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ECOLOGICAL IMPACT ASSESSMENT REPORT

AVONSIDE, MELKSHAM, SN12 8BT

CREATE REAL ESTATE

Document Ref: WWE25110 EcIA | 18/09/2025

Client:	Create Real Estate
Site/Job:	Avonside, Melksham, SN12 8BT
Report title:	Ecological Impact Assessment Report
Report reference:	WWE25110 EcIA

Grid Reference:	ST 90285 64120
Survey date(s):	PRA: 03/07/2025 Bat emergence surveys: 23/07/2025, 13/08/2025, 03/09/2025
Surveyed by:	PRA: Peter Hacker ACIEEM and Harriette Razey Bat emergence surveys: Peter Hacker ACIEEM, Caroline Gregory, Jessica Boddy, Harriette Razey, Alina Karateke, Wendy Priest
Architect/Agent:	Chris Williams

VERSIONING AND QUALITY ASSURANCE

Status	Date	Author	Reviewed by	Approved by
Final	18/09/2025	Peter Hacker ACIEEM Senior Ecologist	Peter Hacker ACIEEM Senior Ecologist	Misho Baxendale Principal Arboriculturist and Ecologist

DISCLAIMER

This document has been prepared by Wildwood Ecology Limited for Create Real Estate solely as a Ecological Impact Assessment Report. Wildwood Ecology Limited accepts no responsibility or liability for any use that is made of this document other than by the client for the purposes for which it was originally commissioned and prepared.

The evidence which we have prepared and provided is true and has been prepared and provided in accordance with the guidance of The Chartered Institute of Ecology and Environmental Management's Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bona fide opinions.

Purpose
Wildwood Ecology was commissioned by Create Real Estate (the client) to undertake an Ecological Impact Assessment (EcIA) at Avonside, Melksham, SN12 8BT. The site is subject to proposals for the redevelopment of the onsite buildings, including the demolition of block G, Scott's gym, and two single story elements. The other onsite buildings are subject to refurbishment and external alterations.
Work undertaken
A Preliminary Roost Assessment (PRA) was undertaken at the onsite buildings, consisting of a desk study and field survey carried out on 03/07/2025 following best practice in line with the Bat Surveys for Professional Ecologists: Good Practice Guidelines, 4th edn. (Collins 2023). Three dusk bat emergence surveys were undertaken from July to September 2025 following survey guidelines (Collins, 2023).
Impacts and Effects
Due to the proposed works, it is likely that in the absence of mitigation there will be adverse effects on the following ecological features: • River Avon SAC; and • foraging and commuting bats.
Recommendations Compensation and Enhancements
Designated sites in the vicinity of the site require further consideration as follows: • River Avon SAC – a construction environmental management plan (CEMP) will be required post planning, to ensure that impacts to the River Avon SAC are avoided or appropriately mitigated. • A suitable drainage strategy / plan should be produced, demonstrating how waste water resulting from the new residential dwellings will be taken into consideration. Additional outflow of waste water into the River Avon SAC must be avoided, unless suitably mitigated in the drainage strategy and agreed with Natural England. <i>Bats</i> Mitigation measures during the construction phase of the proposed development are required as follows: • due to the large number of features present within the Scott's Gym building and the extensive use of the building by bats as a commuting feature, it is recommended that this building be removed under supervision of a bat licenced ecologist. • A sensitive lighting plan should be produced, demonstrating consideration for bats with dark flight lines retained to ensure the proposed development would not have a detrimental effect on bats commuting/ foraging along nearby habitat.

¹ CIEEM (2019). *Advice Note: On the Lifespan of Ecological Reports and Surveys*. Chartered Institute for Ecology and Environmental Management, Winchester.

Conclusions

Providing that the recommendations outlined in this report are implemented in full, the proposed development will adequately mitigate, compensate, and enhance the protected, priority and notable habitats and species within and adjacent to the site.

This report will remain valid for a maximum period of 18 months from the date of the last survey¹ - i.e. until 01/04/2027. In the case of certain exceptions, data may only be valid for 12 months, examples include:

- where a site may support existing or new features which could be used by mobile species, such as bats and birds, within a short timeframe;
- where bats and birds are present onsite or in the wider area, and can create new features of relevance to the assessment; and
- where country-specific or species-specific guidance dictates otherwise.

Further surveys may be required to update the site information if planning is not obtained, or works do not commence within this time period.

¹ CIEEM (2019). *Advice Note: On the Lifespan of Ecological Reports and Surveys*. Chartered Institute for Ecology and Environmental Management, Winchester.

1 INTRODUCTION

- 1.1 Wildwood Ecology was commissioned by Create Real Estate (the client) to undertake an Ecological Impact Assessment (EcIA) at Avonside, Melksham, SN12 8BT (the site), centred at grid reference: ST 90285 64120.
- 1.2 This report has been written in cognisance of the CIEEM Guidelines on: Ecological Report Writing and Ecological Impact Assessment, with full survey methodology provided in the appendices.

Site description

- 1.3 The aerial image of the site (Figure 1) showed the site to consist of seven building blocks and multiple separate buildings, containing commercial lets. The site is located immediately north of the River Avon, close to the centre of Melksham. The landscape around the site is comprised of residential dwellings and commercial properties, alongside roads and other infrastructure.

