Shadow Habitat Regulations Assessment (sHRA)

Land off Trowbridge Road, Bradford-on-Avon

22 April 2026

Ecology
Arboriculture
Land Management

Site Details

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Client	Waddeton Park Ltd

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1 Introduction

This report has been prepared on behalf of Waddeton Park Ltd in relation to a proposal planning application at Land off Trowbridge Road, Bradford-on-Avon.

The area within the application boundary is hereafter referred to as the 'Site'. A separate Ecological Impact Assessment has been produced (2763-EcIA-RY) and accompanies the planning application.

1.1 Site Context

The Site is located in the southern extent of the town of Bradford-on-Avon, directly east of Trowbridge Road. Existing residential development is present to the north-west, with the River Avon Local Wildlife Site (LWS) to the north-east, Wid Brook and Widham Woods LWS to the east and broadleaved woodland to the south.

1.2 Description of Proposed Development

Proposals consist of an outline application (with all matters reserved except for access) for the erection of up to 224 residential dwellings (Class C3), 72-bed care home (Class C2), with sports pitch provision, country park, landscaping and open space.

1.3 Aims

This Shadow Habitats Regulations Assessment (sHRA) has been produced to provide Wiltshire Council (WC) with technical information required to assess whether the project (i.e. the proposed scheme) may have an adverse impact on the integrity of any National Site Network site, either alone or in combination with other plans or projects in the local area as part of their responsibility as the 'competent authority' under Regulation 63 of the Conservation of Habitats and Species Regulations 2017 (as amended).

The aims of this report is to:

- Identify those National Site Network (European) Sites that fall within the potential zone of influence (ZoI) of the proposed scheme, by way of consideration of their qualifying interests, conservation objectives and favourable (or otherwise) conservation status;
- Identify any effects/impacts of the proposed scheme that are likely to have likely significant effects (LSEs) on the identified European sites either alone or in-combination; and
- Identify ways in which the proposed scheme can be modified to avoid/mitigate impacts on European sites to an acceptable level.

This sHRA is based on the Illustrative Masterplan (ref: 250310 L 02 03) and should be read in conjunction with the corresponding application documents and drawings submitted with the planning application.

2 HRA Requirement

2.1 National Site Network

European Council Directive 92/43/EEC (known as the Habitats Directive) and Council Directive 2009/147/EC (codified version of Directive 79/409/EEC as amended) 'the Wild Birds Directive' established a network of internationally important sites (i.e. Special Areas of Conservation (SACs) and Special Protection Areas (SPAs)) designated for their ecological status. Special Areas of Conservation[1] (SACs) are designated under the Habitats Directive and promote the protection of flora, fauna and habitats. Special Protection Areas (SPAs) are designated under the Birds Directive in order to protect rare, vulnerable and migratory birds. These sites form a Europe-wide network of designated sites known as 'Natura 2000'

In the UK, these formerly EU-protected sites have been merged into a National Site Network by the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019.

In addition to sites designated under the above legislation, UK Government policy (NPPF paragraph 187 and Circular 06/2005 refer) states that internationally important wetlands listed under the Ramsar Convention 1971 (Ramsar sites) are afforded the same protection as SPAs and SACs for the purpose of considering development proposals that may affect them.

The term 'Habitats Regulations Assessment' is used to cover the process of assessing the effects of a project or plan on National Site Network sites and Ramsar sites.

2.2 Legislative Context

The Conservation of Habitats and Species Regulations 2017 (as amended) provides protection to the National Site Network.

Under Part 6 'Assessment of Plan and Projects', Regulation 63 (1) of these regulations, an appropriate assessment needs to be undertaken by the competent authority in respect of any plan or project which:

- Is likely to have a significant effect on a European site or a European offshore marine site (either alone or in combination with other plans or projects); and,
- Is not directly connected with or necessary to the management of that site.

As the application is not necessary to the management of the site for nature conservation, Wiltshire Council, as the relevant competent authority, is required to carry out an HRA to ensure that the development decision does not adversely affect the integrity of European sites.

2.3 HRA Process

Habitats Regulations Assessment follows a four-stage hierarchical approach. Each of those four stages contains a number of steps comprising the tests or procedures that are required by the Habitats Directive.

The definitive process for HRA is detailed in the Handbook for HRA (Tyldesley, D., and Chapman, C., 2013). The Handbook was intended to supplement government guidance (on GOV.UK) by bringing together all relevant law, policy, methodology, technical advice and good practice into one comprehensive source. Following the accession of the Planning and Infrastructure Bill in 2025 and UK

[1] Those sites that have been adopted by the European Commission and formally designated by the government of each country in whose territory the site lies

Government Policy to seek to adapt the HRA process to facilitate development, the publishers of the Handbook – DTA Publications has elected to withdraw the handbook as of January 2026.

