



PRELIMINARY ECOLOGICAL APPRAISAL

Bramblewood, Newhouse Lane, Storrington

On behalf of: Folkes Architects

Client:	Folkes Architects			
Project:	Bramblewood, Newhouse Lane, Storrington			
Reference:	LLD3646-ECO-REP-001-00-PEA			
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Validity:

This report is valid for 18 months from the date of the site visit. If works have not commenced by this date, an updated site visit should be carried out by a suitably qualified ecologist to assess any changes in the habitats present on site, and to inform a review of the conclusions and recommendations made.



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SUMMARY

Lizard Landscape Design and Ecology (LLDE) has been commissioned by Folkes Architects to undertake a Preliminary Ecological Appraisal (PEA) of the proposed development at Bramblewood, Newhouse Lane, Storrington (located around central grid reference: TQ 11340 15256 – hereafter referred to as 'the site'). This report presents the results of an initial scoping survey which was undertaken on 09th October 2025.

The site comprises a residential dwelling and associated garden. The site is not located within the impact risk zone of any designated area and development proposals do not meet the criteria which would require the local planning authority to consult with Natural England. Habitats on site were found suitable to support roosting bats and amphibians; further survey for these species groups is therefore required to allow their potential presence to be ruled out.

Table No. 01 - Summary of Recommendations

Ecological Receptor	Recommendations	Time Constraint
Bats	B1 – was assessed as having low potential to support roosting bats. As part of the building is subject to removal further surveys will be required. T2 – was assessed as having low potential to support roosting bats. If the tree is subject to removal further assessment will be required.	May - September
Great crested newts (GCN)	Pond 1 – was assessed as having low potential to support GCN. A GCN eDNA survey is recommended to confirm absence.	Mid-March – Mid-June
Reptiles	Reasonable avoidance measures have been outlined herein.	April – October
Nesting birds	The construction period should be carried out outside the main nesting period.	Main nesting bird season between March – September.

Subject to a sensitively designed scheme, which gives due consideration to the survey and mitigation requirements outlined herein, no major ecological constraints have been identified which would preclude the provision of a well-designed development.

1.0 INTRODUCTION

- 1.1 Lizard Landscape Design and Ecology (LLDE) has been commissioned by Folkes Architects to undertake a Preliminary Ecological Appraisal (PEA) of proposed land at Bramblewood, Newhouse Lane, Storrington (located around central grid reference: *TQ 11340 15256* – hereafter referred to as ‘the site’).
- 1.2 The purpose of this report is to establish the site’s suitability for development, inform the design process for future proposals, record the ecological baseline and identify key potential ecological constraints and opportunities associated with future development proposals. This report has been prepared with due consideration for existing best practice guidance (CIEEM, 2017) (BSI, 2013) and aims to provide general advice on ecological constraints associated with development of the site. The report includes recommendations for further assessment where necessary.

Site Information

- 1.3 The site covers an area of c. 0.17 Hectares (ha) and consists of a rectangular shaped plot. The site comprises a grassed amenity area, a number of individual trees, introduced shrubs, and associated access. The site is bound by Newhouse Lane to the north and by residential buildings and associated gardens, to the south, east and west.

Surrounding Landscape

- 1.4 The site is located within a semi-rural setting, to the northeastern extents of the village of Storrington. The town of Worthing is located c. 12.0km southeast and the town of Horsham lies c.16.0km northeast of the site. The overall surrounds are predominantly residential buildings and associated gardens, with arable fields and areas of woodland in the wider area. The site is bound by a ditch which runs alongside Newhouse Lane. The soil composition is freely draining slightly acid loamy soils.

Development Proposals

- 1.5 It is understood that the proposals involve the demolition and rebuilding of the eastern aspect of the main residential building B1, and the demolition and rebuild of the garage/outbuilding B2, for residential use. Within the current proposals all habitats are scheduled to be retained, however, 2no. common birch trees may need to be removed.

