table 4.1: Summary of Impact Assessment.

Feature	Importance	Unmitigated Impacts	Mitigation	Significance of Residual Effects	Compensation
Site Clearance and Construction Phase					
River Lambourn SAC	International	n/a	n/a	n/a	n/a
River Kennet SSSI	National	n/a	n/a	n/a	n/a
Local Wildlife Sites	County	n/a	n/a	n/a	n/a
Bats	Local	Injury or death Disturbance	Works conducted under European Protected Species Mitigation Licence (EPSL). Construction works conducted following a CEMP.	Loss of Common Pipistrelle roost – significant to ZoI level.	Artificial roost opportunities incorporated into multiple elevations of the new buildings.
Operational Phase					
River Lambourn SAC	International	n/a	n/a	n/a	n/a
River Kennet SSSI	National	n/a	n/a	n/a	n/a
Local Wildlife Sites	County	n/a	n/a	n/a	n/a
Bats	Local	Disturbance	Sensitive lighting strategy	n/a	n/a

5. BIODIVERSITY NET GAIN

Introduction

5.1 This section describes the way in which the Proposals can achieve biodiversity net gain alongside development, in accordance with the relevant National and Local biodiversity policies and strategies summarised at **Appendix 2**. The National Planning Policy Framework (NPPF) requires that planning decisions should enhance the natural environment and provide net gains for Biodiversity. Biodiversity Net Gain has become increasingly higher profile due to the emerging Environment Bill which will mandate a 10% gain when it becomes law; it is also being incorporated into local policy across the country. There is currently no policy requirement in West Berkshire to demonstrate net gain quantitively, however future policy may require applicants to complete and submit a Biodiversity Metric as the 10% gain requirement is enshrined in policy. Demonstration of net gain is still required in the absence of a metric, Policy CS17 of the West Berkshire Core Strategy (2006 – 2026) states:

"… all new development should maximise opportunities to achieve net gains in biodiversity…"

5.2 Policy CS14 of the same strategy also states

"Development proposals will be expected to:… Provide, conserve and enhance biodiversity and create linkages between green spaces and wildlife corridors"

5.3 At present, the Kennet Centre is made up entirely of hard standing (with the exception of a single tree). Designs for the proposals include the provision of a variety of green spaces (Eagle Quarter Plans, Rev. J, **Appendix 1**) including:

- Private and community gardens on the first floor,
- Community podium gardens on second floor,
- Areas of green space on the third, fourth and fifth floors,
- A roof terrace on the sixth floor, and
- A large green roof on the eighth floor.

5.4 In order to achieve maximum gains for biodiversity, it is recommended that the specification for the green roofs be designed to create a diverse habitat utilising a seed mix of native wildflowers and sedum species, such as the Kadas "London Living Roof Mix" (Kadas, 2010) which will be adjusted to be locally appropriate for the Newbury area. Green roofs designed in this way are both functional for wildlife and visually appealing to residents which may overlook the area.

5.5 The Podium Gardens and Roof Terrace spaces provide opportunities to incorporate a variety of additional gains for wildlife. For example, stand-alone planters on roof terraces can be used to create community herb gardens which provide foraging opportunities for pollinating insects, and also sensory benefits for the inhabitants of the development.

5.6 The provision of these green spaces will increase the value of the site for wildlife by providing habitat for a range of plants and invertebrates, where previously there was none. This provision will likely increase the invertebrate population within the ZoI which will in turn provide a foraging resource for both bat and bird species foraging within the area.

Wildlife Boxes

5.7 To provide additional nesting/roosting opportunities within the new development, integrated bird boxes will be incorporated into the design.

5.8 Swifts were observed foraging over the Site on multiple bat surveys. Swift are Amber Listed under the Birds of Conservation Concern and have suffered significant recent declines in breeding population. Installing “Swift Bricks”, a specialised nesting box for this species, is an achievable and low cost way of enhancing a development for both Swifts, and a variety of other bird species which have also been recorded using these features. House Sparrows *Passer domesticus*, Starlings *Sturnus vulgaris* and Great Tits *Parus major* have all been recorded nesting in Swift Bricks (Day *et al*. 2019).

5.9 Swift Bricks are the same size as a conventional brick and are self-contained units which require no ongoing maintenance. The bricks should be installed in clusters under the eaves of buildings where possible. The boxes should be a minimum of 5m above ground level, (the higher up the better), with a clear fall beneath them, and away from windows and doors. They should not be installed on south facing elevations where possible. It is recommended that a cluster of five Schwegler 1a swift bricks (or similar) are installed at the northern and western facing gable ends at both Blocks E and F on Bartholomew Street, five clusters in total, totalling 25 swift bricks.

5.10 Peregrine Falcon records were returned in the desktop study and were also observed flying over the site at dusk on several of the bat surveys. They are known to nest and given the height of the buildings; the proposals present a very good opportunity to provide additional nesting habitat for this species. We recommend that a single London Peregrine designed box is installed on a suitable location in the new proposals. Peregrine boxes can be placed on brackets on a wall or could be fitted to a flat roof. Key considerations for the location of this box are:

- Quiet, undisturbed areas away from building occupants (although plant etc does not generally disturb them).
- North/East facing is ideal – i.e. not in full sun.
- 20 – 200m above ground

5.11 A suggested location for this box would be on the large area of Green Roof on the Eighth floor. This area will have no permissive access therefore should provide the ideal undisturbed location for this box.

5.12 An additional consideration would be to carry out monitoring of the box outside of nesting bird season, either by yearly observations or by installing a camera. This will help to keep an eye on occupation and will also provide positive public engagement with the development.