The justification for this being that the regulatory and assessment landscape will become ever more complex, with many individual sectors each having their own way of avoiding or adapting the HRA process, whilst the Regulations themselves are retained, with or without amendments. As such as it is not a viable proposition to adapt and maintain the Handbook as a resource that would be needed to adequately navigate through all the relevant processes in England.

Until the new processes become clear and guidance is published, the handbook will be followed in the interim, with ecologists fully cognizant of the risks of misapplying the regulatory process as it unfolds.

The HRA process comprises:

- An initial assessment, 'screening', of whether the proposal either alone or in combination with other plans or projects is likely to have a significant effect on the European site. This screening process is focused on the 'Likely Significant Effect' (LSE) test. This is essentially a risk assessment process that seeks to understand whether there are any mechanisms for identified impacts arising from the project to adversely affect the European site (e.g. cause-effect pathway); and,
- If a likely significant effect cannot be ruled out, an Appropriate Assessment will be undertaken to determine whether the proposal will adversely affect the integrity of the European site.

A significant effect can be defined as an 'effect that is likely to undermine the site's conservation objectives'.

Following the People Over Wind ruling (case C323/17) in April 2018, 'it is not appropriate, at the screening stage, to take account of the measures intended to avoid or reduce the harmful effects of the plan or project on that site' and therefore this screening is undertaken in the absence of standard mitigation.