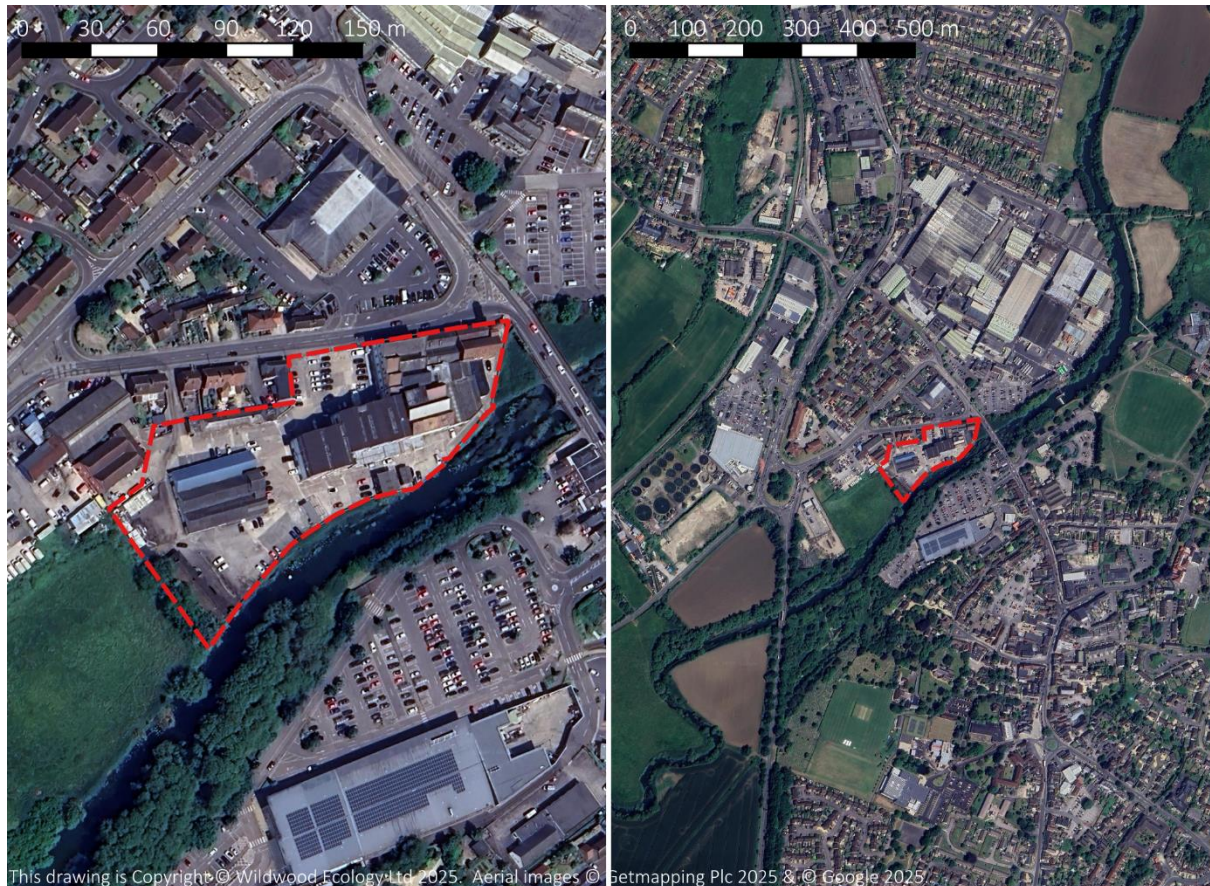


Figure 1 - Aerial image of the site. Red line shows the site boundary. Image used under licence (@2025 Google). Figure created: 17/09/2025.

Proposed development

- 1.4 The site is subject to proposals for the redevelopment of the onsite buildings, include the demolition of block G, scotts gym and two single story elements. The other onsite buildings are subject to refurbishment and external alterations.



Key



Site boundary



Buildings to be refurbished or retained



Buildings to be demolished

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Figure 2 - Structure locations and suitability. The numbers and letters refer to the identification of blocks/buildings on site, where RSS represents riverside single storey and SSE refers to single storey extension.

Data collected

1.5 Data from the following sources was used to inform this report:

- Desk study undertaken on 15/07/2025 including:
 - Wiltshire & Swindon Biological Records Centre; and
 - Multi-Agency Geographic Information for the Countryside (MAGIC).
- Preliminary Roost Assessment (PRA) survey undertaken on 03/07/2025.
- Further surveys including:
 - Bat emergence surveys, undertaken on 23/07/2025, 13/08/2025, 03/09/2025

1.6 Full information on the data sets and search buffers used can be found in the appendices.

Purpose of this report

1.7 The purpose of this report is to provide sufficient information for the local planning authority to fully assess the ecological impacts of the proposed development.

1.8 Key objectives are to identify:

- the likely ecological constraints associated with the proposed development;
- mitigation measures likely to be required, following the 'Mitigation Hierarchy'; and
- opportunities for the proposed development to deliver ecological enhancement.

Limitations and assumptions

1.9 The following limitations relevant to this assessment were noted:

- The internal space of Scott's Gym could not be accessed, as the entire building is sealed. However, due to the number of features observed during the external survey of the building, an accurate assessment of the building's suitability for bats could be made.
- Due to the height and layout of the buildings, parts of the roof of the building could not be directly observed from the ground. However, the underside of the roof of the building could be seen during the internal checks and a full assessment of the roof could be made.

1.10 No other limitations were encountered, or assumptions made during either the desk study or the field survey and it is considered that with the access gained and recording undertaken an accurate assessment of the site's ecological importance has been made.

2 RESULTS

Links to the surrounding landscape

- 2.1 The site had good connectivity to the surrounding landscape via the River Avon, which runs adjacent to the southern site boundary. However, elsewhere onsite the connectivity to the surrounding landscape is poor, given the sites location within Melksham.
- 2.2 The wider landscape was comprised of the town of Melksham. To the north-east and south-west, there are tree-lines following the River Avon that connect to habitats beyond the town, however these are not directly connected to onsite habitats.

Desk study

Designated sites

- 2.3 There were two statutory international designated sites requiring special consideration (Special Areas of Conservation (SAC), Special Protections Areas (SPA), and RAMSAR sites) within 20km. These include the Bath and Bradford on Avon Bats SAC, located 7.8km north of the site and the River Avon SAC, located adjacent to the southern site boundary.
- 2.4 There were no statutory national designated sites (Site of Special Scientific Interest (SSSI), National Nature Reserves (NNR), and Local Nature Reserves (LNR)) within 2km.
- 2.5 There were two non-statutory sites (Sites of Interest to Nature Conservation (SINC) and Local Wildlife Sites (LWS) within 1km of the site.

MAGIC map results

- 2.6 Results from desk study data showed that there were 18 granted European Protected Species (EPS) licences for bats within 5km of the site. The most recent licence was granted in 2020, 4.8km west of the site, for the destruction of a breeding site and destruction to a resting site for brown long-eared, common pipistrelle, greater horseshoe, lesser horseshoe and Natterer's bat. The closest licence was located 625m west of the site and granted in 2011 for the destruction of a resting site for brown long eared, common pipistrelle, soprano pipistrelle, and serotine.

Light pollution

- 2.7 The site is in an urban area with high levels of light pollution (VIIRS Data Base, 2024).

Habitat Regulations Assessment (HRA) Screening

The site was situated within the Zone of Influence (Zoi) of the following international designated sites:

- River Avon SAC

Due to the potential for adverse effects on the integrity of the international designated sites identified above, from the risk of waste water and other pollution, an HRA will likely be required to determine the likelihood of an adverse effect on the integrity of those sites and whether mitigation measures will be required.

Priority and notable habitats

2.8 The following priority/notable habitats were noted within and adjacent to the site:

- Priority River

Priority and protected species

2.9 Priority and protected species records were returned from the Wiltshire & Swindon Biological Records Centre for species located within 2km of the site. Key species records can be found below, with the full data set available upon request:

- maternity roosts of the following species were returned within the search radius: common pipistrelle and soprano pipistrelle;
- [REDACTED]
- signs of beaver were returned within the search radius;
- six counts of great crested newt were returned within the search radius;
- seven counts of otter were returned within the search radius with the closest record being for a spraint located 60m south of the south; and
- 23 counts of water vole were returned within the search radius.