2.0 SCOPE OF THE ASSESSMENT

- 2.1 In accordance with current guidance (CIEEM, 2017), the aim of the Preliminary Ecological Appraisal has been to:
- Identify the likely ecological constraints associated with a project;
 - Identify any mitigation measures likely to be required, following the 'Mitigation Hierarchy' (BSI, 2013);
 - Identify any additional surveys that may be required to inform an Ecological Impact Assessment (EclA); and
 - Identify the opportunities offered by a project to deliver ecological enhancement.

3.0 METHODOLOGY

3.1 Desk Study

- 3.1.1 The Multi-Agency Geographical Information Centre (MAGIC) website was consulted for information regarding the location of waterbodies, priority habitats, statutory designated sites and existing wildlife mitigation licences, within a potential zone of influence of the site. Additionally, the Local Planning Authority (LPA) website was consulted for information regarding the location of non-statutory designated areas, and satellite imagery and historic mapping was used to inform an assessment of the recent land use changes and habitat types within the area. The following potential zones of Influence's have been used for the following potential ecological receptors during the desk study assessment:

Table No. 02 – Zones of Influences for Ecological Receptors

Potential Zone of Influence	Type of Record / Designation/s / Ecological Receptor
0.5km	• Ponds, ditches and other water bodies.
2.0km	• Priority Habitats (UKBAP) (NERC, 2006); • European Protected Species Mitigation Licences (EPSMLs); • Local Nature Reserves (LNRs); • National Nature Reserves; • Sites of Special Scientific Interest (SSSIs); and • Local Wildlife Sites (LWS) / Site of Nature Conservation Interest (SNCI).
10.0km	• Special Protection Areas (SPAs); • potential Special Protection Areas (pSPAs); • Ramsars (Wetlands of International Importance); • proposed Ramsars (pRamsar); • Special Areas of Conservation (SACs); and • possible Special Areas of Conservation (pSACs).
12.0km	• Special Areas of Conservation (SACs) and possible Special Areas of Conservation (pSACs) designated for supporting Annex II bat species.

- 3.1.2 Given the quantum of development proposed / broad low ecological value of the site and the surrounding area, a local biological records centre search has not been provided. This is an approach in line with current guidance (CIEEM, 2020).
- 3.1.3 The Local Planning Authority website was consulted to inform of additional relevant information to this assessment, including local development plan policies in relation to ecology and biodiversity (see *Appendix A – Planning Policy and Legislation*) as well as any Local Nature Recovery Strategies, Nature Improvement Areas (NIAs) and Biodiversity Opportunity Areas (BOAs) etc.

3.2 Field Survey

- 3.2.1 The field survey was undertaken on 9th October 2025 by a Suitably Qualified Ecologist (Eve Hills, MRes, BSc, 3 years professional experience). Weather conditions were mild (c.17°C), with a light south-westerly wind (Beaufort Scale 1-2), sunshine and 15% cloud cover.
- 3.2.2 The field survey comprised a walkover inspection of the site, immediately adjacent land and boundaries features, in which ecological features were noted and mapped in accordance with principles of the UKHabs-Professional Classification System (UKHabs Ltd., 2023). A minimum mapping unit of 25m² / 5m length was used and habitats were identified to at least level 4 wherever practicable. Habitat categories were slightly amended to be consistent with those used as part of Biodiversity Net Gain calculations.
- 3.2.3 A list of plant species noted was compiled, together with an estimate of relative abundance made according to the DAFOR scale. In addition, Target Notes were used to provide supplementary information where necessary on any features encountered which were notable, relevant to the assessment or too small to map.