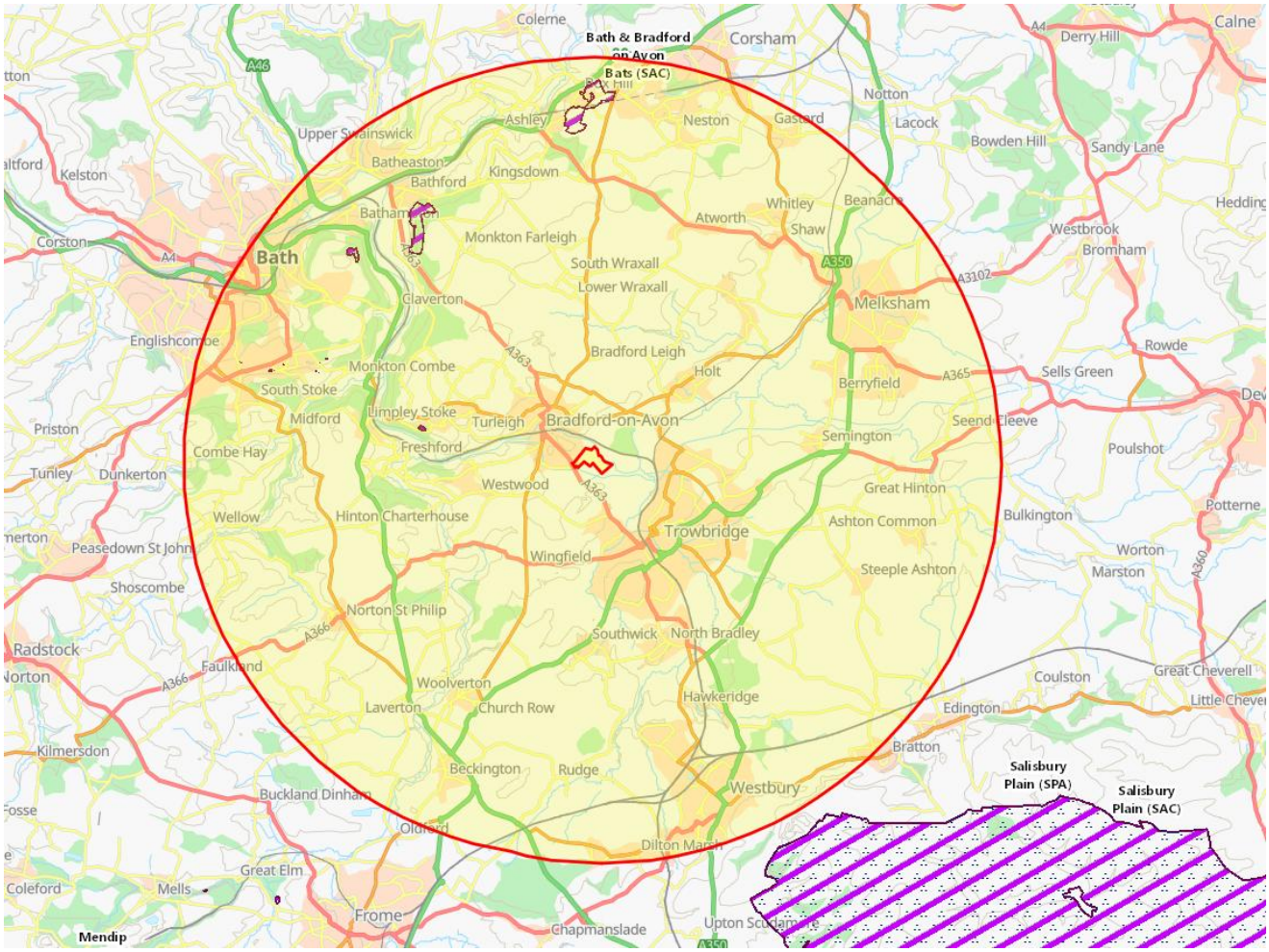
3 Sites Scoped Into Assessment

Bath and Bradford-on-Avon Bats SAC is the only National Site Network site within 10km of the Site and has therefore been scoped into the assessment.

European site locations in relation to the application site are shown below (provided by MAGIC[2]).

[2] https://magic.defra.gov.uk/home.htm

Plate 1: 10km Zone of Influence



The proposed development was not considered to have effects on the National Site Network beyond 10km as no potential pathways have been identified. Salisbury Plan SAC/SPA is situated c. 1km outside the ZOI; however, the Site is not within the recognised buffer for recreational pressures and has therefore been screened out of further assessment.

4 Screening Assessment

4.1 Factors Affecting NSN sites

The Assessment takes into account the current state of the National Site Network, the main sensitivities and the range and scale of potential impacts from the proposed development.

During the screening exercise, Standard Data Forms produced by JNCC have been used to identify threats, pressures and activities with high impacts on the European site's designated features. In addition, Site Improvement Plans (SIPs) which have been developed by Natural England for each European site, have been used to identify current and predicted issues affecting the condition of the qualifying features.

4.2 Likely Significant Effect (LSE) Test

The sections below detail the characteristics of the European Sites and identifies potential pathways for Likely Significant Effects (LSEs) as a result of the proposed development.

4.2.1 Bath and Bradford-on-Avon Bats SAC

The nearest component of the Bath and Bradford-on-Avon Bats SAC is c. 3.8km west at Winsley Mines SSSI. The interest features of the SAC comprise:

- Annex II species (primary reason) - 1304 Greater horseshoe bat *Rhinolophus ferrumequinum*; 1323 Bechstein's bat *Myotis bechsteinii*.
- Annex II species (qualifying feature) – 1303 Lesser horseshoe bat *Rhinolophus hipposideros*.

The main threats to the SAC as outlined in the Site Improvement Plan (Natural England, 2015) relate to planning permission: general (1), change in land management (2), direct impact from third party (3), feature location/extent/condition unknown (4), offsite habitat availability/management (5), public access/disturbance (6), change to site conditions (7) and inappropriate designation boundary (8).

Furthermore, bat activity surveys undertaken between April-October 2025 have confirmed that greater horseshoe, lesser horseshoe and *Myotis* spp. bats are using the tree line, hedgerow and adjacent woodland and watercourse habitats within the Site to commute and forage.

As such, in the absence of mitigation, LSEs on Bath and Bradford-on-Avon Bats SAC cannot be ruled out.

5 Information for Appropriate Assessment

5.1 Bath and Bradford-on-Avon Bats SAC

The Bath and Bradford-on-Avon Bats SAC is made up of 4 component Sites of Special Scientific Interest (SSSIs):

- Winsley Mines SSSI;
- Brown's Folly SSSI;
- Combe Down, Bathampton Down Mines SSSI; and
- Box Mine SSSI.

The Site Improvement Plan[3] for the SAC states that:

"*The SAC as a whole supports 15% of the UK population of greater horseshoe bats, internationally significant populations of lesser horseshoe and Bechstein's bats. The SAC comprises four component sites: Brown's Folly, Box Mine, Winsley Mines, and Combe Down and Bathampton Down Mines. These are distributed over a wide geographical area to the south and east of Bath and have different known bat usages, which over the whole of the SAC include breeding, hibernation, swarming and dispersal. The sites are all abandoned limestone mines, and some include areas of supporting habitat: broadleaved woodland and species rich calcareous grassland. The surrounding landscape provides feeding and commuting opportunities between the component SSSIs, other SAC sites and other undesignated roosts which is vital in supporting the bats throughout their life cycle. Features of significance within the wider landscape are watercourses, woodland, grazed pasture, hay meadows, hedgerows, linear trees and scrub*."