6. CONSEQUENCES FOR DECISION MAKING

Summary of Mechanisms to Secure Impact Avoidance, Mitigation and Compensation Measures

6.1 The following strategies, which will be secured by planning conditions and/or obligations, will be required to ensure the successful implementation of the impact avoidance, mitigation and compensation measures set out in **Section 4**:

- Construction Environmental Management Plan (CEMP);
- Lighting Strategy;
- Section 106 Agreement;
- Landscape Management Plan; and
- European Protected Species Mitigation Licence (EPSL) for bats
- Integrated bat boxes; three clusters of three Schwegler 2FR bat tubes

Biodiversity Net Gain

6.2 In accordance with national and local policy, the Proposed Development will deliver biodiversity enhancements which go above and beyond the measures required to avoid, mitigate and/or compensate for the potential impacts described in **Section 4**, as described in **Section 5**, thereby delivering biodiversity net gain. The enhancement measures are intended to benefit known features of ecological importance present within the ZoI, as well as biodiversity in general, and to contribute towards targets set out within the NPPF and the West Berkshire Core Strategy (2006 – 2026). Key deliverables include:

- Biodiverse specification for green roof areas;
- Installation of Swift Bricks: five clusters of five bricks
- Installation of Peregrine Falcon box

Conclusion

6.3 This EcIA has predicted that, subject to the implementation of the impact avoidance, mitigation and compensation measures set out in **Section 4**, the Proposed Development will not have any significant negative residual effects on IEFs, and will conform to all applicable nature conservation related legislation and policy, as set out at **Appendix 2**

6.4 As a result of the enhancement measures proposed, biodiversity net gain will also be secured, in accordance with relevant planning and biodiversity policy.

7. LEGAL CONSIDERATIONS

7.1 Should planning permission be granted for the Proposed Development, the following legal considerations will apply, in accordance with the following items of legislation:

- The Conservation of Habitats and Species Regulations 2017; and
- The Wildlife and Countryside Act 1981 (as amended);

Bats

7.2 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 Habitats Regulations 2017 (as amended). Development proposals affecting bats or their roosts require a European Protected Species mitigation licence from Natural England. 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.

7.3 The results of the surveys indicate that the Site is in use as a transitional roost by low numbers of a common species of bat. This roost will be lost through redevelopment. In the absence of mitigation, the loss of this roost has the potential to cause an offence under both Acts resulting in a significant negative impact upon the assemblage of bats within the ZoI at the Local Level. Following planning approval, European Protected Species Mitigation Licence (EPSL) for bats will be obtained in order to demolish the building and the bat roost in compliance with legislation.

7.4 The presence of bats will mean that there will be seasonal constraints for destruction of the roost during demolition of the building, which need to be taken into account when planning the build programme.

Birds

7.5 All wild birds are protected under the Wildlife and Countryside Act 1981 (as amended), making it an offence to intentionally kill, injure or take any wild bird and to take, damage or destroy their nests or eggs. In the absence of mitigation, the proposals have the potential to negatively impact the assemblage of nesting birds within the ZoI.

7.6 Any vegetation or features of the Kennet Centre that have the potential to support nesting birds should be removed outside of the nesting bird season (March – mid-September inclusive). Where this is not possible, a nesting bird check must be carried out within 24hrs before vegetation removal. This nest check should be conducted by a suitably experienced ecologist.

Should nesting birds be found, works in the immediate vicinity should not commence/be stopped, and should only recommence when an ecologist has deemed the nest is no longer active.

8. REFERENCES

Bat Conservation Trust (2016). Bat Surveys for Professional Ecologist, Good Practice Guidelines, London.

Chartered Institute of Ecology and Environmental Management (CIEEM) (2019). *Guidelines for Ecological Impact Assessment in the UK and Ireland*. CIEEM, Winchester.

Day, J., Mayer, E. & Newell, D. (2019) The Swift – A bird you need to help. In Practice. 104, 38-42.

Department for Communities and Local Government (2019). *National Planning Policy Framework.*

DCLG (accessed July 2017). *Planning Practice Guidance*. Available from: https://www.gov.uk/government/collections/planning-practice-guidance

Environment Agency (accessed November 2020) *Catchment Data Explorer: Kennet Operational Catchment*. Available from: http://environment.data.gov.uk/catchment-planning/OperationalCatchment/3242

European Commission Urban Wastewater Treatment (accessed November 2020) *The River Kennet*. Available from: https://uwwtd.eu/United-Kingdom/discharge-point/ukenthdp000116/2012

Institute of Lighting Professionals (2018) Bats and artificial lighting in the UK. Guidance Note 08/18.

Kadas, G. (2010) Green Roofs and Biodiversity. Can Green Roofs Provide Habitat for Invertebrates in an Urban Environment? LAP Lambert Academic

Kettel, E.F., Gentle, L.K., Quinn, J.L. & Yarnell, R.W. (2018) *The breeding performance of raptors in urban landscapes: a review and meta-analysis.* Journal of Ornithology**. 159** (1-18)

Kettel, F.E., Gentle, L.K., Yarnell, R.W. & Quinn, J.L. (2019) *Breeding performance of an apex predator, the peregrine falcon, across urban and rural landscapes.* Urban Ecosystems. **22** (117-125)

West Berkshire Local Council, 2012. West Berkshire Core Strategy (2006 – 2026). June 2012.

Maps

MAP 1 Site Location

KEY

Site boundary

SCALE: 1:16,000 at A3

0 250 500 750 1,000 Metres

N

EPR

Ecological Planning & Research

CLIENT: Lochailort Investments Ltd

PROJECT: Kennet Centre, Newbury

DATE: 11 November 2020

Y:\Kennet Centre, Newbury 2049\GIS\Map1_SiteLocation_P2049_915_111120.mxd

P20/49

MAP 2 Nature Conservation Designations

KEY

- Site boundary
- 5km linear distance from site boundary

Non-Statutory Sites

- Local Wildlife Sites (LWS)
- Ancient & Semi-Natural Woodland
- Ancient Replanted Woodland

Statutory Sites

- Special Areas of Conservation (SAC)
- Sites of Special Scientific Interest (SSSI)
- Local Nature Reserves (LNR)

SCALE: 1:38,000 at A3

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

N

EPR
Ecological Planning & Research

CLIENT: Lochailort Investments Ltd

PROJECT: Kennet Centre, Newbury

DATE: 12 November 2020

Y:\Kennet Centre, Newbury 2049\GIS\Map2_Site_Local_Designations_P2049_815_121120.mxd