PEA

2.10 A Preliminary Ecological Appraisal (PEA) was not undertaken at the site, as the onsite habitat consist of only building and hardstanding, with no other habitats present within the site boundary. However, due to the proximity of the site to the River Avon SAC, the potential for priority, protected or notable species to be present onsite is considered below.

Table 1 - Protected species onsite

Species or group	Habitat suitability	Site connectivity	Presence confirmed?
Amphibians, including great crested newt	N/A	None	N/A
Badger	N/A	Poor	N/A
Bats	Poor	Excellent/direct	Directly observed onsite
Beaver	N/A	None	No evidence identified by the site is well connected to suitable habitat offsite
Birds	Poor	Good	No evidence identified but the site is well connected to suitable habitat offsite

Fish	N/A	N/A	No evidence identified but the site is well connected to suitable habitat offsite
Fungi	N/A	N/A	N/A
Hazel dormouse	N/A	None	N/A
Hedgehog	N/A	Poor	N/A
Invertebrates	N/A	Poor	No evidence identified but the site is well connected to suitable habitat offsite
Otter	N/A	Good	No evidence identified but the site is well connected to suitable habitat offsite
Reptiles	N/A	Poor	No evidence identified but the site is well connected to suitable habitat offsite
Water vole	N/A	Good	No evidence identified but the site is well connected to suitable habitat offsite

2.11 Notably, the site is located adjacent to the River Avon, but is separated from the river by a concrete embankment, approximately 3-4m in height. While it can be confirmed from local records that otter, water vole and beaver are present within the nearby River Avon, the embankment would act as a significant barrier to these species accessing the site. Additionally, there are no onsite habitats suitable for these species to use for foraging, therefore the likelihood that these species are using the onsite habitat is low.



Figure 3 - Photo taken from google street-view, showing the height of the embankment separating the site from the River Avon. © 2025, Google.

Bats

PRA

2.12 A PRA survey was undertaken at the site on 03/07/2025, led by Peter Hacker ACIEEM Senior Ecologist.

2.13 Descriptions of the structures surveyed during the PRA are summarised in Table 2. Structure locations can be seen in Figure 2. Other sections of the main building which are not being directly impacted (blocks A, E and F) are not included.

Table 2 - Structures surveyed during the PRA

Structure reference	Building description	Development plans
Block A	Ceramic brick building with a corrugate sheet metal roof. The building has multiple pitches which are faced with concrete. Thin roof construction (plastic felt lining between wooden panels and roof sheeting). Internally, there is a large, open loft space with natural and artificial light.	Hospitality/commercial use - refurbished
Block B	Ceramic brick building with a corrugate sheet metal roof. The building has multiple pitches which are faced with concrete. Thin roof construction (plastic felt lining between wooden panels and roof sheeting). Internally, there is a large, open loft space with natural and artificial light. Infrequently used (biweekly visits, with minimal storage). Roof,	Hospitality/commercial use - refurbished

	walls, and brickwork intact. Adjacent boxing gym causes regular loud noise into the evening (top of Block A) (Figure 3 and 4).	
Block C	Ceramic brick building with a corrugate sheet metal roof. The building has multiple pitches which are faced with concrete. Thin roof construction (plastic felt lining between wooden panels and roof sheeting). Internally, there is a large, open loft space with natural and artificial light.	Change of use (to residential)
Block D	Top floor opens into loft space via large areas of fallen ceiling (Figure 6). Top floor unused, with extensive bird droppings. Very bright due to large windows (Figure 5). Loft space is divided and does not span the full block. Roof sheeting fixed directly onto timber battens with metal roofing. Large plastic roof sections allow light and warmth in. Bright open area with partially transparent plastic roofing across half of this space (Figure 7). Large section with numerous windows; high temperatures due to sun exposure. Significant accumulation of pigeon droppings throughout (Figure 8).	Change of use (to residential)
Block E	Ceramic brick building with a corrugate asbestos roof. The building has multiple pitches which are faced with concrete. Thin roof construction (plastic felt lining between wooden panels and roof sheeting). Internally, there is a large, open loft space with natural and artificial light.	Retained
Block F	Ceramic brick building with a ceramic tile roof. Thin roof construction comprises wooden panels and roof tiles). Internally, there are internal loft spaces which were inaccessible at the time of survey.	Retained
Block G	Ceramic brick building with a corrugate sheet metal roof. The building has multiple pitches which are faced with concrete. Thin roof construction (plastic felt lining between wooden panels and roof sheeting). Internally, there is a large, open loft space with natural and artificial light. The roof includes a small tower, which includes windows allowing a large amount of natural light into the building.	Retained
Riverside single storey element	Wooden horizontal beam above the toilet block is rotten in places (Figure 12). Brick work in good condition and windows flush to the building.	Demolition
Single story extension	Small brick building with bitumastic felt roof and timber soffits.	Demolition

Scott's gym	Tree line to southeast leading to river. Potential bee nest on southwest side. Wooden cladding in poor condition with holes and lifting panels. Bird droppings odour inside. Boarded windows. Broken window and cavity wall behind cladding. Moss-covered roof with few tile gaps.	Demolition
3	A ceramic brick construction, with roof structures comprising corrugated asbestos or corrugate metal sheeting. The building has timber soffit boards in places, including around a 2 storey section of the building. The building could not be accessed internally.	Retained
7-11	Ceramic brick and concrete construction, with corrugate asbestos roof sheeting. Part of the brick has a flat, metal sheet roof. The building has a tight timber soffit around the pitched section of the roof.	Retained
13	A small ceramic brick building with a corrugate asbestos, single-pitched roof.	Retained
14	A 2-storey ceramic brick building with a flat, bitumastic felt roof.	Retained
15	A single storey ceramic brick building with a pitched corrugate asbestos roof.	Retained



Key

 Site boundary  High suitability buildings  Negligible suitability buildings

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2.14 Survey results, including the suitability of each structure for roosting bats and a description of potential roost features, can be found in Table 3.

Table 3 – Structure information and survey results.

Structure reference	Suitability for bats	Potential roost features and evidence of use identified
Block A	Negligible	No features were noted to provide suitable roosting features for bats.
Block B	Negligible	No features were noted to provide suitable roosting features for bats.
Block C	Negligible	Wooden horizontal beam around the top of the toilet block is rotten providing minor gaps in the woodwork (Figure 13).
Block D	Negligible	No features were noted to provide suitable roosting features for bats.
Block E	Negligible	No features were noted to provide suitable roosting features for bats.
Block F	Negligible	No features were noted to provide suitable roosting features for bats.
Block G	Negligible	No features were noted to provide suitable roosting features for bats.
Riverside single storey element	Negligible	No features were noted to provide suitable roosting features for bats.
Single story extension	Negligible	No features were noted to provide suitable roosting features for bats.
Scott's gym	High	1. Multiple lifted and damaged timber cladding panels provide access to cavity walls (Figure 15). 2. Gaps all around where the porch joins the main building (east side) (Figure 14). 3. Gaps along the gable end on the west side. 4. Numerous holes in wooden panels provide access to cavity wall. 5. Broken windows offer further ingress points (Figure 16). 6. Boarded windows create a dark interior; gaps between boards and structure may be used by bats.