Greater Horseshoe Bats (GHS): This site in south-west England is selected on the basis of the size of population represented (up to 15% of the UK population). The Winsley Mine SSSI recorded counts of up to 100 hibernating GHS, representing c. 5% of the UK population in this site alone. In 1985, according to the Supplementary Advice on Conserving and Restoring Site Features (Natural England, 2019), a peak count of 56 bats was counted (1985).

Roost choice, and the presence of bats within the SAC, is likely to be influenced by the site's ability to provide bats with food and shelter. The woodland surrounding the underground mines is important for the maintenance of optimal humidity conditions inside the mine system and also as foraging areas.

Beyond this, GHS rely on the maintenance of supporting offsite habitats (functionally linked land). The provision of rich feeding areas around a roost, and the commuting routes (or flight-lines) to them, are an important element in sustaining the SAC population. Flightlines extend beyond the designated site boundary into the wider local landscape and are especially important as a link between summer and winter roost sites. GHS commute and forage along linear features, over grazed pasture and in woodland. Permanent pasture and ancient woodland linked with an abundance of tall bushy hedgerows is ideal supporting habitat for this species. GHS tend to forage within 2.5km of their summer roost, though they can travel up to 4km from these roosts to suitable foraging grounds (Schofield, 2008). In winter, their foraging range is reduced, with a mean foraging radius of 1.2 km around hibernation sites reported.

The bats are vulnerable to the loss of insect food supplies due to insecticide use, changing farming practices and the loss of broadleaved tree-cover, and to the loss or disturbance of underground roost sites.

[3] Available at: https://publications.naturalengland.org.uk/publication/6279810384920576?category=5374002071601152

Lesser Horseshoe Bats (LHS): The main population of LHS is at Box Mine SSSI, with a hibernating population of 197 (peak count – Jan 2014) (Natural England, 2019). A smaller population is present at Winsley Mine SSSI, c. 6 individuals recorded (peak count – Dec 1984) (Natural England, 2019).

As with GHS, roost choice and the presence of bats within the SAC, is likely to be influenced by the site's ability to provide bats with shelter and food (supporting habitat). LHS tend to forage within 2-3km of their roost, though they can travel up to 4km from their roosts to suitable foraging grounds. LHS commute and forage along linear features over grassland and woodland. They feed on flies (mainly midges), small moths, caddis flies, lacewings, beetles, small wasps and spiders. The species prefers sheltered valleys with extensive deciduous woods or dense scrub, close to roost sites. Where habitat is fragmented, linear features such as hedgerows are important corridors between roosts and foraging areas. During the winter, their foraging range is reduced, with a mean foraging radius of 1.2 km around hibernation sites reported. Summer and winter roosts are usually less than 5-10 km apart.

LHS are vulnerable to the loss or disturbance of both summer and winter roost sites and the removal of linear habitat corridors.

Bechstein's Bats: The main populations of Bechstein's bat are at Box Mine SSSI and Brown's Folly SSSI, although recorded numbers are low (Natural England, 2019). There are no records of Bechstein's bats at either Winsley Mines SSSI or Combe Down and Bathampton SSSI.

Similarly to the horseshoe bats, roost choice and the presence of bats within the SAC, is likely to be influenced by the site's ability to provide bats with shelter and food (supporting habitat). Roosts are usually tree holes during the summer and exposed sites with caves, cellars or tree holes during the winter[4]. Bechstein's bats tend to forage near to their roost sites and rarely travel more than 1.5km to find suitable foraging grounds[5]. They forage largely in enclosed vegetation such as woodland and feed mainly by gleaning flies, earwigs and moths. The species prefers damp, deciduous woodland although they may be found in parkland and coniferous woodland. Where habitat is fragmented, linear features such as hedgerows are important corridors between roosts and foraging areas.

Bechstein's bats are vulnerable to the loss or disturbance of suitable habitat, e.g. by removal of dead/ dying trees, habitat fragmentation and drainage of wet woodlands.

