Appropriate Assessment of Effects on a European Site

This is a record of the appropriate assessment of Wiltshire Council required by Regulation 63 of the Habitats Regulations 2017 (as amended). The project has been assessed as likely to have significant effects on one or more European protected sites and is not directly connected to or required for the management of such sites. This assessment is made in accordance with the relevant guidance documents and case law (ref. *HRA Handbook*, David Tyldesley Associates).

PART A: INFORMATIC	ON REVIEWED
Information about	16/00547/FUL – Drynham Lane, Trowbridge
the plan or project	The proposed development is for the erection of 91 dwellings on a greenfield site on the southern edge of Trowbridge. The site forms part of the strategic allocation for 2600 homes at Trowbridge identified in the Wiltshire core strategy. The development site is about 1km in radius from Green Lane Wood and about a 1.8km walk on foot. In addition to material submitted at the time the application was
	made, the following recent documents are relevant to this appropriate assessment:
	Site layout drawing number P18-1032_01 Rev R
	 Ecological Mitigation Plan (GE Consulting, Ref 0842-EMP- CT dated 22/7/2021
	 Post Intervention Habitat Plan (GE Consulting Ref 0842- BNG-DM) dated 22/7/2021
	 Detailed Soft Landscaping proposals 1 – 3 (Pegasus P18- 1032_101-D / 102-D / 103-D)
	 Street and Footpath Draft Lighting Layout (MMA 16042/001 R3, 21 Aug 2020)
	Outdoor Lighting Report (MMA 16042, 20 January 2021)
	 Lighting Strategy R3 (MMA 16042, 21 January 2021)
	 Ecology Addendum (GE Consulting September 2020)
	 Defra metric (GE Consulting 0842-MET-CT)
	 Tree quality survey and arboricultural method statement (Tyler Grange 2104_R03c_JJ_ar)
	 Ecology Sections A-C Ref P18-1032_104 dated 20/7/2021
	My comments dated 13 February 2017 identified this development has the potential to lead to significant effects on the Bath and Bradford on Avon Bats SAC: it lies within the Council's consultation zone for Bechstein's bats where loss / deterioration of habitat has the potential to negatively affect this species. In light of the judgement in Case C 323/17 CJEU "people over wind" (12 April 2018) the Council has determined that the application should be subject to an appropriate assessment under Regulation 63 of the Habitats Regulations 2017.
Natura 2000 site(s)	Bath and Bradford on Avon Bats Special Area of Conservation (SAC)

List of European	Qualifying Features:
Site interest	1. Bechstein's bat Myotis bechsteinii
features	2. Greater horseshoe bat Rhinolophus ferrumequinum
	3. Lesser horseshoe bat Rhinolophus hipposideros
	The conservation objectives for the site are to: "Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;
	 The extent and distribution of the habitats of qualifying species;
	 The structure and function of the habitats of qualifying species;
	 The supporting processes on which the habitats of qualifying species rely
	The populations of qualifying species; and
	• The distribution of qualifying species within the site."
	Publication Date: 27 November 2018 – version 3.
Information about the SAC	The following is based on supplementary advice published by Natural England on 20 March 2019 and locally acquired evidence following extensive surveys commissioned by developers and Natural England.
	The current condition of the European site is favourable. The disused stone mines are of key importance as hibernation and swarming sites but the SAC bat populations are also supported by habitats beyond the boundaries of the SAC. Such habitats include watercourses, tree lines, hedgerows and open farmland which provide foraging habitat, flight corridors and summer roosting habitat. In addition, several maternity roosts for each of the special features have been identified between Trowbridge and Westbury. Lesser and greater horseshoe roosts have been found in buildings as far as south Westbury while nationally important maternity roosts for Bechstein's bats have been recorded using a group of woodlands around the SW perimeter of Trowbridge including at Green Lane and Biss Woods and Pickett and Clanger Wood. Records of ringed bats show there is a functional connection between these summer / maternity roosts and the SAC.
Other relevant plans or projects	 15/04736/OUT – Land south east of Trowbridge ("Ashton Park")
	 18/00985/FUL – The Grange, Devizes Road, Hilperton, completed
	 15/12551/OUT – Land at Westbury Sailing Lake, Station Road, Westbury, completed
	 W/11/01932/REM land north east of Green Lane Farm, 174 dwellings, completed
	W/04/02105/OUTES Castlemead, 650 dwellings, completed