Structure reference	Suitability for bats	Potential roost features and evidence of use identified
		7. Roofing felt allows bats to crawl into the building. 8. Access underneath the whole building could support species such as lesser horseshoe bat. 9. Gaps in the soffit (Figure 17).
3	Negligible	No features were noted to provide suitable roosting features for bats.
7-11	Negligible	No features were noted to provide suitable roosting features for bats.
13	Negligible	No features were noted to provide suitable roosting features for bats.
14	Negligible	No features were noted to provide suitable roosting features for bats.
15	Negligible	No features were noted to provide suitable roosting features for bats.

2.15 It is unlikely that bats are using onsite habitats to forage, as the site is entirely comprised of hard standing. However, adjacent habitat features are likely to be used by foraging and commuting bats, especially across the nearby River Avon and along a tree-line to the west of the site.

Bat emergence surveys

2.16 A summary of survey timings can be found in Table 4.

Table 4 - Emergence survey timings and weather conditions

Date	Survey Timing			Conditions			
	Start	End	Sunset / Sunrise	Temp [°C]	Cloud Cover [Oktas]	Wind Speed [Beaufort]	Rain
23/07/2025	20:54	22:39	21:09	20	8/8	1	Nil
13/08/2025	20:19	22:04	20:34	21	7/8	1	Nil
03/09/2025	19:34	21:19	19:49	18	4/8	1	Nil

2.17 The results of the bat emergence surveys are summarised in Table 5.

Table 5 - Emergence survey results.

Survey type and date	Roosts / points of particular interest	General observations	Equipment Used	Surveyors
23/07/2025	No emergences	A large amount of foraging by soprano pipistrelle over the river and north of the building. Commuting by common pipistrelle, lesser horseshoe, Leisler's bat and serotine also heard.	Batlogger M2, Nightfox Whisker, Thermal vision ecology thermal imaging camera	CG, HR, AK, WP
13/08/2025	A possible emergence from underneath the building by lesser horseshoe was observed. Later analysis was able to establish that the bat had not emerged.	Moderate foraging and commuting along the tree-line to the south-west of the building. Lower levels of foraging to the north-east, where artificial light levels are high. Common pipistrelle, soprano pipistrelle, brown long-eared, noctule, serotine, lesser horseshoe and greater horseshoe all heard.	M2, Nightfox Whisker, Thermal vision ecology thermal imaging camera	CG, HR, AK, WP
03/09/2025	Lesser horseshoe was observed foraging within a dark corridor between the building and the tree-line, but no bats were observed to emerge.	Bats were observed foraging over the nearby River Avon and commuting over the top of the building. Common pipistrelle, soprano pipistrelle, serotine, noctule, Leisler's and lesser horseshoe identified.	M2, Nightfox Whisker, Thermal vision ecology thermal imaging camera	PH, HR, AK, WP

2.18 Bat flight-lines identified during the emergence surveys can be seen in the appendices.

3 IMPACTS AND EFFECTS

- 3.1 The following discussion and assessment are provided to ensure compliance with legislation and planning policy (see Appendices).

Impacts of the proposed development

- 3.2 The site is subject to proposals for the redevelopment of the onsite buildings, include the demolition of block G, Scott's gym and two single story elements. The other onsite buildings are subject to refurbishment and external alterations.
- 3.3 Due to the proposed works, it is likely that in the absence of mitigation there will be adverse effects on the following designated sites, habitats, and species:
- River Avon SAC
 - Foraging and commuting bats
 - Nesting birds
 - Badger (commuting only)
 - Otter (commuting only)
- 3.4 A summary of impacts and effects can be found in Table 6.

Table 6 - Summary of potential impacts

Ecological feature	Potential impacts and effects	Cause of impact	When will impacts occur?
River Avon SAC	Degradation of the designated site.	Soil run off, chemical spillage, dust deposition, waste water from new residential dwellings.	Construction phase / Operational phase
Foraging and commuting bats	Lighting of notable commuting routes and foraging areas.	Increased lighting over the nearby River Avon, removal of a building which forms part of a commuting/foraging corridor.	Operational phase
Badger - potential to move onto site from nearby habitats	Killing/injury of badger.	Although there is no suitable habitat onsite, during construction works, badger may move onto site from nearby habitats and be killed/injured.	Construction phase
Breeding birds likely/confirmed nesting onsite	Destruction of an active nest.	Demolition of onsite buildings will result in the destruction of nests if breeding birds are present.	Demolition phase
Otter, Water Vole, and Beaver	Degradation of a watercourse known to support otter, water vole, and beaver populations, direct killing/injury, disturbance via increased lighting and/or human activity.	Although otter, water vole, and beaver are unlikely to move across the site due to a lack of suitable habitat, these species accessing the site during construction works may be killed/injured. Increased lighting over the nearby River Avon may also impact local otter, water vole, and beaver populations.	Construction phase / Operational phase

4 RECOMMENDATIONS, COMPENSATION AND ENHANCEMENTS

- 4.1 There are a number of impacts and effects on ecological features which cannot be eliminated as a result of proposed mitigation measures.
- 4.2 Due to these resulting impacts and effects, the following recommendations and compensation measures are suggested:

Recommendations / compensation measures

Designated sites/Priority habitats

- 4.3 The proposed development lies adjacent to the River Avon SAC and further consultation with Natural England will be required. The proposed demolition of onsite buildings and conversion of over buildings to residential use may result in dust deposition, soil run off and chemical spillage during the demolition/construction phases and waste water outfall from the development during the operational phase. A Habitat Regulations Assessment (HRA) may be required by Natural England if the risk of an adverse effect is considered high.
- 4.4 A construction environmental management plan (CEMP) will be required post planning to ensure that impacts to the River Avon SAC are avoided or appropriately mitigated.
- 4.5 A suitable drainage plan should be produced, to demonstrate how additional waste water resulting from conversion of onsite building to new residential dwellings will be taken into consideration. There should not be an increase in waste water outfall into the River Avon, unless suitably mitigated as part of the drainage plan and agreed with Natural England.