P20/49

MAP 3 Habitats and Features

KEY

- Site boundary
- Tree
- Buildings & hardstanding

SCALE: 1:800 at A3

0 10 20 30 40 50 Metres

N

Ecological Planning & Research

CLIENT: Lochailort Investments Ltd

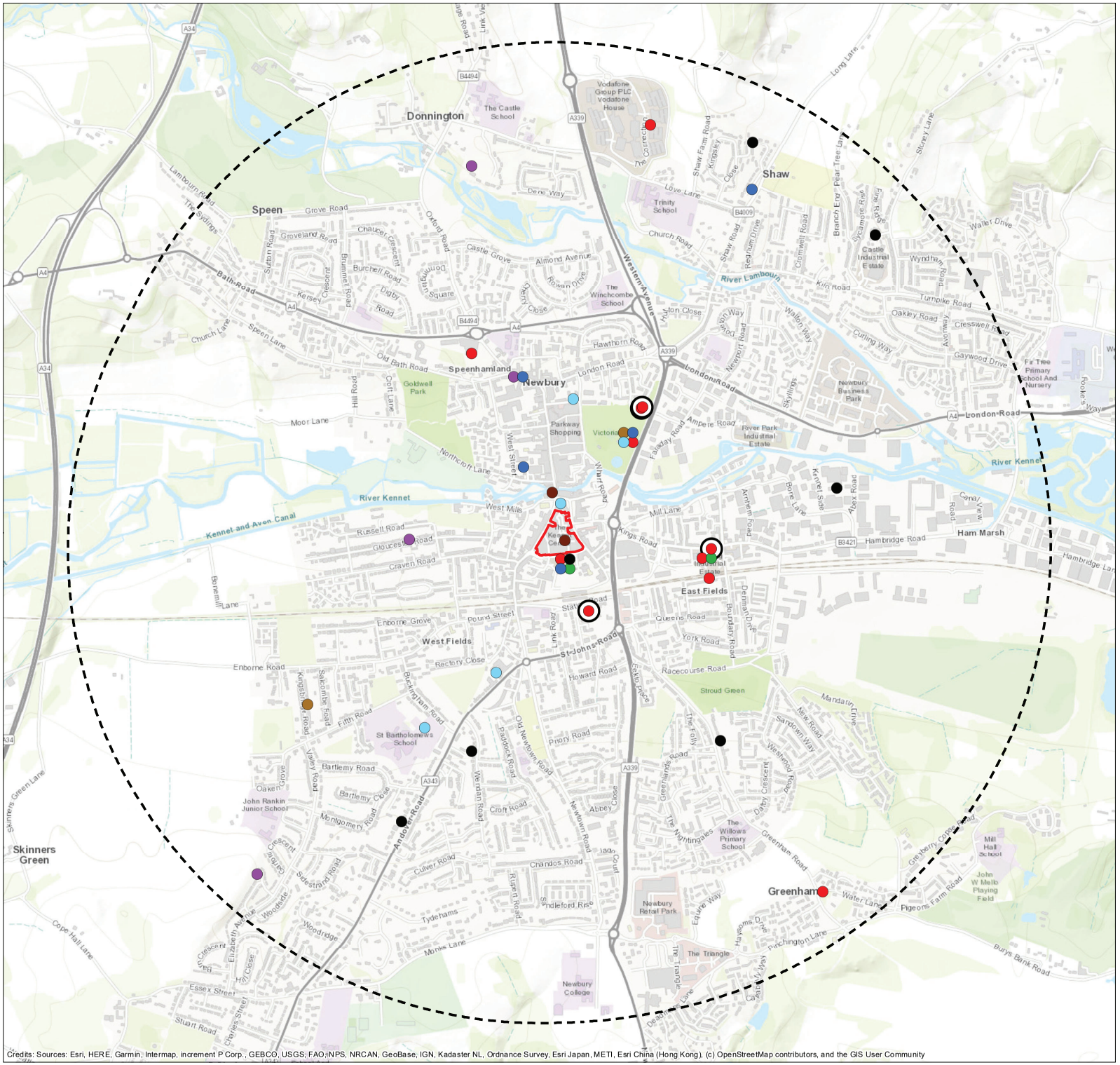
PROJECT: Kennet Centre

DATE: 14 December 2020

Y:\Kennet Centre, Newbury 2049\GIS\Map3_HabitatsAndFeatures_P2049_015_141220.mxd

P20/49

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



MAP 3 Bat Species Records

KEY

- Site boundary
- 2km linear distance from site boundary
- Brown Long-eared bat
- Common Pipistrelle
- Daubenton's bat
- Noctule Bat
- Pipistrelle Bat Species
- Soprano Pipistrelle
- Unidentified Bat
- Whiskered Bat
- Roosts

SCALE: 1:16,000 at A3

0 250 500 750 1,000 Metres

N

Ecological Planning & Research

CLIENT: Lochailort Investments Ltd

PROJECT: Kennet Centre

DATE: 17 November 2020

Y:\Kennet Centre, Newbury 2049\GIS\Map4_BatRecords_P2049_708_171120.mxd

P20/49

Bat Records - ©Thames Valley Environmental Records Centre

MAP 5 Results of Daytime Inspection for Roosting Bats

KEY

- Site boundary
- Surveyor positions
- High roost suitability
- Moderate roost suitability
- Low roost suitability

All other areas within site boundary are negligible potential

SCALE: 1:1,000 at A3

0 10 20 30 40 50 Metres

N

Ecological Planning & Research

CLIENT: Lochailort Investments Ltd

PROJECT: Kennet Centre

DATE: 10 December 2020

Y:\Kennet Centre, Newbury 2049\GIS\Maps\5_ResultsOfDaytimeInspection_P2049_015_101220.mxd

P20/49

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

MAP 6 Bat Survey Results

KEY

- Site boundary
- Survey areas
- West surveyor positions
- East surveyor positions
- Pp Common Pipistrelle
- Ps Soprano Pipistrelle
- Nn Noctule
- (f) Foraging
- (p) Pass
- Emergence
- 04/08/20
- 01/09/20
- 02/09/20 - no bats
- 15/09/20
- 16/09/20
- 29/09/20