	• 15/11267/FUL – Land South of Paxcroft Mead, 26 dwellings,
	completed
	Wiltshire Core Strategy 2006-2026
	 PI /2021/03749 Land at Glenmore Farm
	• T E/2021/03/49 Land at Glenmole Fam
	 Wiltshire Housing Site Allocations Plan (adopted February 2020). Applications have been submitted for all six allocations at Trowbridge
	 19/08146/VAR - Trowbridge Lodge Park, (mobile homes within area of mature oak woodland)
	Bath and North East Somerset Core Strategy
PART B: IMPACT PRE	
Impact	Predicted Effect of Impact
Temporary / permanent loss of foraging and roosting habitat and flight corridors	Oak tree with preferred roosting features will undergo rebalancing and crown lifting which may mean roost sites suitable for Bechstein's bats are lost. Hedgerow trees such as this have been found to support night and day roosting Bechstein's bats to the south of Trowbridge. A mature ash will be removed – no record of roosting features in this tree therefore no direct impact.
	will lead to loss of small amounts of foraging habitat, but these are unlikely to prevent continued use of hedgerows by bats as flight lines. Connection to the railway line, which is presumed to be a key habitat link for bats, will be maintained.
	The current value of cattle grazed pasture on the site for foraging Bechstein's and horseshoe bats is unknown but may contribute for foraging especially during emergence times of seasonally important insect prey. Approximately 5.4 ha of pasture will be lost.
Risk of collision and bat fatality	Potential for bat fatality when tree works are undertaken, numbers of bats at risk unknown.
	There is minimal risk of bat fatality from road collisions. Traffic speeds will be low enough for bats to take avoiding action.
Disturbance to bat flight/foraging/ roosting activity from light spill	Lighting along the south eastern hedgerow may cause all three species of bats to abandon this as a flight line. Light spill from housing may have cumulative effects on hedgerow when added to footpath and road lighting, especially for the SW, SE and NE hedgerow boundaries.
Disturbance to bat flight/foraging/roosting activity from noise or human presence – construction and operational phases	None (but see in-combination assessment below).
PART C: IMPACT PRE	DICTION IN-COMBINATION
Impact	Predicted Effect of Impact
Temporary / permanent loss of	Loss / deterioration of habitat at Drynham Lane could lead to adverse effects on the SAC in combination with the developments

foraging and roosting habitat and flight corridors	identified in Part A. Note that development at Green Lane, Castlemead and Paxcroft, although completed, is still likely to be continuing to impact habitats which support the SAC despite mitigation being implemented.
Risk of collision and bat fatality	Potential bat fatalities at Drynham Lane could lead to in- combination effects with those arising from recreational pressure at publicly accessible woodlands to the south of Trowbridge.
Disturbance to bat flight/foraging/ roosting activity from light spill	Effects of lighting at Drynham Lane could lead to effects in- combination with light spill from other greenfield developments.
Disturbance to bat flight/foraging activity from noise or human presence – construction and operational phases	The effects of recreational pressure at Green Lane and Biss Woods in Trowbridge are discussed in detail in the AAs for Ashton Park (15/04736/OUT) and the Wiltshire Housing Site Allocations Plan. Both achieved a favourable AA outcome on the basis of detailed and extensive mitigation schemes. The current application lies within the medium risk zone for causing recreational impacts at the publicly accessible woodlands and it can therefore be assumed it will contribute to recreational impacts.
PART D: CONSEQUE	NCES FOR CONSERVATION OBJECTIVES
Development in Trowbr boundary. All of the risk SAC which is functiona habitat.	ridge is not currently expected to affect habitat within the SAC is below have been assessed in relation to habitat lying outside the lly related to the SAC either as roosting, foraging or commuting
Does the project or pl	an have the potential to:
Cause delays in progress towards achieving the conservation objectives of the site?	N/A Site is in favourable condition
Interrupt progress towards achieving the conservation objectives of the site?	N/A Site is in favourable condition
Disrupt those factors that help to maintain the favourable condition of the site?	As described above the effects of increased lighting and habitat loss / deterioration arising from development in the bat consultation zone, and increased recreational pressure in the Trowbridge area generally, could lead to adverse effects on maternity roosts, other roosts and on habitat that the bats rely on for foraging and commuting, all of which lie outside the SAC boundary.
Interfere with the balance, distribution and density of key species that are the indicators of	As above. Development could interfere with habitats lying outside the SAC that are functionally linked to it.