Bats

- 4.6 No roosts were identified within the onsite buildings during the PRA/emergence surveys. Therefore, a European Protected Species Licence (EPSL) for bats will not be required from Natural England. However, due to the large number of features present within the Scott's Gym building and the extensive use of the building by bats as a commuting feature, it is recommended that this building be removed under supervision of a bat licenced ecologist. And under precautionary working methods. The working methods will include a general inspection/ inspection of features for signs of use by bats immediately prior to demolition, using a endoscope to inspect hard to reach features where necessary.
- 4.7 If a bat is found during the demolition of the former Scott's Gym building, all works will cease and a suitably licenced ecologist will be contacted. Works will not be able to proceed until a EPSL is granted by Natural England and suitable mitigation installed.
- 4.8 All UK bats are nocturnal species and some species are light-averse (horseshoe bats, brown long-eared and Myotis particularly so). Artificial lighting of foraging and commuting routes is known to act as a barrier to bats and fragment otherwise suitable habitats, causing a negative impact on their local populations. As all of the above listed light-averse species were observed to commute at and around the site, dark zones should be maintained around key foraging and commuting areas

to avoid impacting upon foraging and commuting features. In particular, the south-west site boundary and the River Avon will not be lit beyond current levels.

- 4.9 As areas of the site will require new lighting, a sensitive lighting plan should be produced, demonstrating consideration for bats with dark flight lines retained to ensure the proposed development would not have a detrimental effect on bats commuting/ foraging along nearby habitat. The external works for the proposed development should be undertaken during daylight hours.
- 4.10 Suggestions for mitigating the light impact on bats are outlined in Guidance Note 08/23 - 'Bats and artificial lighting in the UK; Bats and the built environment series' (The Bat Conservation Trust, BCT, and the Institution of Lighting Professionals, ILP). These are summarised in the appendices.

Birds

- 4.11 If buildings or habitats suitable for nesting birds are to be removed, then works will take place outside of the bird nesting season. In the event that clearance work has to be undertaken during the nesting season (generally from 1st March until 31st August, although birds are known to nest outside of these dates in suitable conditions), a nesting bird check will be required; carried out by a suitably qualified person. Active nests should be protected by a suitable buffer, as directed by the ecologist, until the young have fledged, as confirmed by the ecologist.

Otter, Water Vole, and Beaver

- 4.12 Although no evidence of otter, water vole, or beaver was identified onsite, local records demonstrate that these species may be using the nearby River Avon.
- 4.13 To avoid killing or injuring otters, water vole, or beaver, trenches will be covered overnight during the works (or a plank provided as a means of escape) and pipes will be capped.
- 4.14 Any onsite chemicals are to be properly stored away within a locked shed/ building overnight to avoid any spillage into the nearby waterbody.

Enhancements

- 4.15 Local authorities have a duty to seek to maintain **and enhance** biodiversity in the exercise of their functions.
- 4.16 Where possible native species of local provenance or ornamental plants with known wildlife value will be used for new planting on the site.
- 4.17 The following bird and bat box enhancements are recommended:
- Bird nesting boxes and bat roosting boxes (in addition to any recommended as part of mitigation and compensation measures) should be incorporated within newly constructed buildings and boundary features with bat boxes preferably being provided at a 3:1 ratio per dwelling.
 - A range of box types should be used to provide opportunities for a number of species. The following designs are recommended (or similar, if they are not available):
 - Bats - small crevice dwelling species, such as pipistrelle - Schwegler 2F, Eco Kent, Beaumaris Bat Box, or a similar design

- Bats - large crevice dwelling species, such as noctule or serotine - Schwegler 1FF, Wildcare Eco Cavity/Crevise Bat Box, or a similar design
- Birds - general purpose, small bird species (Schwegler 1B, Schwegler 2M, Woodstone Nest Box - 32mm / 28mm, or similar design).
- Birds - swifts (Vivara Pro Woodstone Swift Box, Ibstock Swift Eco, Cambridge Swift Brick, Schwegler 1A, Schwegler 18, Schwegler 16, Schwegler 1MF, or similar design)

If onsite buildings are suitable: a 1:1 nest brick to dwelling ratio is followed, based upon guidance from the Swift Conservation Group. https://www.swift-conservation.org/universal_swift_nest_brick02.pdf. Integrated nest bricks will be installed in clusters of 2-3 in the north, east and west gable ends or close under the eaves away from windows and doors, at a height of 4m+, with clear flight access and no protruding ground floor roofs such as garages.

5 CONCLUSION

- 5.1 In the absence of any mitigation measures, the proposed development would have the potential to result in significant negative impacts on designated sites / protected habitats and protected species. With the implementation of mitigation and precautionary measures proposed in this report, the development is not anticipated to result in any significant impacts on important ecological features.

APPENDIX I: SURVEY METHODS

PRA

The buildings within the site were subject to a PRA. This is an external and internal building inspection survey, the purpose of which is to search for bats/evidence of bats and assess the likelihood of bats being present and the need for further survey and/or mitigation.

A systematic search was made of the building and the ground, especially below suitable access points where present. Such features include window sills, windowpanes, walls, tiles, weather boarding, lead flashing, eaves, behind surfacing materials and under tiles, and other cracks and crevices that provide protection from the elements. Such features are known to be used by roosting bats.

The building inspection included searching for the following evidence of roosting bats:

- roosting bats within crevices or free-hanging;
- bat corpses e.g. on the floor, in uncovered water (header) tanks or other containers in roof voids;
- bat droppings beneath roosting features;
- feeding remains e.g. moth/butterfly Lepidoptera spp. wings and beetle Coleoptera spp. wing casings;
- scratch marks and characteristic staining from urine and/or fur oil beneath roosting features e.g. on roofing timbers and walls within roof voids;
- 'clean' gaps associated with bat roosts;
- bat-fly Nycteribiid spp. pupal cases;
- droppings, corpses, feeding remains and/or bat-fly pupal cases beneath roof insulation, which indicates use by bats before the insulation was installed; and
- clean swept floors, which may indicate evidence has been removed.

The internal building inspection included searching for the following evidence of roosting bats:

- roosting bats within crevices or free-hanging, bat corpses including in uncovered water tanks or other containers in roof voids;
- bat droppings, scratch marks or staining beneath roosting features, and 'clean' gaps associated with bat roosts;
- feeding remains e.g. moth/butterfly Lepidoptera spp. wings and beetle Coleoptera spp. wing casings;
- bat-fly Nycteribiid spp. pupal cases;
- evidence beneath roof insulation, which indicates use by bats before the insulation was installed;
- clean swept floors, which may indicate evidence has been removed;

- gaps within the structure of the building, for example: light ingress in the roof indicating access points to the outside; between the roof lining and roof covering; within the structure of walls and suitable access points to cavity or rubble-filled walls; around the structure of chimneys or within disused chimneys; and around lintels;
- suitable locations for free-hanging bats and/or night/feeding perches e.g. timber beams; and
- cool areas suitable for torpor or hibernation e.g. cellars.