SCALE: 1:800 at A3

0 10 20 30 40 50 Metres

N

Ecological Planning & Research

CLIENT: Lochailort Investments Ltd

PROJECT: Kennet Centre

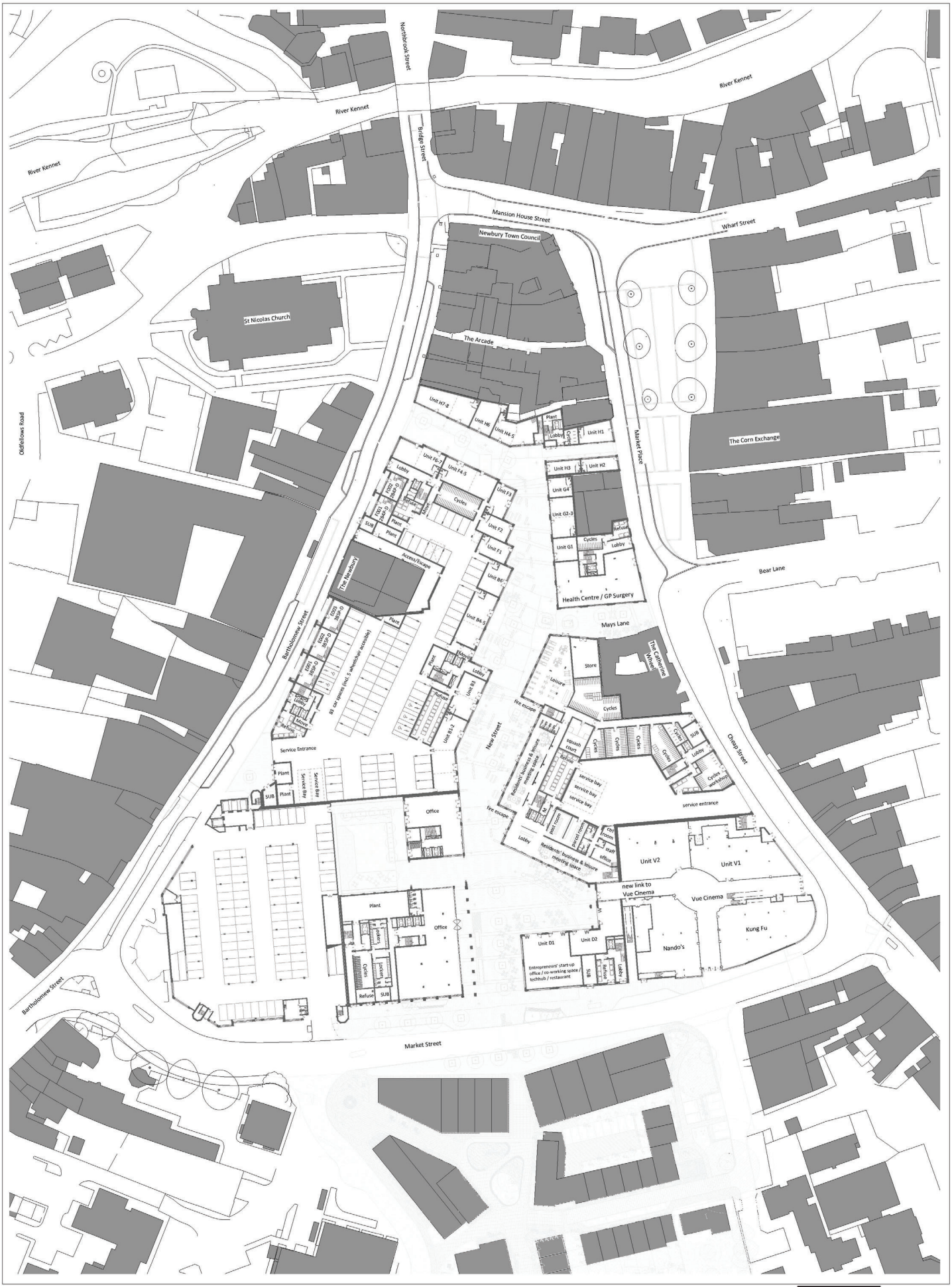
DATE: 14 December 2020

Y:\Kennet Centre, Newbury 2049\GIS\Bats\Map 6_BatSurveyResults_P2049_015_141220.mxd

P20/49

Appendix 1

Eagle Quarter Plans, Rev J



NOTES

CONSULTANTS
- Refer to highways consultant's drawings for details
- Refer to landscape consultant's drawings for details

AREAS
- Refer to area schedule

Rev	Notes	Date	By	Auth
P1	Issued for Planning Submission	12/02/2021		

0m 10m 20m 30m 40m 50m

VISUAL SCALE 1:500 @ A1

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Date: 29/01/2021
Drawn By: LK
Checked by: RC
Scale @ A1: 1 : 500
Scale @ A3: 1 : 1000
CAD File No:

LOCHAILORT

Eagle Quarter, Newbury
Proposed Site Plan - Ground Floor

PLANNING
20011 P0-100

P1
Revision

Appendix 2
Relevant Legislation & Planning Policy

LEGISLATION

The Conservation of Habitats and Species Regulations 2017 (as amended)

The Conservation of Habitats and Species Regulations 2017 (as amended) (known as the "Habitats Regulations") transpose the European Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (the "Habitats Directive") into UK legislation. The Regulations will remain in force until 31 December 2020, the Implementation Period Completion Day for the UK's exit from the European Union.

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 certain actions relating to European Protected Species (EPS), which include *inter alia* Hazel Dormouse *Muscardinus avellanarius*, Great Crested Newt *Triturus cristatus*, European Otter *Lutra lutra* and all native species of bat.

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

Wildlife & Countryside Act 1981 (as amended)

The Wildlife and Countryside Act 1981 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.

Table A1.1: Relevant 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.
Schedule 9a	Allows environmental authorities to issue species control orders to landowners, obliging them to control/eradicate invasive and/or non-native species.