favourable condition of the site?	
Cause changes to the vital defining aspects (e.g. nutrient balance) that determine how the site functions as a habitat or ecosystem?	Nutrient enrichment through dog fouling and fire pits has the potential to disrupt nutrient balance in the woodlands south of Trowbridge. Other key vital defining aspects such as hydrology, shading, wind exposure, are unlikely to be affected. While an effect of nutrient enrichment is possible, it is unlikely that the current application, even in combination with other pending applications would trigger loss of integrity at this time.
Change the dynamics of the relationships that define the structure and/or function of the site?	It is believed the relationship between maternity and hibernation sites is currently stable. This could be disrupted if habitat between these two key roosting areas becomes less favourable for bats through, for example isolation, disturbance or habitat deterioration caused by increased recreational pressure, loss / deterioration of habitat.
Interfere with predicted or expected natural changes to the site?	Increased recreational pressure may affect natural changes and natural succession within the maternity woodlands.
Reduce the area of key habitats?	Increased recreational pressure may lead to deterioration of understorey habitat and canopy trees leading to a reduction in suitable foraging habitat and roosting habitat for Bechstein's bats.
Reduce the population of key species?	Vandalism of bat boxes or disturbance to tree roosts could cause bat fatalities and a reduction in the population. It is possible that the current application in-combination with other pending applications would trigger loss of integrity
Change the balance between key species?	There is potential for recreational pressure to indirectly affect the proportions of Bechstein's prey species if impacts on foraging vegetation are severe over a prolonged period of time.
Reduce diversity of the site?	Current understanding indicates the effects of recreational pressure are unlikely to affect those aspects of habitat species diversity that are critical in relation to providing adequate foraging and roosting habitat for SAC bats.
Result in disturbance that could affect population size or density, or the balance between key species?	The impact of increased recreational pressure could lead to a reduction in the amount of foraging habitat available, the number of trees with roosting features and the number of bat boxes available to roosting Bechstein's bats. It is possible that the current application in-combination with other pending applications, would trigger loss of integrity
Result in fragmentation?	It is unlikely that the woodland habitat would become fragmented as a result of recreational pressure. The development at Castlemead and creation of Jubliee wood at the north end of Biss Wood has reduced fragmentation between Green Lane and Biss Wood. Involvement by WWT of local communities in managing the new Green Lane Woodland Complex will provide opportunities for new woodland planting. However, as discussed above, development could lead to fragmentation of foraging and commuting habitat between the hibernation and maternity sites.