The SIP states that the main pressures and threats are:

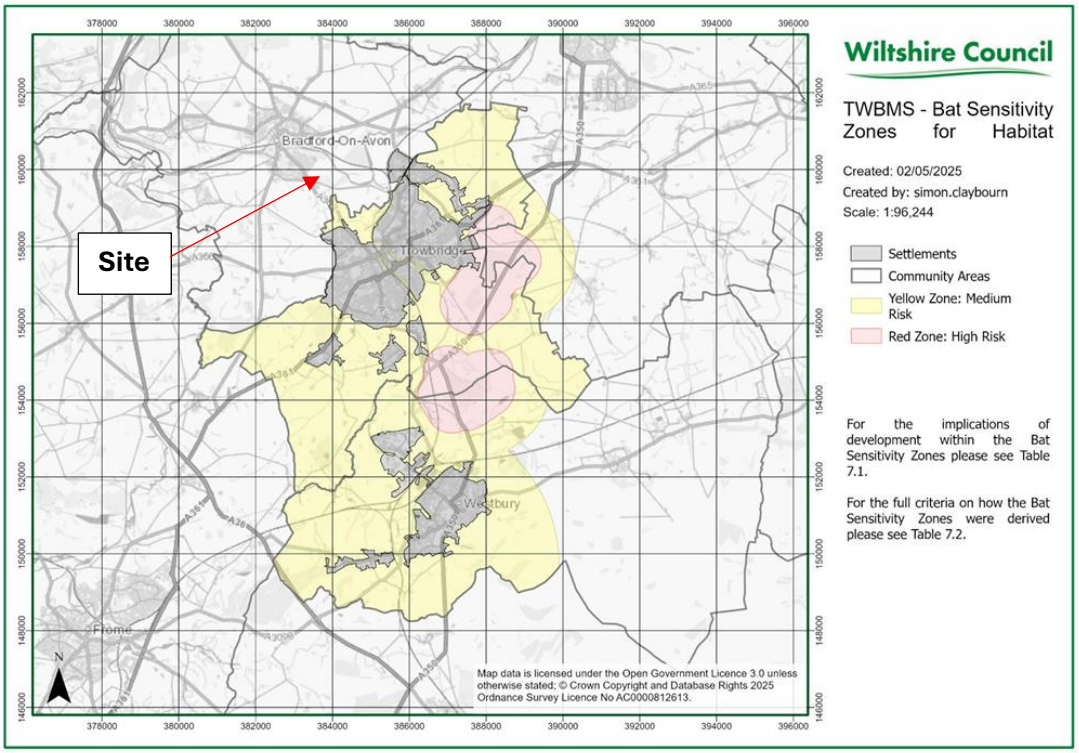
- Planning permission - loss of foraging habitat, loss of minor roost sites, and disruption of flightpaths (the latter particularly through light pollution).
- Change in land management – loss of foraging habitat through inappropriate management in terms of bats.
- Direct impact from third party – vandalism and impacts of recreational activities.
- Feature location/ extent/ condition unknown (Bechstein's bat only) – lack of knowledge regarding location and extent of Bechstein's bats.
- Offsite habitat availability/ management – use of surrounding habitats.
- Public access/ disturbance – damage disturbance from public access.
- Change to site conditions – Unstable mines at risk of collapse may no longer be used by bats.
- Inappropriate designation boundary – new sites being considered for designation.

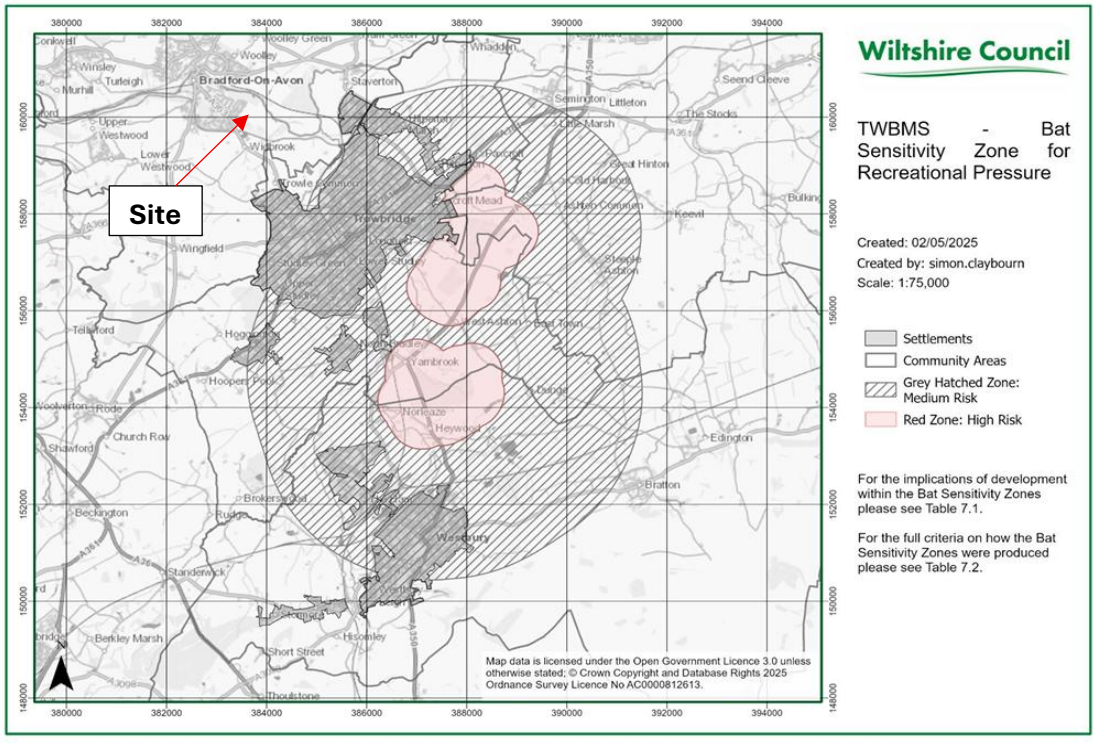
[4] https://www.bio.bris.ac.uk/research/bats/britishbats/batpages/bechsteins.htm