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 2000 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.

The Natural Environment and Rural Communities Act 2006

The Natural Environment and Rural Communities (NERC) Act 2006 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 England. This was published in 2007 and is commonly referred to as the "S41 list". 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-sections of this Appendix.

The Water Environment (Water Framework Directive) Regulations 2017

Currently, the overriding legislation relating to freshwater is the EU Water Framework Directive (WFD), which is enacted into law in England and Wales through the Water Environment Regulations 2017. The Directive sets out objectives to deliver a better water environment based upon achieving a 'good status' for freshwater bodies. The new concept of 'good status' is a more rigorous measure of environmental quality than previous measures, which now takes into account not just the chemical status but also the ecological health and the extent of artificial physical modification to rivers.

The WFD is based upon the concept of protecting water through the management of river basin districts (RBDs), and requires the implementation of River Basin Management Plans (RBMPs). Regulation 17 of the WFD requires local authorities to 'have regard' of the RBMP when making planning decisions, for example through the granting of planning permission with appropriate planning conditions and/or obligations. These could require measures to be implemented (e.g. Sustainable Urban Drainage Systems (SUDS), grey water recycling etc.) or funds to be provided for habitat enhancement schemes.

The WFD also affects planning policy through the implementation of Programmes of Measures for each river basin district. This involves bringing together funding from various sources and co-ordination of the activities of organisations with an interest in the use of land and water, including developers.

SITES DESIGNATED FOR THE CONSERVATION OF NATURE

There is a hierarchy of nature conservation sites which is based on the level of statutory (legal) 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: International

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

The Conservation of Habitats and Species Regulations 2017 (as amended) provide the primary legal basis for the protection of Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) in Great Britain.

SACs are sites which support internationally important habitats and/or species listed as being of Community Importance in the Annexes of the European Habitats Directive 92/43/EEC. SPAs are sites which support internationally important numbers of bird species listed as being of Community Importance in the Annexes of the European Birds Directive 2009/147/EC. Together, SACs and SPAs make up the Natura 2000 network of Sites of Community Importance throughout Europe. They are often referred to as “European sites”.

Ramsar sites are wetlands of international importance and are, as a matter of national planning policy, subject to the same strict protection as SACs and SPAs. The majority of terrestrial Ramsar sites in England are also notified as SPAs and/or Sites of Special Scientific Interest (SSSIs).

Any plan or project considered likely to affect a SAC, SPA or Ramsar site must be subject to a Habitats Regulations Assessment (HRA), as set out under Regulation 63 (and Regulation 105 in respect of Land Use Plans) of the Habitats Regulations 2017 (as amended).

The local authority (or other ‘competent authority’) carries out the HRA, but the onus is on the developer to provide the necessary information to inform this process, usually in the form of a report.

Under the Habitats Regulations 2017 (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. This stage of the HRA process is known as ‘screening’.

If a likely significant effect cannot be precluded (screened out) 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 a significant effect, 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.

Statutory Sites: National

Nationally important sites include Sites of Special Scientific Interest (SSSIs) and National Nature Reserves (NNRs). A development proposal that is likely to affect a nationally important site will be subject to special scrutiny by the local planning 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, as set out in Section 15 of the National Planning Policy Framework (NPPF).

Sites of Special Scientific Interest

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 (SSSIs). These sites have been designated to capture the best examples of England's flora, fauna, geological or physiographical diversity.

National Nature Reserves

National Nature Reserves (NNRs) are declared under the National Parks and Access to the Countryside Act 1949 and the Wildlife and Countryside Act 1981, as amended by the Environmental Protection Act 1990. They are managed to conserve their habitats or to provide special opportunities for scientific study of the habitats communities and species represented within them. NNRs represent the very best parts of England's SSSIs. The majority of NNRs also have European nature conservation designations.

Statutory Sites: Regional/Local

Local Nature Reserves

Local Nature Reserves (LNRs) 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 planning 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 for the conservation of biodiversity in England under Section 41 of the NERC Act 2006. Although these habitats are not legally

protected, 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.

The S41 list also includes species as explained below under 'Species of Principal Importance in England'.

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.

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 conservation and are generally dealt with by an arboricultural consultant rather than an ecologist. Further guidance on TPOs in relation to development is available from the Department for Communities and Local Government.

Surface & Ground Waters

Surface waters (including flowing and standing water) and ground water can directly and indirectly impact upon the conservation of nature.

Guidance on pollution prevention is hosted on the Government's website and focuses on regulatory requirements. This covers topics including the prevention of pollution if you are a business, managing business and commercial waste, oil storage, working on or near water, and managing water on land. Careful planning and the application of these guidelines 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.

Water Resources Act (WRA) 1991

Under the WRA there is strict regulation of discharges (including sediment, chemicals, nutrients) to rivers, lakes, estuaries and groundwaters. It also aims to ensure that polluters cover the costs associated with pollution incidents.

SPECIES PROTECTION

Legally Protected Species

The species listed in the following subsections are protected by law in England. When preparing a planning application, it is essential to determine the presence or likely absence of legally protected species and the extent to which they may be affected by a proposed development. This can best be achieved by undertaking surveys early in the planning process. Avoidance and/or mitigation measures may be required to address any predicted impacts upon protected species and may necessitate a licence. The Government website offers standing advice from Natural England and DEFRA which can be applied to planning applications that affect protected species.

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 Habitats Regulations 2017 (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 mitigation licence from Natural England.

Birds

49 species of bird are listed as Species of Principal Importance in England. All wild 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 (as amended) affords extra protection for certain species and applies harsher penalties for offences. Any intentional or reckless disturbance of a Schedule 1 bird, whilst it is nesting or rearing dependent young, constitutes an offence.

Regulation 10 of the Conservation of Habitats and Species Regulations 2017 (as amended) requires appropriate authorities and conservation bodies, in the exercise of their functions, to take such steps that they consider appropriate in order to secure "*the preservation, maintenance and re-establishment of a sufficient diversity and area of habitat for wild birds in the United Kingdom, including by means of the upkeep, management and creation of such habitat (…)*".