Result in the loss or reduction of key features?	There is the potential for loss of tree roosts and bat boxes used for roosting and a risk of reduction in the quality of foraging habitat. It is possible that the current application in-combination with other pending applications would trigger loss of integrity.
PART E: MITIGATION	FOR APPLICATION 16/00547/FUL
North western boundary adjacent to existing development at Southview Farm	Drawings demonstrate a minimum width of 8.5m will be provided between housing and the existing boundary hedge, increasing to more than twice this near the SuDs. Condition required to implement and manage landscaping.
Railway boundary and internal hedgerow	Drawings demonstrate garden fence lines will be at least 5.5m from railway boundary. The internal hedgerow will be at least 7m from properties frontages. Both these hedgerows will be improved in condition (see Post Intervention Habitat Plan). Street lighting will not impact on hedgerows. Conditions required for lighting and to implement and manage landscaping
South eastern boundary adjacent to Drynham Lane	The street lighting layout indicates that the hedgerow will be maintained at below 0.5 lux by not lighting the adjacent footpath. I understand this is acceptable to the Highways Dept. This hedgerow should therefore continue to be used for bat commuting and foraging. The hedgerow will be improved in condition. Conditions required for lighting and to implement and manage landscaping
New woodland planting	Approximately 1.03 ha of new woodland planting at north eastern end of the site as an offset for loss / deterioration of bat habitat, including grassland and hedgerows. It can be expected to provide foraging habitat for Bechstein's bats within a few years of being planted and its value will increase as it ages. In terms of mitigation quantum, the woodland is considered to be equivalent proportionally to the mitigation package provided for the remainder of the strategic allocation at Ashton Park.
	A biodiversity net gain calculation has been provided which over- estimates the units generated post development (the pond should be classed as SuDs, the woodland cannot be created through accelerated succession) such that it is unlikely to achieve a net gain for biodiversity and may even lead to a degree of loss. However, this application is not required to meet the TBMS criteria, it is part of the Ashton Park strategic allocation and as such the allocation as a whole is likely to achieve a net gain. Conditions required to implement woodland planting and retain and manage woodland primarily as bat habitat. S106, woodland planting to be completed and approved by the LPA prior to commencement of development.
Precautionary approach to tree works	Works to the Oak tree should be preceded by a thorough examination of all preferred roosting features and works modified as necessary to minimise impacts on bats, retaining roosting features as far as possible. Condition for method statement

Recreational pressure	The development on its own is unlikely to offset visits to Green Lane and Biss Woods, and Picket and Clanger Woods. As the development lies within the grey hatched medium risk zone, and as no other mitigation has been proposed, the Council will be required to contribute £641.48 per dwelling from CIL towards the recreational mitigation scheme in Appendix 2 of the TBMS.
Compliance	As the landscaping measures are required to make this development compliant with the Habitat Regulations and this Council has limited compliance capacity, there is a significant risk, based on past experience, that mitigation will not be delivered either in accordance with the design or within acceptable timescales. A S106 contribution is therefore required towards employing a Council compliance officer in proportion to that secured for Ashton Park.
Conditions and informatives	The following matters must be secured by condition. The wording of conditions seeks as far as possible to ensure the Habitats Regulations will be complied with i.e. to provide certainty that mitigation will be effective, to ensure mitigation will be in place before impacts start to occur and to ensure mitigation continues to be effective for as long as impacts are endured.
	1. Development to be carried out in accordance with the following:
	P18-1032_101-D / 102-D / 103-D)
	REASON: To ensure adequate long term provision on site for priority habitats and protected species.
	2. Before any development takes place, including removal of any vegetation, a Construction Environmental Management Plan (CEMP) shall be submitted to the local planning authority for written approval. The Plan shall provide details of the measures that will be implemented during the construction phase including the precautions that will be undertaken to avoid harm to protected species, hedgerows and trees through the presence on site of an Ecological Clerk of Works. The Plan will also ensure that:
	 areas proposed to be set aside for bat mitigation along site boundaries and at proposed woodland will be fenced off prior to commencement and not used for temporary works at any time during the construction period, and;
	 the impact of loss of bat roosting features during any works to trees, including the oak tree in the south west of the site will be minimised.
	The development shall be carried out in full accordance with the approved plan.
	REASON: To ensure adequate protection and mitigation for protected species and priority habitats.
	3. Landscaping to be carried out and maintained (i.e. condition WC2).
	REASON: To ensure satisfactory landscape setting AND adequate provision of habitat to offset impacts on ecology.