The following equipment was used for the bat survey:

- elevation and baseline drawings of the building or structure;
- binoculars
- powerful torch to illuminate dark corners from the ground
- a ladder;
- collection pots and labels for corpses and droppings; and
- camera to record evidence and suitable roosting sites.

Bats – Emergence/re-entry Surveys

Dusk emergence survey and/or pre-dawn re-entry survey were undertaken.

Dusk emergence surveys commenced approximately 15 minutes before local sunset and continued for approximately 1.5 hours after sunset.

Pre-dawn re-entry surveys commenced approximately 2 - 1.5 hours before the time of local sunrise and continued for 15 minutes after sunrise.

Surveyors were positioned to ensure complete coverage of the building and/or the known/Potential Roost Features.

Surveyors were equipped with broadband bat detectors (Elekon BatScanner Stereo). Elekon Batloggers was also deployed to record bat activity across the site.

All bat activity was recorded including (where appropriate) roost access points, species, time of re-entry, direction of flight, behaviour (foraging or commuting) and use of landscape features.

Minimal lighting was used during the surveys as this can alter the behaviour of the bats emerging from or entering a roost, or foraging or commuting within an area.

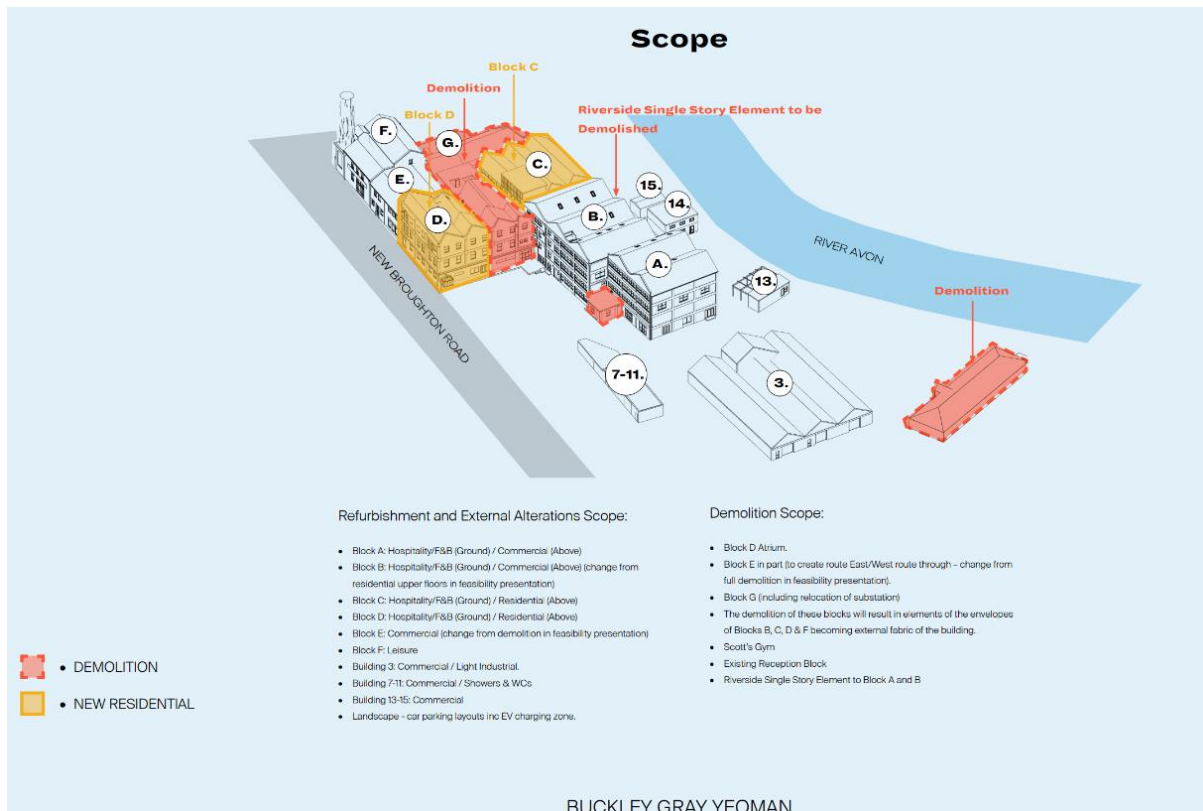
Nightfox whiskers (1080P (30fp), 850nm, 3W, 57°) and infrared cameras (1080P (30fps) i.e. 1080 pixels and 30 frames per second) alongside infrared torches (Nightfox XB5) were used on different elevations throughout the surveys. Cameras were either positioned next to a surveyor, who view the building through the camera once visibility was low, or near a surveyor to get a wider angle.

A thermal imaging camera was also deployed during the bat emergence surveys. A FLIR A50 Smart Sensor (95°, 640 x 480 resolution, accuracy ±2°C). The thermal camera was

positioned next to a surveyor to view the building once visibility was low. The thermal camera also provides a greater opportunity for observing bat emergences and does not rely on the use of IR torches, as infrared cameras do. Footage of recorded data was analysed after the survey using the FLIR analysis software.

Footage from cameras placed away from a surveyor was later reviewed by an ecologist to check for unrecorded emergences, and to cross reference records of emergence from surveyors.

APPENDIX III: PROPOSED DEVELOPMENT PLAN



APPENDIX IV

APPENDIX V: SURVEY IMAGES



Figure 4 - The external of Block D. Brickwork all intact, barge board flush with no gaps. The rest of the main buildings had the same external conditions.

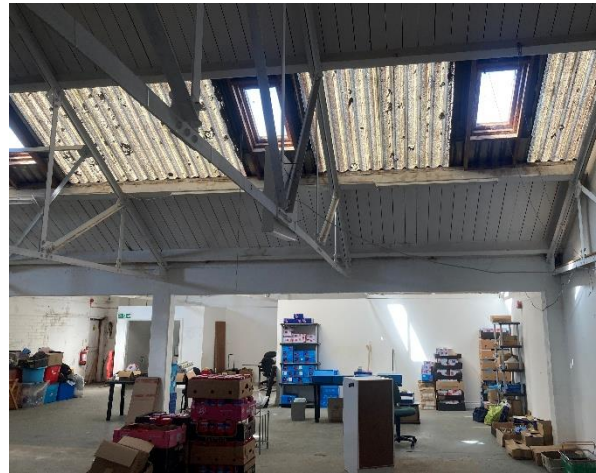


Figure 5 - Loft space in block B.



Figure 6 - Loft space of Block B.



Figure 7 - Top floor of Block D.



Figure 8 - Loft space of Block D. Large parts of the ceiling of the top floor of Block D were open giving access to the loft space.