[5] https://cdn.bats.org.uk/uploads/pdf/Bechsteins-bat-species-account.pdf?v=1642079639

5.2 Trowbridge and Westbury Bat Mitigation Strategy (TWBMS)

As part of the Trowbridge and Westbury Bat Mitigation Strategy[6], Bat Sensitivity Zones have been developed with regards to habitat suitability and recreational pressures. The Site is not situated within a Bat Sensitivity Zone for either habitat suitability or recreational pressure (see below).





[6]https://www.wiltshire.gov.uk/media/18096/Trowbridge-and-Westbury-Bat-Mitigation Strategy/pdf/TWBMS_v4_Final_July_2025.PDF?m=1758027614863

Furthermore, the strategy states that: *"Significant potential effects to the SAC therefore include impacts to the foraging areas and commuting routes in the surrounding landscape used by the bats as well as roosts and can include:*

- *Habitat degradation - alteration / demolition / removal of a potential roost feature including changes to environmental conditions (temperature, humidity, internal light levels etc); loss, damage or change of management of potential foraging habitat; or removal / fragmentation / modification of habitats in a potential commuting corridor;*
- *Lighting – increased artificial lighting affecting potential roosting, foraging, commuting features as well as insect availability;*
- *Noise and vibration – construction / demolition activities close to potential roost features;*
- *Recreational disturbance – increasing the risk of recreational visits, both organised and informal. This can result in impacts such as: trampling of vegetation, leading to changes in species composition, loss of vegetation and erosion; disturbance from the presence of people and their activities; 'general' urban effects: dumping of waste, damage, vandalism, fires; and spread of plants including alien species.*
- *Pollution – dust and fumes close to potential roost features; and*
- *Mortality – e.g. predation by domestic cats at roost entrances, collision risk from road traffic and wind turbines."*

5.3 Use of the Proposed Development Site by Bats

5.3.1 Roosting

Five trees within the Site have Potential Roost Features (PRFs) for roosting bats. These PRFs comprised dense ivy, lifted bark, knot holes, cavities and sheer-offs; some of which provide potential suitability for Bechstein's bats. However, no further surveys were undertaken on these trees as they are set to be retained and suitably buffered and protected within the scheme proposals.

5.3.2 Foraging and commuting

Three night-time bat walkover surveys (NBWs) have been undertaken within the Site in May, August and September 2025. During these surveys, activity was dominated by soprano pipistrelle (257 passes) and common pipistrelle (182 passes), with moderate levels of *Myotis* sp. (25 passes), lesser horseshoe (24 passes), *Nyctalus sp*. (17 passes) and serotine (17 passes), and low levels of greater horseshoe activity (2 passes) also recorded. Although bat activity during the NBWs was recorded throughout the Site, activity levels were concentrated on the northern and eastern Site boundaries adjacent to the River Avon and Wid Brook respectively.

Seven automated detector surveys comprising five detectors were undertaken monthly between April – October 2025. During these surveys, at least ten species have been recorded. These are shown below in order of frequency:

- Common pipistrelle (44.62%; 10707 passes)
- Soprano pipistrelle (25.39%; 6632 passes)
- *Nyctalus* spp. (14.13%; 3126 passes)
- Serotine (6.68%; 1477 passes)
- *Myotis spp.* (5.32%; 1280 passes)
- Greater horseshoe (2.28%; 551 passes)
- Lesser horseshoe (0.72%; 210 passes)
- *Plecotus* spp. (0.68%; 200 passes)
- Barbastelle (0.11%; 29 passes); and
- Nathusius' pipistrelle (0.06%; 14 passes).