3.3 Evaluation of Ecological Features

- 3.3.1 An assessment was made to determine the likely importance of any flora / habitats present, as well as determining whether any qualified as being of conservation merit, such as those listed as habitats and species of principal importance for the conservation of biodiversity (NERC, 2006). Likely importance was determined in reference to a predefined geographical frame of reference, as laid out in *Guidelines for Ecological Impact Assessment* (CIEEM, 2022), this was assessed in accordance with the criteria outlined below:

Table No. 03 – Likely Importance Assessment Criteria

Likely Importance Categories	Likely Importance Criteria
Negligible	Of no notable ecological value.
Site	Ecologically valuable within the context of the site
Local	Ecologically valuable within the context of the immediate surrounds, i.e., c. 1km ²
District	Ecologically valuable within the context of the wider surrounds / LPA district, i.e., c. 10km ²
County	Ecologically valuable within the context of the wider county, i.e., c. 100km ²
Regional	Of ecological value within the region, i.e., southeast, south west, midlands etc.
National	Of ecological value within the context of the United Kingdom, such as a SSSIs, NNR's etc.
International	Ecological value of global significance, such as SACs, SPAs etc.

- 3.3.2 Habitats within and adjacent to the site were assessed to determine their potential to support protected and notable fauna. This assessment was based on professional judgment and experience, with due consideration to industry standard best practice guidance for the relevant taxa, as laid out in the table below. The possible presence of each taxon was summarised as either negligible, low, moderate, high or confirmed.

Table No. 04 – Habitat Suitability Assessment References

Fauna	Relevant Best Practice Guidance
Great Crested Newts	<i>Great Crested Newt Conservation Handbook</i> (Langton <i>et al</i> , 2001) & <i>Evaluating the Suitability of Habitat for the Great Crested Newt</i> (Oldham <i>et al</i> , 2000)
Reptiles	<i>Herpetofauna Workers' Manual</i> (Gent and Gibson, 2003)
Bats	<i>Bat Surveys for Professional Ecologists: Good Practice Guidelines</i> (4 th edition) (Collins, 2023)
Dormice	<i>The Dormice Conservation Handbook</i> (English Nature, 2006)
Badger	<i>Survey Badgers</i> (Harris <i>et al</i> , 1989)
Water Vole	<i>The Water Vole Mitigation Handbook</i> (Dean <i>et al</i> , 2016)
Birds	<i>Guidance for Bird Surveys in Relation to Development</i> (NE, 2022)
Invertebrates	<i>Considering Terrestrial Invertebrates in Preliminary Ecological Appraisals</i> (Jukes, 2021) and <i>Organising Surveys to Determine Site Quality for Invertebrates</i> (English Nature, 2005)

- 3.3.3 Photographs were taken as evidence and to illustrate any notable ecological features on site. These have been provided within the body of the relevant parts of the Results section, where appropriate.

3.4 Daytime Bat Walkover Survey

- 3.4.1 A Daytime Bat Walkover (DBW) survey was undertaken as part of the field survey assessment by the suitably experienced surveyor (accredited agent under 2016-20460-CLS-CLS).
- 3.4.2 The Daytime Bat Walkover (DBW) survey entailed a slow walkover of the site, during which time the surveyor identified any structures, trees and other features that could be suitable for bats to roost in, and any habitats which could be suitable for bats to commute, forage or swarm in.

- 3.4.3 During this survey any direct evidence of bats was searched for and recorded, such as grease marks, urine stains, bat droppings, feeding remains and dead / live bats. Furthermore, any structures or trees which offered features with the potential to support bats were noted. For trees this included the identification of features typically associated with decay, such as, but not limited to, cracks, crevices and holes naturally formed by trees. For structures this included the identification of features such as, but not limited to, slipped, missing or uneven tiles, gaps around the soffit / barge board and raised flashing etc.
- 3.4.4 All suitable bat habitat was assessed in accordance best practice criteria (Collins, 2023), which is outlined herein. During the survey all trees within and immediately adjacent to the site were assessed using the following criteria:

Table No. 05 – Criteria for Assessing the Bat Roosting Suitability of Trees

Suitability	Description
None	Either no potential roosting features in the tree, or highly unlikely to be any.
FAR	Further assessment required to establish if potential roosting features are present in the tree.
PRF	A tree with at least one potential roosting feature present.