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 legislation, and only where there is a valid justification. The licences most relevant to development scenarios are discussed below.

European Protected Species Mitigation Licences

A European Protected Species mitigation licence (EPSL) 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 Habitats Regulations 2017 (as amended); including inter alia all species of bats, Hazel Dormouse, Great Crested Newt and European 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.

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.

Species of Principal Importance in England

943 species have been identified as being of Principal Importance for the conservation of biodiversity in England under Section 41 (S41) of the NERC Act 2006. The S41 list includes species found in England which have been identified as requiring action under the now superseded UK Biodiversity Action Plan 2007 (plus the Hen Harrier). While many of these species may not be legally protected (some are protected under the legislation described above), there is a clear responsibility on local 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 to enhance their habitats where possible. Additional guidance to developers is typically provided in local level planning policies.

Invasive Non-Native Species

There are a number of species not ordinarily resident in the UK, such as Japanese Knotweed. Those which pose a significant threat, if uncontrolled, 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.

Japanese Knotweed is also classed as ‘controlled waste’ under the Environment Protection Act 1990 (as amended) and if taken off site it must be disposed of safely at a licensed landfill site. Soil containing rhizome material should also be regarded as contaminated and treated accordingly.

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.

PLANNING POLICY & GUIDANCE

This section set out the main planning policy and government guidance that relates to the conservation of nature at all levels of government.

National Level

National Planning Policy Framework 2019

The National Planning Policy Framework (NPPF) 2019 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 11), with economic, social and environmental objectives. This presumption does not apply where a plan or project has failed the ‘appropriate assessment’ test under the Habitats Regulations (paragraph 177).

Section 15 of the NPPF provides guidance on conserving and enhancing the natural environment through the planning system, as summarised below.

Firstly, planning policies and decisions should contribute to and enhance the natural and local environment by applying the following key principles:

- protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);
- minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;

- recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland; and
- preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability.

Section 15 also requires planning policies and decisions to limit the impact of artificial light pollution on nature conservation.

Secondly, when determining planning applications, local planning authorities should apply the following key 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;
- proposed development that is likely to have an adverse effect on a SSSI (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 aged or veteran trees, unless there are 'wholly exceptional reasons' and a suitable compensation strategy exists; and
- development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity.

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

Section 15 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.

Section 15 includes the following text on air quality:

- Planning policies and decisions should sustain and contribute towards compliance with relevant limit values or national objectives for pollutants, taking into account the presence of Air Quality Management Areas and Clean Air Zones, and the cumulative impacts from individual sites in local areas;
- Opportunities to improve air quality or mitigate impacts should be identified, such as through traffic and travel management, and green infrastructure provision and enhancement. So far as possible these opportunities should be considered at the plan-making stage, to ensure a strategic approach and limit the need for issues to be reconsidered when determining individual applications; and

- Planning decisions should ensure that any new development in Air Quality Management Areas and Clean Air Zones is consistent with the local air quality action plan.

The NPPF also sets out principles for plan-making, including the allocation of land with the least environmental or amenity value, and taking a strategic approach to maintaining and enhancing networks of habitats and green infrastructure by identifying, mapping and safeguarding components of local wildlife-rich habitats, wider ecological networks, wildlife corridors and stepping stones, and those areas identified by national and local partnerships for habitat management, enhancement, restoration or creation.

Government Circular 06/05: Biodiversity and Geological Conservation

The Government produced Circular 06/05 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 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 of protected species, and the extent to which thy 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.

MHCLG Planning Practice Guidance

Revised and updated Planning Practice Guidance (PPG) was launched by the Department for Communities and Local Government (now the Ministry of Housing, Communities and Local Government, MHCLG) as a web-based tool in March 2014 to accompany the NPPF. The webpages are set out in a 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*.

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 in relation to biodiversity and the development process. Of particular note is *British Standard BS42020:2013 Biodiversity – Code of practice for planning and development*, 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 NPPF and is aimed at organisations concerned with ecological issues throughout the planning process, including local authorities, developers, planners and ecological consultants. It sets out 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

Regional plans (such as the South East Plan Regional Spatial Strategy) have been revoked, but some specific policies have been saved. The only policy saved from the South East Plan is Policy NRM6, which relates to the Thames Basin Heaths Special Protection Area (TBH SPA).

Local Level

Local Planning Policy of relevance to this Site is found within the West Berkshire Core Strategy (2006 – 2026). Relevant policies within this document include:

- CS14: Design Principles
- CS17: Biodiversity and Geodiversity
- CS18: Green Infrastructure

Other local level policy of relevance includes:

- The West Berkshire Housing Site Allocations DPD (2006 – 2026), Policy GS1: General Site Policy
- The South East Plan – Saved Policy NRM6

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 conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species, and identify and pursue opportunities for securing measureable net gains for biodiversity” (paragraph 174). 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 Framewo*rk 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 on Biological Diversity in 2010.

In England, *Biodiversity 2020: A strategy for England's wildlife and ecosystem services* 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 out objectives relating to terrestrial and marine habitats and ecosystems, species and people.

Local level

While BAPs at the national level have now been superseded by *the UK Post-2010 Biodiversity Framework* and *Biodiversity 2020: A strategy for England's wildlife and ecosystem services*, many county and district level BAPs still exist.

Nature conservation in West Berkshire is coordinated by the Berkshire Local Nature Partnership (BLNP). It is built around Biodiversity Opportunity Areas, which focus on landscape-scale conservation in areas where the creation, restoration and connection of priority habitats will be most effective and benefit the recovery of priority species populations.

Delivering Net Gain

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, and increasingly in local level planning policy.

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 financial support.