Location 2 (southern boundary of F1 adjacent to Widbrook Wood) saw the highest levels of bat activity throughout the surveys, comprising 32.17% of the total passes recorded. Location 4 (northern extent of LOT5 adjacent to the River Avon) saw the next highest levels of activity (31.93%), with Locations 3, 1 and 5 comprising 16.50%, 10.03% and 8.37% respectively. These surveys appear to show that although bats utilise all the boundary features throughout the Site for commuting and foraging, they showed a clear preference for those adjacent to the River Avon and the north-western boundary of Widbrook Wood.

The assemblage of bats recorded during the surveys is considered to be fairly typical given the Site's geographic location and habitats available both on Site and within the wider landscape. The vast majority of activity within the Site was attributed to common pipistrelle and soprano pipistrelle, both of which are considered to be common and widespread within the UK and are light-tolerant. Three Annex II species, namely lesser horseshoe, greater horseshoe and barbastelle were also recorded-on Site. Greater horseshoe and lesser horseshoe were recorded in modest numbers, and barbastelle in very low numbers, thus suggesting that the Site provides an important foraging or commuting resource for Annex II species. It is also important to note that there is an inherent difficulty in identifying Bechstein's acoustically and it is considered likely that a proportion of the *Myotis* spp. recorded during the surveys can be attributed to Bechstein's, albeit in smaller proportions to the more common and widespread *Myotis* species, such as Natterer's and Daubenton's.

5.4 Identification of Potential Impact Pathways

5.4.1 Bath and Bradford-on-Avon Bats SAC

Considering the vulnerabilities of GHS, Bechstein's and LHS bats as described above, the development may result in potential effects to the Bath and Bradford-on-Avon SAC as identified in the Bats Special Areas of Conservation (SAC): Planning Guidance for Wiltshire (2015) by:

- Roosting;
- Direct loss of foraging/commuting habitat;
- Loss/disruption of commuting/foraging routes (flight lines) through indirect impacts such as lighting; and
- Disturbance during construction works.

5.4.2 Loss of Roosting Habitat

The scheme will not directly impact upon the Bath and Bradford-on-Avon Bats SAC and its integral roosts. Furthermore, there is no potential for indirect impacts as all Site trees with PRFs will be retained, buffered and protected as part of the scheme. **As such, no Adverse Effect on Integrity (AEOI) is anticipated on the bat populations associated with Bath and Bradford-on-Avon Bats SAC through loss of roosting habitat.**

5.4.3 Loss and Fragmentation of Foraging/Commuting Habitat

In the absence of mitigation, the proposed development has the potential to affect commuting and foraging bats through the severance of commuting/foraging routes due to hedgerow and tree line removal resulting in bats using less energy-efficient routes (Russ & Montgomery 2002) or abandoning roosts/ foraging areas altogether.

The scheme has been designed to retain and enhance unlit green corridors around the Site which can be used by foraging and commuting bats, allowing them to continue to move through and around the Site between offsite roosts and foraging grounds.

The majority of hedgerows and tree lines will be retained within the scheme. The pond will also be retained, and the majority of individual trees will also be retained and protected. Furthermore, the retained hedgerow network will be enhanced, and a substantial amount of modified grassland will be retained and enhanced to other neutral grassland (c. 13ha). In addition, significant areas of new habitat will be created within the Site to provide additional commuting and foraging habitat. Habitats to be created will comprise new other neutral grassland (c. 1.25ha), other broadleaved woodland (c. 3.45ha), individual trees (c.350 no.), traditional orchard (c. 0.07ha), SuDS basins (c.0.54ha) and species-rich native hedgerow (0.31km); all of which will provide additional commuting and foraging resource for bats.

The enhancement of the existing modified grassland to other neutral grassland will be undertaken through harrowing and sowing with a species-rich seed mix containing yellow rattle, a hemi-parasitic species, which will reduce the dominance of competitive grass species and allow the growth of a wider variety of species including forbs/ wildflowers. The area of other neutral grassland north of the footpath and adjacent to the River Avon will be sown with a damp-tolerant species-rich seed mixture to ensure it can withstand the periodic flooding from the River Avon, which will provide an increase in extent and quality of the riparian habitats within the Site and associated invertebrate prey. The hedgerows, tree lines and POS habitats will all remain unlit (see **Section 5.4.4**).

A Habitat Mitigation and Monitoring Plan (HMMP) will be produced detailing the methods and strategies to manage these habitats, as well as providing details of the funding mechanisms and timescales for management. As required by the Bath and Bradford on Avon Bat SAC Planning Guidance for Wiltshire Document', habitats will be managed for horseshoe bats in perpetuity.