- 3.4.5 If it was possible to adequately assess a Potential Roosting Feature (PRF) from ground level then this was completed, and the feature classified as either:
- **PRF-I:** Feature only suitable for individual or very small numbers of bats, either due to size or lack of suitable surrounding habitat; or
 - **PRF-M:** PRF is suitable for multiple bats and therefore has the potential to be used by a maternity colony.
- 3.4.6 Furthermore, all structures were assessed externally, and internally wherever possible for their potential to support bats, using the following criteria:

Table No. 06 – Criteria for Assessing the Bat Roosting Suitability of Structures

Potential Suitability	Description
None	No habitat features on site likely to be used by any roosting bats at any time of year.
Negligible	No obvious habitat features on site likely to be used by roosting bats. However, some small uncertainty remains, as bats can use small and apparently unsuitable features occasionally.

Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of year. However, these do not provide enough shelter, space, protection, appropriate conditions or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats.
Moderate	A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat, but unlikely to support a roost of high conservation status, irrespective of species conservation status.
High	A structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat, with the potential to support high conservation status roosts irrespective of species conservation status.
Confirmed	Direct evidence of bats identified.

- 3.4.7 Finally, an assessment of the winter hibernation potential of the structures was made in consideration of the criteria used for assessing structures and trees, in combination with the potential presence of classic hibernation features, known roosts and suitability of habitat in the surrounds.

3.5 Great Crested Newts – Habitat Suitability Assessment

- 3.5.1 Any ponds identified within or adjacent to the site were subject to a Habitat Suitability Index (HSI) assessment to determine their suitability to support GCN, in line with current guidance (Oldham *et al*, 2000). The HSI is a numerical index, between 0 and 1 (0 representing completely unsuitable habitat and 1 representing optimal habitat), calculated based on the suitability of 10 calculable indices.
- 3.5.2 HSI assessment is useful to aid in determining how suitable a given waterbody is for GCN, but it does not directly correlate with GCN presence or population numbers and serves as information only.

4.0 RESULTS

4.1 Desk Study

Pond Study

- 4.1.1 Six ponds were identified within 500m of the site, based on OS mapping and satellite imagery, 2no were within 250m. Pond 1 (P1) is located on site, at the time of the survey P1 appeared unmanaged and was largely concealed by vegetation. P2 is located c. 235m northeast of the site adjacent to Newhouse Lane. P3 is located c. 275m northeast at Newhouse Farm, P4 is located c.386m south in an area of woodland. P5 is located c.421m southeast and is situated within a private garden and P6 is located c. 444 northwest, the pond is surrounded by vegetation and is located within an area of open farmland.

Priority Habitats

- 4.1.2 In accordance with the MAGIC dataset, within a 2.0km search radii of the site there were UKBAP Priority Habitats (NERC, 2006) of Upland heathland, Lowland Mixed Deciduous Woodland (some of which was ancient), Traditional Orchards and Woodpasture and Parkland.

European Protected Species Mitigation Licence (EPSML) Search

- 4.1.3 No (EPSMLs) were returned within 2km of the site.

Local Non-Statutory Designated Areas

- 4.1.4 The following non-statutory designated areas were identified within 2.0km of the site.

Table No. 08 – Non-Statutory Designated Areas

Site	Location
Sandgate Park (SNCI)	1.5km SW

Statutory Designated Sites

- 4.1.5 Statutory designated sites identified within a potential zone of influence of the site include:

Table No. 09 – Statutory Designated Sites

Site	Description	Location
Statutory Designated Sites within 2.0km		
Sullington Warren SSSI	The site supports a range of heathland habitats including both wet and dry heath, grassland, scrub and woodland. The woodland supports a rich community of breeding birds.	c. 1.5km SW
International Statutory Designated Sites within 10/12km		
Arun Valley SAC	The site is primarily designated for supporting the following Annex II species: Ramshorn snail <i>Anisus vorticulus</i>.	c. 6.7km SW
Arun Valley SPA Ramsar	The site consists of three SSSI's in an area of wet meadows on the floodplain of the River Arun. It is of outstanding importance for wintering waterfowl and breeding waders. It supports a number of wetland invertebrates that are listed as threatened in Britain, four of which are rare, and one of these, <i>Psuedamnicola confusa</i> , is considered endangered. Over winter the site supports waterfowl species of international importance including: - Bewick's swan <i>Cygnus columbianus bewickii</i> and: - Ruff <i>Philomachus pugnax</i>	c.5.8km
The Mens SAC	The site is an extensive area of mature beech <i>Fagus sylvatica</i> woodland rich in lichens, bryophytes, fungi and saproxylic invertebrates, and is one of the largest tracts of Atlantic acidophilus beech forests in the southeastern area of the habitats UK range. In response to limited silvicultural intervention, the site is developing a near-natural high forest structure. The following Annex II species is present as a qualifying feature, but not a primary reason for site selection: <i>Barbastelle Barbastella barbastellus</i>	c.11km NE

- 4.1.6 The site is located within the Impact Risk Zone of Warren Hill SSSI, and development proposals meet the criteria which would require the local planning authority to consult with Natural England regarding potential impacts upon this SSSI.

4.2 Existing Habitat Assessment

Site Assessment

- 4.2.1 Habitats within and adjacent to the site include:

- Modified Grassland
- Individual Trees
- Ditch
- Introduced Shrub
- Pond
- Hedgerow
- Buildings
- Developed land, sealed surface

Modified Grassland

- 4.2.2 The grassland to the front of the site is well maintained and at the time of the survey the sward height varied between c. 7 and 20cm long and was dominated by grass species that included red fescue *Festuca rubra* and perennial ryegrass *Lolium perenne*. Forbs noted occasionally throughout the sward include common daisy *Bellis perennis*, early dog violet *Violet reichenbachiana* and herb Robert *Geranium robertianum*, and those noted rarely include bird's-foot trefoil *Lotus corniculatus*, red deadnettle *Lamium purpureum* and white clover *Trifolium repens*. The east of the rear garden was laid to lawn and at the time of the survey, and sward height varied between 7 and 25cm. Overall, the grassland is of **site** value only.

Individual Trees

- 4.2.3 A number of individual trees were present throughout the survey area. These included, a mature oak *Quercus robur* with peeling bark, three mature multi-stem American chestnut *Castanea dentata*, two common birch *Betula pendula* and a number of immature holly trees *Ilex aquifolium*, found to the northern boundary of the site. Three mature oaks were noted to the rear of the site to the southern and eastern boundaries, as well as several immature common birch and holly trees (see *Figure No. 01 – Site Habitats Plan*). Overall, mature oak and the American chestnuts are of **local** value.



Photograph No: 1 – View of the individual trees lined to the northern boundary (right of the image) of the site, adjacent to Newhouse Lane. Image from the western viewpoint.

Dry Ditch

- 4.2.4 A ditch was noted along the northern boundary of the site, running adjacent to Newhouse Lane. The ditch extended approximately 30m along the entirety of the northern extent of the site. Trees lined the top forming a canopy overhanging the ditch. Vegetation present along the bank of the ditch included moss sp *Bryophyta*, common ivy *Hedera helix*, and bramble *Rubus fruticosus*. The ditch was dry at the time of the survey. Overall, the ditch is of **local** value.



Photograph No: 2 – Image showing the dry ditch and overhanging vegetation along the northern boundary of the site.

Introduced Shrubs

- 4.2.5 A number of introduced shrubs were noted throughout the survey area, those found to the north and east of the site included rhododendron *Rhododendron ponticum*, buddleia *Buddleja davidii* and Japanese angelica *Aralia elata*, while a small number cherry laurel *Prunus laurocerasus* were found along the western boundary of the site. Overall, this habitat is of **site** value.

Pond

- 4.2.6 1no. pond was located to the rear of the property. There was algae present in the pond as well as excessive vegetation. Overall, the pond was overtaken by emergent vegetation. A detailed assessment of the pond is contained in section 4.4, but the pond is of **site** value.