Appendix 3
EclA Assessment Methodology

Overview

The approach to Ecological Impact Assessment (EclA) taken in this report takes account of guidance in the Chartered Institute of Ecology and Environmental Management (CIEEM) *'Guidelines for Ecological Impact Assessment in the United Kingdom and Ireland'* (CIEEM, 2019). The Preface of the CIEEM EclA Guidelines states:

"Biodiversity: Code of practice for planning and development published by the British Standards Institute (BS 42020:2013) cites the CIEEM EclA Guidelines as the acknowledged reference on ecological impact assessment. The Guidelines are consistent with the British Standard on Biodiversity, which provides recommendations on topics such as professional practice, proportionality, pre-application discussions, ecological surveys, adequacy of ecological information, reporting and monitoring."

In accordance with the above guidance, EPR takes the following step-wise approach to EclA:

- Prediction of the activities associated with a proposed scheme that are likely to generate biophysical changes which may lead to significant effects (either positive or negative) upon Important Ecological Features (IEFs);
- Identification of the likely Zone of Influence (ZoI) of those activities;
- Scoping to select the ecological features (habitats, species, ecosystems and their functions/processes) that are likely to fall within the predicted ZoIs and be affected by the activities;
- Evaluation of IEFs likely to be affected – both negatively and positively;
- Identification of likely impacts (positive and negative) on IEFs, together with an assessment of the geographic level at which effects are likely to be significant;
- Application of the mitigation hierarchy - refinement of the proposed scheme to incorporate impact avoidance and/or mitigation measures for negative effects on IEFs, and enhancements in order to deliver net gains;
- Assessment of the significance of residual effects and identification of any policy drivers for additional mitigation or compensation in the event of residual significant negative effects; and
- Advice on conformance with policy and legislation.

Ecological Evaluation Method

The evaluation method used in this EclA uses the following geographic scale of importance for ecological features:

- International/European;
- National;
- Regional;
- County (or Metropolitan or Local Authority-wide area);

- Local; and
- Within the Zone of Influence.

With this in mind, features taken forward for detailed impact assessment are those which:

- Are evaluated as being of at least 'Local' ecological importance, or have the potential to be so; and
- Are likely to be affected, positively or negatively, by the proposals.

Ecological features deemed to be of less than 'Local' importance are considered throughout the EcIA process in the context of the national planning policy requirement for 'Biodiversity Net Gain'. The implications for those features that are protected by legislation are also discussed separately at the end of the EcIA report.

Ecological Importance is judged with reference to the following factors:

- Statutory requirements and policy objectives (e.g. site designations or the country lists of habitats and species of principle importance for the conservation of biodiversity); and
- Biodiversity value (e.g. diversity, rarity, scarcity, function within ecosystem, population trends).

Impact Assessment Method

The ecological features selected to be included in the assessment are those which both meet the importance threshold and are likely to be affected by the proposed scheme.

The first stage of the assessment is to determine the potential impacts upon each important ecological feature, with reference to the likely biophysical changes arising from the proposals. Impacts can be characterised according to their extent, magnitude, duration, timing, frequency, reversibility, and whether they are positive or negative.

The likelihood of cumulative impacts with other planned or consented projects is also taken into account at this stage. An assessment is then made of whether the effect(s) of an impact upon an important ecological feature is likely to be considered 'significant' in EcIA terms.

Significant Effects

The EcIA Guidelines state that:

"Significance is a concept related to the weight that should be attached to effects when decisions are made. For the purpose of EcIA, 'significant effect' is an effect that either supports or undermines biodiversity conservation objectives for 'important ecological features' or for biodiversity in general……in broad terms, significant effects encompass impacts on structure and function of defined sites, habitats or ecosystems and the conservation status of habitats and species (including extent, abundance and distribution)." [our emphasis]

Put simply, an effect is considered significant if it is likely to change the structure and function of defined sites and ecosystems or the conservation status of habitats and species.

Professional judgement about significance is informed by conservation objectives for the affected feature, where available (for example conservation objectives set by Natural England for European designated sites, or in habitat and species action plans). The ‘conservation status’ (habitats and species) or the degree to which a feature is exhibiting ‘integrity’ in terms of structure, function and condition (defined sites or ecosystems) is also considered. The predicted effect of natural and man-made trends in the absence of development is also taken into account in determining the conservation status or integrity of a feature and in considering whether otherwise insignificant effects may contribute to a significant cumulative effect.

The CIEEM Guidelines state:

“The evaluation of significant effects should always be based on the best available scientific evidence. If sufficient information is not available further survey or additional research may be required. In cases of reasonable doubt, where it is not possible to robustly justify a conclusion of no significant effect, a significant effect should be assumed. Where uncertainty exists, it must be acknowledged in the EcIA.”

Opportunities for Mitigation and Compensation to Achieve Biodiversity Net Gain

EPR will advise the applicant’s team about how a scheme may be refined, in accordance with the mitigation hierarchy, to achieve net gains in biodiversity. Once the biodiversity measures are agreed, EPR will assess any residual effects and advise on the degree of compliance with national and local policy and nature conservation legislation. This process may evolve with the design of the development. In some instances, it may not be possible to avoid all the significant adverse effects or to deliver biodiversity net gain within the development site. In that case, EPR will advise of any opportunities to contribute to wider (offsite) biodiversity strategies which would deliver the appropriate mitigation, compensation and/or enhancement.

The final agreed measures will be set out clearly, so that the LPA can readily understand what planning conditions or legal agreements are required to achieve the necessary level of policy and legal compliance.

Appendix 4
Survey Methodology and Results

Bats

Daytime Inspection

Method

A desk 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 interrogation of internet resources including the Government's Multi-Agency Geographic Information for the Countryside (MAGIC), aerial photos and current Ordnance Survey maps. Reference was also made to local planning policies, strategies and initiatives relating to biodiversity as detailed in **Appendix 1**. Thames Valley Environmental Records Centre were commissioned to provide information from their databases on existing data. Records of protected bat species were identified within a 2km radius of the Site.

The field survey was completed by Ann Bailey and Collen Hope, a licensed bat ecologist, on 31st July 2020. The site and the predicted Zone of Influence of the proposals was walked, recording features of potential value to bats and any evidence of, or potential for bats to be using the site in accordance with the methods described below. The Site was inspected from both street and roof level. Internal areas with potential to support roosting bats (for example loft voids) were inspected where access was permitted.