As such, it is considered that, with the above mitigation and habitat enhancement/creation measures described above, **there will be no AEOI to the bat populations associated with the Bath and Bradford-on-Avon Bats SAC as a result of habitat loss/fragmentation.**

5.4.4 Loss/Disruption of Foraging/Commuting Habitat through Lighting

All three species associated with the Bath and Bradford-on-Avon SAC are generally light-averse woodland specialists, preferring to commute/forage within woodlands, along the edges of woodland or along woodland glades/rides. Lighting levels of under 0.5lux are required to ensure continued use of commuting routes (Stone, 2013) (unless baseline conditions already exceed this level). Lighting can cause avoidance of commuting routes and a change in the abundance of available insect prey. Fragmentation via lighting can cause bats to fly further to reach foraging grounds which could result in increased energetic costs, higher risk of predation and roost abandonment (Stone, 2013). In the absence of mitigation, lighting within the new development has the potential to cause disruption or loss of these commuting/foraging routes and as such it is considered that, in the absence of mitigation, the development could have a permanent adverse effect on the local populations of all three species.

During operation, no lighting is to be directed at the hedgerows, tree lines, POS habitats or adjacent watercourses and woodland, thus allowing continuous corridors for bats to be maintained. Whilst a certain level of lighting throughout the Site is necessary for the health and safety of future residents, a strategy will be produced to include measures to reduce the impact of this lighting on local fauna including the identification of sensitive zones to ensure darker areas are maintained/created to protect important commuting and foraging routes. Lighting within these areas will be kept to an absolute minimum. Best practice technology should be employed to reduce light-spill, for example LED lighting, luminaries with peak wavelengths higher that 550nm, no upward light-spill and/or a part-night lighting regime, in line with current guidelines – ILP Guidance Note 08/23 – Bats and Artificial Lighting at Night (Bat Conservation Trust/ Institute of Lighting Professionals, 2023). Key bat habitats, namely the

boundary vegetation, POS habitats and adjacent watercourses and woodland, should be maintained at no more than 0.5 lux (or baseline light levels).

Any necessary lighting throughout the Site will be designed with no spill to exceed the boundaries and will be connected via either a centralised control system or with a luminaire-to-luminaire onboard system to allow brightening and dimming of the lights when a person is detected and has subsequently passed. Where brighter lighting is necessary, i.e. around parking spaces and primary footpaths, luminaires will be directional with no upward, sideways or outward spill and fitted with shields where necessary to maintain darker areas along and within the sensitive habitats.

Whilst the lighting will invariably be increased in some areas, the impact of this is considered to be minimal providing a sensitive lighting strategy is developed in-line with the above measures and adhered to. It can therefore be concluded **there will be no AEOI to the bat populations associated with the Bath and Bradford-on-Avon Bats SAC as a result of lighting.**

5.4.5 Disturbance during Construction Works

There is potential for impacts as a result of disturbance through noise, vibration and construction lighting during construction and enabling works.

Construction will be restricted to daylight hours, finishing at least 30 minutes before sunset and commencing at least 30 minutes after sunrise throughout the year. If this is not possible, no construction lighting will be allowed to spill onto boundary hedgerows, tree lines or adjacent watercourse and woodland habitats, ensuring light averse species can continue to utilise the Site and wider area during the construction period.

A Construction Ecological Management Plan (CEMP) will be produced providing details and mechanisms through which this area will be protected during construction.

As such, it is considered that, with the mitigation described above, **there will be no AEOI to the bat populations associated with the Bath and Bradford-on-Avon Bats SAC as a result of construction disturbance.**

6 Cumulative Assessment

Cumulative assessment (In-combination assessment) is a key part of the HRA process, as it seeks to identify whether any residual effects below the threshold for AEOI but where plans or project could cumulatively result in an AEOI upon a designated site.

However, as the assessment above does not identify any residual effects from the identified impact pathways, **no cumulative impacts upon the integrity of the designated sites discussed above are anticipated.**

7 Overall Assessment

This sHRA identifies the potential pathway for LSE on Bath and Bradford-on-Avon Bats SAC. This sHRA has considered the effects discussed above in relation to the conservation objectives for the qualifying features of the designated site and identified the mitigation and enhancement measures which are inherent to the proposals as submitted. These measures are considered sufficient to ensure that the construction and operation of the proposed development does not, either alone or in-combination with other plans or projects, give rise to any adverse effects on the integrity of the Bath and Bradford-on-Avon Bats SAC.

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