Hedgerow

- 4.2.7 A section of hedgerow was noted to the southwestern boundary of the site. The hedge was formed of cherry laurel, rhododendron and holly. This habitat is of **site** value.

Buildings

- 4.2.8 There were 3no. buildings noted on site. Building 1 (B1) is the main residential dwelling, brick built with tiled roof and hanging tiles were present on the upper part of the exterior walls. Two dormers were present on the roof and there was a brick-built chimney to the western aspect of the building. Building no.2 is a brick built detached double garage over two floors, and building no. 3 is an open fronted lean-to attached to the eastern aspect of B1. A detailed assessment of the buildings is contained in section 4.4 but these building offer **negligible** value in and of themselves.

Developed land, sealed surface

- 4.2.9 A tarmacadam circular driveway provides vehicular access from Newhouse Lane, with areas of block paving to the entrance of B1 and B2. Also noted, was a raised brick-built patio area to the front of B1. Overall, these areas are of **negligible** ecological value.



Legend

- Red Line Boundary
- Existing Large Rural Tree
- Existing Medium Rural Tree
- Existing Small Rural Tree
- Ditches
- Developed land
- Introduced shrub
- Modified grassland
- Ponds
- + Target Notes



Client

Folkes Architects

Project Title & Location

Bramblewood, Newhouse Lane

Drawn by	Approved by	Rev	Date
EH	CO	00	11/11/25

Figure No. 01 - Site Habitat Plan

4.3 Invasive Species

- 4.3.1 *Rhododendron ponticum* were noted in two areas of the site, to the north and to the south, this species is listed on Schedule 9 of the Wildlife and Countryside Act 1981. Cherry laurel *Prunus laurocerasus* was also observed on site, a small number were noted along the western boundary fence line. This species is not listed on Schedule 9 of the Wildlife and Countryside Act 1981; however, it is listed as an invasive species within Sussex.

4.4 Protected and Notable Fauna - Likely Presence Assessment

Amphibians

Desk Study

- 4.4.1 The desk study returned a small number of records for great crested newt *Triturus cristatus* from within the search area; the records were recorded in close proximity to a single pond centred c. 530km southeast of site. The desk study also returned several records for common frog *Rana temporaria*, common toad *Bufo bufo*, and smooth newts *Lissotriton vulgaris*

Site Assessment

- 4.4.2 There is one pond on-site which has been assessed below. A further 5 ponds are located within 500m of the site and all ponds (with the exception of P4) are moderately well connected to the site. It was not possible to get access to the surrounding ponds at the time of the survey. The on-site HSI assessment (see Table No. 10), assessed P1 as being of good suitability for great crested newts.
- 4.4.3 The introduced shrub and hedgerow habitat to the southeast of the site, in addition to a number of log piles and deadwood noted in this area, provide potential hibernation, shelter and foraging opportunities for great crested newts. Overall, the habitats are of **moderate** suitability for great crested newts and other amphibians.

Table No. 10 – Summary of HSI Results

HSI Criteria	P1	
Location	1	Zone A
Pond Area	0.5	Pond <50m2

Permanence	0.9	Never dries
Water Quality	0.33	Poor
Shade	1.0	No shade
Waterfowl	1.0	No evidence
Fish	1.0	No records
Pond Count	0.6	>4 per km ²
Terrestrial Habitat	0.67	Moderate
Macrophytes	1.0	80% cover
HSI Score	0.75	Good

Reptiles

Desk Study

- 4.4.4 The desk study returned a small number of records for four species of reptiles, including records for adders *Vipera berus*, slow worms *Anguis fragilis* and common lizard. Records were also returned for grass snake *Natrix Helvetica*.

Site Assessment

- 4.4.5 Reptiles require a mosaic of habitats to persist in a landscape, including vegetative cover for refuge opportunities, open areas for basing and a diverse flora to support viable invertebrate prey throughout the year. An area of introduced shrubs to the southeast and mixed species hedgerow to the eastern extent of the site may provide sheltering and basking opportunities for reptiles. In addition, a number of log piles and deadwood were noted throughout the survey area, providing further basking and shelter opportunities for reptiles. Overall, the habitats are of **moderate** suitability for reptile species.