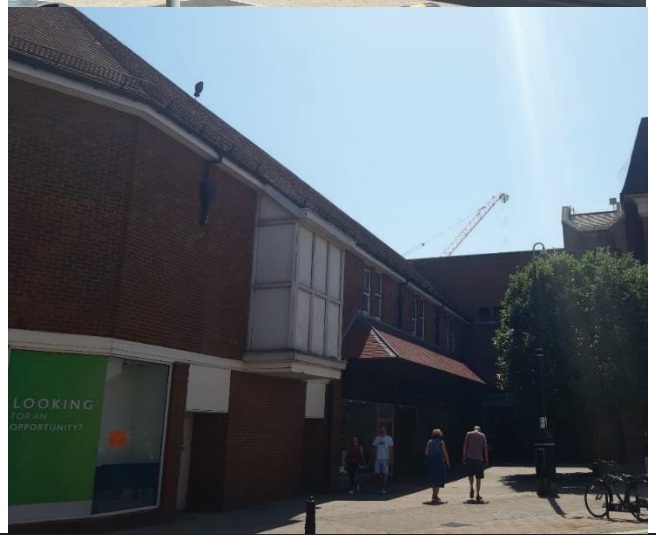
Results

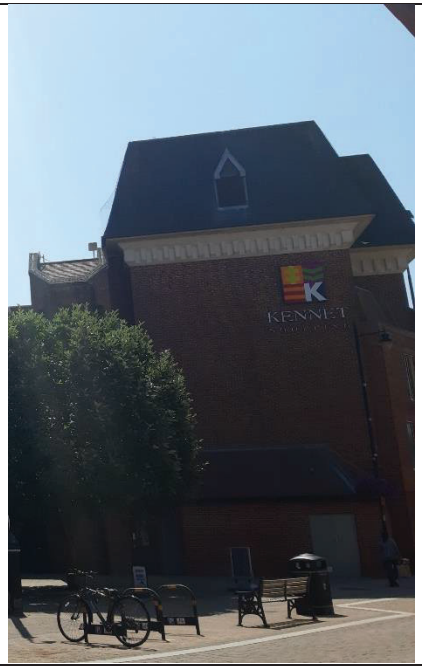
See **Table 1** below for unit-by-unit results of the daytime inspection for bats.

Unit Details	Corresponding Ground Level Surveyor Position (**Map 5**)	Bat Potential Rating	Notes	Photo
Vue Cinema	-	Negligible	Might be retained as part of proposals. Metal cladding, no weep holes, brick beneath, flat roof. No potential roosting features	-
Two vacant lots and Sundaes Gelato	1	Low	Brick, flat roof, very few weep holes, no visible gaps around windows, habitat immediately adjacent is poor. Some brick gaps around the corner, visible from position A at the bus stop	

Out of boundary, Save the Children, Classic Tattoo and The Catherine Wheel pub	1/2	High	Not within boundary, clay tiled roof, clay hanging tiles, approximately 50% of roof tiles were slipped/cracked providing gaps across roof	
Number 96	2	High	Brick walls with weep holes, clay tile roof with slipped tiles	
Coral and one-stop	2/3	High	Brick walls and weep holes, 20% slipped or missing tiles, soffits with gaps	

Vacant and Pizza express	3	Moderate	Slate tiled roof, gaps around grouting at edge (visible from roof), rendered wall over brick, sash windows.	
Vacant, Nero and Laura Ashley	4	High	Weep holes in brickwork, clay roof next to globe with hanging tiles, clay roof behind attached to Kennet Centre. Cladding	
The Newbury	5	High	Out of boundary, clay tiled roof, brick, slate roof	

Vacant Debenhams up to multi-storey	6 + 7	High	Bricks, gaps to wooden soffit and barge board on side, 5-10% gaps, weep holes	 

Multi-storey car park	7/8	High	Not within current boundary, lots of weep holes and gaps in brickwork , slate roof with gaps around windows and soffit	
Brick wall with metal murals	-	Negligible	Flat roof, gaps around metal murals, no visible gaps in brickwork	-
Old nightclub next to ramp	8	Low	Flat roof, some gaps and weep holes in brickwork with roosting potential, no visible gaps around windows	

Emergence and Re-entry Surveys

To effectively cover all aspects and features with bat roosting potential, the Kennet Centre was divided into two cross-sectional halves creating an east side and a west side. Each of the two 'sides' were subject to three nights of survey in accordance with industry standard guidelines for structures possessing high suitability. Four dusk emergence and two dawn re-entry surveys were conducted on the Kennet Centre between August and September of 2020. The methods employed take due consideration of the Bat Survey Good Practice Guidelines produced by the Bat Conservation Trust (2016).

Experienced bat surveyors were positioned in static locations in order to provide comprehensive coverage of the target buildings. Surveyor locations are shown in **Map 5**. Using standard recording techniques, a note was made of each bat pass. Surveyors used a combination of heterodyne, auto-heterodyne, time expansion and frequency division bat detectors (Petterson D240X, Anabat Scout and Bat Box Duet) and recordings were made where appropriate, to enable subsequent analysis of calls. **Table 2** below details the weather conditions and timings of each survey.

Table 2: Metadata for emergence/re-entry bat surveys of the Kennet Centre. Weather data reported as degrees Celsius, cloud cover (cc) and wind speed (using the Beaufort Scale (BF)).

Date	Survey Type	Start Time	End Time	Weather Data	Notes
04/08/2020	Dusk	20:32	23:17	16.8°C – 15.2°C 90% cc BF 2-3	
01/09/2020	Dusk	19:35	21:20	18.5°C – 17.3°C 100% cc BF 0	
02/09/2020	Dawn	04:50	06:36	9.5°C – 7.9°C 30% cc BF 1	
15/09/2020	Dusk	19:03	20:48	23°C - 17°C 80% BF 1-2	
16/09/2020	Dawn	05:13	06:45	16°C - 15°C 70% cc BF 1	
29/09/2020	Dusk	18:31	20:16	17.2°C – 14.4°C 60% cc BF 1-2	