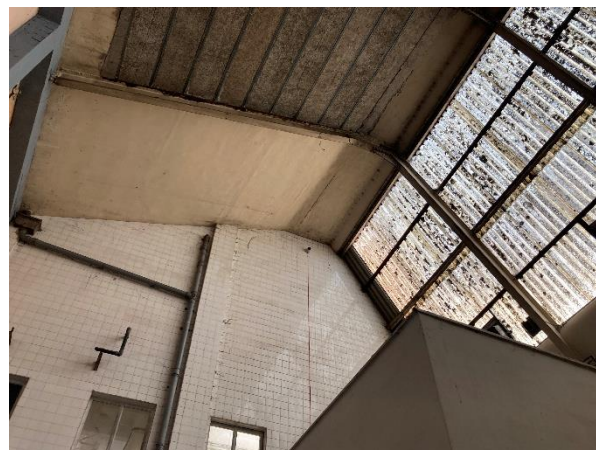


Figure 9 - Block D loft/top floor space.



Figure 10 - Top floor/loft space of Block D



Figure 11 - The roof of the building



Figure 11 - Roof of the main building.



Figure 12 - Condition of the external brickwork of the main building.



Figure 13 - Rotten woodwork on the toilet block on the south side of the main building.



Figure 14 - Scott's Gym, south side.



Figure 15 – Scott's Gym, cavity wall.



Figure 16 – Scott's Gym, broken window.



Figure 17 - Gaps in the soffit.

APPENDIX VI: SPECIES LIST

The site name: Avonside, Melksham, SN12 8BT **Provided by:** Wildwood Ecology

Grid reference: ST 90285 64120 **Verified by:** Peter Hacker

Common name	Scientific name (if known)	Number	Comment
Common pipistrelle	<i>Pipistrellus pipistrellus</i>	2	Foraging and commuting along the River Avon
Soprano pipistrelle	<i>Pipistrellus pygmaeus</i>	>10	Foraging and commuting along the River Avon
Noctule	<i>Nyctulus noctula</i>	1	Foraging and commuting along the River Avon
Serotine	<i>Eptesicus serotinus</i>	1	Foraging and commuting along the River Avon
Leisler's bat	<i>Nyctulus leisleri</i>	1	Foraging and commuting along the River Avon
Lesser horseshoe	<i>Rhinolophus hipposideros</i>	2	Foraging and commuting along the River Avon. Commuting along nearby tree-line
Greater horseshoe	<i>Rhinolophus ferrumequinum</i>	1	Foraging and commuting along the River Avon
Brown long-eared	<i>Plecotus auritus</i>	1	Foraging and commuting along the River Avon

APPENDIX VII: FULL METHODOLOGY

This report has been informed by the following, with detailed methodology provided in Appendix I:

- Full desk study and records search;
- Preliminary Ecological Appraisal; and
- Preliminary Roost Assessment survey

This report has been written in cognisance of the CIEEM Guidelines on: Ecological Report Writing, Preliminary Ecological Appraisal, Preliminary Roost Appraisal and Ecological Impact Assessment.

A desk study was undertaken in relation to the site. The sources consulted and the type of information obtained are summarised below.

Source	Information and data sets	Search buffer from the site centre/boundary
Choose an item.	• Protected and priority species. • Non-statutory designations	• (2km) • (1km)
Multi-Agency Geographic Information for the Countryside (MAGIC)	• International statutory designations • National statutory designations • Granted EPSL returns. • Bat consultation zones/core + juvenile sustenance zones	• (25km) • (2km) • (2km) • (10km)

The search buffers are sufficient to cover the Zone of Influence (Zoi) of the proposed development in relation to Protected and Priority species and designated sites.

The impact of the proposed development on the biological integrity of nearby designated protected sites has been fully considered.

Assessing ecological importance

The assessment of the importance of sites, habitats and species are made with reference to CIEEMs guidelines for EclA, where possible. These guidelines provide consistency in the approach to evaluating the importance of the ecological features within a site and the effects or impacts a proposed development will have on them.

Firstly, the sites, habitats and species are assessed using a framework which assigns a level of geographical importance to ecological features. This framework incorporates a wide range of legislation and governmental guidance in assessing each feature's importance.

Next, the effects/likely effects of the proposed development are predicted, considering different stages and activities within the development process. These effects/likely effects are then assessed for their significance, based upon the importance of the site, habitat or species being assessed. The assessment of effects/likely effects significance is considered before and after the proposed mitigation to give an overall indication of significance.

The importance of specific ecological receptors (sites, habitats or species) is assigned according to their level of importance using the following terms:

- International Importance;
- UK Importance;
- National Importance (i.e. England/Northern Ireland/Scotland/Wales);
- Regional Importance;
- County Importance;
- District Importance (or Unitary Authority, City, or Borough);
- Local or Parish Importance; and
- Of Importance within the site (the zone of influence or a larger defined area).

Contributor information

The PRA was undertaken by Peter Hacker ACIEEM Senior Ecologist. The report was written by Peter Hacker ACIEEM Senior Ecologist. The report was reviewed and approved by Misho Baxendale MCIEEM MArborA Principal Arboriculturist and Ecologist.

APPENDIX VIII: LIGHTING GUIDANCE

As foraging and commuting bats are confirmed to be present on or close to the site, Guidance Note 08/23 - 'Bats and artificial lighting at night' (The Bat Conservation Trust, BCT, and the Institution of Lighting Professionals, ILP) will be followed:

All luminaires should lack UV elements when manufactured. Metal halide, compact fluorescent sources should not be used.

LED luminaires should be used where possible due to their sharp cut-off, lower intensity, good colour rendition and dimming capability.

A warm white light source (2700Kelvin or lower) should be adopted to reduce blue light component.

Light sources should feature peak wavelengths higher than 550nm to avoid the component of light most disturbing to bats (Stone, 2012).

Internal luminaires can be recessed (as opposed to using a pendant fitting - See Figure 5) where installed in proximity to windows to reduce glare and light spill.

Waymarking inground markers (low output with cowls or similar to minimise upward light spill) to delineate path edges (see Case Study 1).

Column heights should be carefully considered to minimise light spill and glare visibility. This should be balanced with the potential for increased numbers of columns and upward light reflectance as with bollards.

Only luminaires with a negligible or zero Upward Light Ratio, and with good optical control, should be considered - See ILP GN01.

Luminaires should always be mounted horizontally, with no light output above 90° and/or no upward tilt.

Where appropriate, external security lighting should be set on motion sensors and set to as short a possible a timer as the risk assessment will allow. For most general residential purposes, a 1 or 2 minute timer is likely to be appropriate.

Use of a Central Management System (CMS) with additional web-enabled devices to light on demand.

Use of motion sensors for local authority street lighting may not be feasible unless the authority has the potential for smart metering through a CMS.