Photograph No: 3 – view of piles of deadwood and vegetation to the southeast of the site providing shelter and basking opportunities for reptiles.

Bats

Desk Study

- 4.4.6 The desk study returned a number of records for 10no. species of bat, including records for common pipistrelle *Pipistrellus pipistrellus*, serotine *Eptesicus serotinus*, Daubenton's *Myotis daubentonii* and brown long-eared bats *Plecotus pygmaeus*. Records were also returned for whiskered *Myotis mystacinus* and barbastelle *Barbastella barbastellus*, from within the search area. This included records for roost sites and observations of bats in the field. The closest records were centred c.1.km northeast of the site and was for western barbastelle, the record was submitted in 2015.

Daytime Bat Walkover - Trees

- 4.4.7 The majority of trees within the site are semi-mature specimens which are yet to reach a stage of senescence whereby suitable roosting features would be present, but a number of trees were identified as offering some level of bat roost suitability during the ground level assessment. A summary of these features is illustrated in the table below. The tree reference numbers are illustrated on *Figure No. 01 – Site Habitats Plan*. All trees on site are proposed to be retained with the exception of two silver birch trees which may need to be removed. The ground assessment did not identify PRFs on either of these trees.

Table No. 11 – Preliminary Bat Roost Assessment Results - Trees

Tree Ref	Description	Category
T01	Mature common birch with light coverage of ivy. No obvious PRFs present.	FAR
T02	Mature common birch with some peeling bark present.	PRF
T03	Mature American chestnut tree multi-stem (x4). Large tree with dense foliage, and light coverage of ivy. NO obvious PRFs but not possible to adequately assess from ground level.	FAR
T04	Mature oak with knotholes and loose bark. Moderate coverage of ivy. Not possible to adequately assess from the ground.	PRF
T05	Mature American chestnut multi-stem (x2). Ivy clad stem. Not possible to adequately assess from the ground.	PRF

T06	Common birch multi-stem x2. Loose and peeling bark present.	PRF
T11	Mature multi-stem American chestnut. No obvious PRFs but not possible to adequately assess from the ground.	FAR
T12	Dead common birch. Presence of cavities and loose and peeling bark.	PRF
T13	Mature multi-stem American chestnut. No obvious PRFs but not possible to adequately assess from the ground.	FAR
T21	Mature oak. Large tree with knot-holes and peeling bark.	PRF
T22	Large snag with cavities and loose bark present.	PRF



Photograph No: 4 - Common birch (T01) with light coverage of ivy on stem.

Photograph No. 5 – Common birch (T02) with peeling bark present on stem.

- 4.4.8 All buildings within the site were assessed internally and/or externally for bats. A summary of this assessment is provided in the table below. Building reference numbers are illustrated on *Figure No. 01 – Site Habitats Plan*. Part of the main dwelling B01 is proposed to be removed and rebuilt within the current development proposals, building B02 is planned for removal and will be rebuilt, and B03 is being retained as part of the proposals.

Table No. 12 – Preliminary Bat Roost Assessment Results - Buildings

Building Ref	External assessment	Internal assessment	Suitability
B01	Two-storey residential dwelling. Brick built with clay roof tiles and hanging tiles to both dormers. A number of roof tiles are either slipped, or uneven, creating crevice and ingress opportunities for bats. A number of gaps around the skylight windows, dormers and soffits were identified, which would provide roosting opportunities to crevice dwelling roosting bat species.	The internal roof space is used as living space and was not possible to access. No evidence of roosting bats was identified.	Low
B02	Two storey brick-built garage building. Well-sealed with a couple of lifted tiles, creating crevice and ingress opportunities for bats.	The building is used as a residential unit with no internal loft space. No internal inspection of B02.	Negligible
B03	Brick built lean-to shed. Timber and corrugated roofing. The building is in poor state of repair with numerous gaps in building frame, creating crevice and ingress opportunities for bats.	The building is small and open fronted. No evidence of roosting bats was identified. The building is open to the weather and draughts are likely to deter bat use.	Negligible



Photograph No: 6 – View of B01 roof and gaps in tiles and around soffits, creating roosting opportunities for crevice dwelling bat species.