4.	 Before works commence, a Landscape and Ecological Management Plan (LEMP) will be submitted to the Local Planning Authority for written approval. The LEMP shall set out management objectives and detailed prescriptions for every habitat / communal area across the site. In addition, management will ensure that: the value of the woodland is maximised for bats and wildlife, with public access being allowed only for walking and 'the quiet appreciate of nature'; all boundary hedgerows provide a minimum width within the site boundary of 3m and minimum height of 4m, and; the cutting regime for neutral grassland areas as shown on the Post Intervention Habitat Plan (GE Consulting Ref 0842-BNG-DM) dated 22/7/2021 maximise invertebrate biomass and diversity.
	The LEMP shall also include details of the legal and funding mechanism(s) by which long-term implementation of the plan will be secured. The LEMP shall be implemented in accordance with the approved details and in perpetuity as each habitat / communal area is created. REASON: To ensure the long-term management of protected
	and priority habitats and other landscape and ecological features, and to maintain and enhance these habitats and features in perpetuity.
5.	No external lighting shall be installed on site until plans showing the type of light appliance, the height and position of fitting, illumination levels and light spillage have been submitted to and approved in writing by the Local Planning Authority. The plans will be in accordance with the appropriate Environmental Zone standards set out by the Institute of Lighting Engineers in their publication GN01:2011, 'Guidance for the Reduction of Obtrusive Light' (ILP, 2011), and Guidance note 08/18 "Bats and artificial lighting in the UK", issued by the Bat Conservation Trust and Institution of Lighting Professionals and will demonstrate that bat habitat (trees, scrub and hedgerows) on the perimeter of the site will remain below 1 lux and in accordance with the Street and Footpath Draft Lighting Layout (MMA 16042/001 R3, 21 Aug 2020).
	The approved lighting shall be installed and shall be maintained in accordance with the approved details and no additional external lighting shall be installed. Footpaths across open space and the access road through the woodland will remain unlit for the lifetime of the development.
	REASON: to provide suitable conditions for protected species and to minimise unnecessary light spillage above and outside the development site.

S106 agreement	The S106 agreement must secure the following:
	 In relation to new woodland planting at the north end of the site:
	 a) Timescale for completion of planting in relation to commencement of development i.e. must be planted and approved by the LPA before commencement. b) Details of temporary and permanent fencing including gates and styles to prevent damage by contractors and residents at all times. c) The area remains as woodland habitat managed for biodiversity for the lifetime of the scheme with no recreational or other use to be made of the area other than that for walking and the 'quiet appreciation of nature'.
	 A sum to be paid by the developer towards compliance monitoring by the LPA during the construction and early occupation periods. This will be £7772.00 based on a proportion of that paid by Ashton Park developers. This sum includes provision of a grade J ecologist at £39,200 FTE including NI and Pension and allows for inflation at 2% annually.
PART F: CONCLUSIO	N
Is the project likely to	affect site integrity?
a) Alone?	No, provided the above conditions and S106 agreement heads of
	terms are secured.
b) In combination with other plans or projects?	terms are secured. No.
b) In combination with other plans or projects? Recommendation:	terms are secured. No.
b) In combination with other plans or projects? Recommendation: Application 16/00547/F Bradford on Avon Bats provided that conditions	terms are secured. No. UL will not lead to adverse effects on the integrity of the Bath and SAC alone or in combination with other plans and projects s and a S106 agreement are secured as stated in section E above.
b) In combination with other plans or projects? Recommendation: Application 16/00547/F Bradford on Avon Bats provided that conditions Name of officer(s) making the assessment and date	terms are secured. No. UL will not lead to adverse effects on the integrity of the Bath and SAC alone or in combination with other plans and projects s and a S106 agreement are secured as stated in section E above. Louisa Kilgallen Senior Ecologist, Landscape and Design Team, Wiltshire Council 17/09/2021
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