The use of bollard or low-level downward-directional luminaires is strongly discouraged. This is due to a considerable range of issues, such as unacceptable glare, poor illumination efficiency, unacceptable upward light output, increased upward light scatter from surfaces and poor facial recognition which makes them unsuitable for most sites. Therefore, they should only be considered in specific cases where the lighting professional and project manager are able to resolve these issues.

Only if all other options have been explored, accessories such as baffles, hoods or louvres can be used to reduce light spill and direct it only to where it is needed. However, due to the lensing and fine cut-off control of the beam inherent in modern LED luminaires, the effect of cowls and baffles is often far less than anticipated and so should not be relied upon solely.

APPENDIX IX - BIBLIOGRAPHY

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APPENDIX X: PLANNING POLICY AND LEGISLATION

The following planning policy and legislation relating to nature conservation and biodiversity status are considered of relevance to the current proposal.

Planning and biodiversity (England)

Local Authorities have a requirement to consider biodiversity and geological conservation issues when determining planning applications under the following planning policies.

National Planning Policy Framework (2023)

The National Planning Policy Framework (NPPF) was updated in December 2023 and sets out the Government's planning policies for England and how these should be applied. It replaces the National Planning Policy Framework published in July 2021.

Paragraph 11 states that: "Plans and decisions should apply a presumption in favour of sustainable development." Section 15 of the NPPF (paragraphs 180 to 188) considers the conservation and enhancement of the natural environment including habitats and biodiversity (paragraphs 185-188).

Paragraph 180 states that planning and decisions should contribute to and enhance the natural and local environment by: "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); 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; maintaining the character of the undeveloped coast, while improving public access to it where appropriate; Minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures; 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. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and Remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate."

Paragraph 181 states that plans should distinguish between the hierarchy of international, national, and locally designated sites; allocate land with the least environmental or amenity value, where consistent with other policies in this Framework; take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries.

Paragraph 185 states that in order to protect and enhance biodiversity and geodiversity, plans should: "Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and 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 measurable net gains for biodiversity.

"When determining planning applications, paragraph 186 states that local planning authorities should aim to conserve and enhance biodiversity by applying the following principles: "If significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused; Development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest; Development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, 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 improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate."

As stated in paragraph 187 the following should be given the same protection as habitats sites: "Potential Special Protection Areas and possible Special Areas of Conservation; Listed or proposed Ramsar sites; and Sites identified, or required, as compensatory measures for adverse effects on habitats sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites.

"Paragraph 188 states that the presumption in favour of sustainable development does not apply where the planned project is likely to have a significant effect on a habitat site (alone or in combination with other plans or projects) unless an appropriate assessment has concluded the plan or project will not adversely affect the integrity of the habitats site

Legislation and biodiversity

Certain species of animals and plants found in the wild in the UK are legally protected from being harmed or disturbed. These species are listed in the Wildlife and Countryside

Act 1981 (as amended) or are named as European Protected Species (EPS) in the Conservation of Habitats and Species Regulations 2017 (as amended). These two main pieces of legislation have been consulted when writing this report and are therefore described in detail within this section.

Other relevant legislation and policy documents that have been consulted include –The Countryside and Rights of Way Act 2000; The Hedgerow Regulations 1997; Biodiversity Action Plans, both UK-wide (UKBAP) and Local plans (LBAPs), and The National Planning Policy Framework (NPPF).

There is also legislation that legally protects certain animals - for example, the Protection of Badgers Act (1992) protects badgers and their setts, and the Deer Act (1991) places restrictions on actions that can be taken against deer species.

Wildlife & Countryside Act 1981 (as amended)

The Wildlife & Countryside Act 1981 (as amended) [WCA] is the primary legislation for England and Wales for the protection of flora, fauna and the countryside. Part I within the Act deals with the protection of wildlife.

Most European Protected Species offences are now covered under the Conservation of Habitats and Species Regulations (see below), but some 'intentional' acts are still covered under the WCA, such as obstructing access to a bat roost.

The WCA prohibits the release to the wild of non-native animal species listed on Schedule 9 (e.g. signal crayfish and American mink). It also prohibits planting in the wild of plants listed in Schedule 9 (e.g. Japanese Knotweed and *Rhododendron ponticum*) or otherwise deliberately causing them to grow in the wild. This is to prevent the release of invasive non-native species that could threaten our native wildlife.

The provisions relating to animals in the Act only apply to 'wild animals'; these are defined as those that are living wild or were living wild before being captured or killed. It does not apply to captive bred animals being held in captivity.

There are 'defences' provided by the WCA. These are cases where acts that would otherwise be prohibited by the legislation are permitted, such as the incidental result of a lawful operation which could not be reasonably avoided, or actions within the living areas of a dwelling house.

Licensing: certain prohibited actions under the Wildlife and Countryside Act may be undertaken under licence by the proper authority. For example, scientific study that requires capturing or disturbing protected animals can be allowed by obtaining a licence – e.g. bat surveys.

Conservation of Habitats and Species Regulations 2017 (as amended)

The Conservation of Habitats and Species Regulations 2017 (as amended) (which are the principal means by which the EC Habitats Directive is transposed in England and Wales)

update the legislation and consolidate all the many amendments which have been made to the Regulations since they were first made in 1994.

These regulations provide for the:

- protection of European Protected Species [EPS] (animals and plants listed in Annex IV Habitats Directive which are resident in the wild in Great Britain) including bats, dormice, great crested newts, and otters;
- designation and protection of domestic and European Sites - e.g. Site of Special Scientific Interest [SSSI] and Special Area of Conservation [SAC]; and
- adaptation of planning controls for the protection of such sites and species.

Public bodies (including the Local Planning Authority) have a duty to have regard to the requirements of the Habitats Directive in exercising their function – i.e. when determining a planning application.

There is no defence that an act was the incidental and unavoidable result of a lawful activity.

Licensing: it is possible for actions which would otherwise be an offence under the Regulations to be undertaken under licence issued by the proper authority. For example, where a European Protected Species has been identified and the development risks deliberately affecting an EPS, then a 'development licence' may be required.

Species protection

The following protected species information is relevant to this report. Legislation is only discussed in relation to planning and development; other offences may exist.

Bats

All British bats are classed as European Protected Species and therefore receive protection under the Conservation of Habitats and Species Regulations 2017 (as amended), making it an offence inter alia to:

- deliberately kill, injure or capture a bat;
- deliberately disturb bats; and
- damage or destroy a breeding site or resting place of a bat.

In addition, all British bats are also listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) which contains further provisions making it an offence to intentionally or recklessly:

- obstruct access to any structure or place which any bat uses for shelter or protection; or
- disturb any bat while occupying a structure or place which it uses for that purpose.

If proposed development work is likely to destroy or disturb bats or their roosts, then a licence will need to be obtained from Natural England, which would be subject to appropriate measures to safeguard bats.