Photograph No: 7 – View of B02 showing well-constructed building with a couple of small gaps but no obvious PRFs



Photograph No: 8 – Internal view of B03 showing gaps in roofing. Open fronted aspect is likely to deter bat use.

Winter Roosting Potential

- 4.4.9 Given the results of the preliminary roost assessment and in consideration of the presence or classic / non-classic hibernation features, the suitability of the surrounding habitat for commuting and foraging, and the presence / absence of known roosts, it was determined that the site offered **low** winter roosting potential.

Foraging and Commuting Suitability

- 4.4.10 There are a number of trees on-site that were identified as offering bat roost opportunities. These trees are mature and are well connected to suitable habitat within the wider landscape, as such these features are highly suitable for the majority of UK bat species. The habitats overall are considered to be of **moderate** habitat suitability.

*Dormice**Desk Study*

- 4.4.11 The desk study returned a number of records of dormouse *Muscardinus avellanarius* from within the search area. The closest record was centred c.700m south of the survey area. Hedgerows present in the surrounding landscape have some limited potential to support dispersing dormice; however, Rock Road is a potential barrier between the location of the record and the site.

Site Assessment

- 4.4.12 Boundary vegetation does contain species suitable to support dormouse foraging, hazel was present on-site, but this was rare. The mature trees to the northern boundary of the site are connected to areas of suitable habitat in the wider environment. However, the proposals are likely to have minimal impact on this habitat. Considering the presence of local records for dormouse, the site is considered of **low** value to this species.



Birds

Desk Study

- 4.4.15 The desk study returned numerous records for 104no. species of birds from within the search area. This included records for 7no. species listed on Schedule 1 (Wildlife and Countryside Act, 1981) (as amended), as well as records for 49 species of birds listed on the Birds of Conservation Concern (BoCC) Red List (Stanbury *et al*, 2021). This included records for bird associated with farmland habitat, such as lapwing *Vanellus Vanellus* and grey partridge *Perdix perdix* as well as woodland species such as lesser spotted woodpecker *Dryobates minor*, pied flycatcher *Ficedula hypoleuca* and nightingale *Luscinia megarhynchos*. Records for birds of prey, wintering wildfowl and seasonal migrants, were also returned

Site Assessment

- 4.4.16 The individual trees, shrubs and hedgerow present throughout the site would be suitable to support breeding birds during the nesting season. The sward height throughout the site would not be suitable to support breeding birds during the nesting season. The site is connected to suitable habitats in the wider area that could support breeding, wintering and migrant birds and considering the presence of local records for these species, overall, the site has a **moderate / high** potential to support nesting birds.



Photograph No: 9 – View of individual trees and vegetation to the north of the site, providing nesting opportunities for breeding birds.

Invertebrates***Desk Study***

- 4.4.17 The data search returned records of numerous species of invertebrates within 2.0km.

Site Assessment

- 4.4.18 The site has multiple habitats with a reasonably diverse range of flora, however, none likely to support a notable assemblage of invertebrate species. Therefore, the site is likely of **low / moderate** value for invertebrate species.

Hedgehogs

- 4.4.19 No signs of hedgehogs were noted during the initial survey such as scat or other field signs. The trees and introduced shrubs throughout the site may provide some suitable habitat for hedgehogs. However, no suitable hedgehog habitat exists within the proposed construction area, thus the site is therefore of no more than **low value** to hedgehogs.

5.0 ECOLOGICAL CONSTRAINTS AND RECOMMENDATIONS

5.1 Internationally Designated Sites

- 5.1.1 2no. internationally designated statutory sites were identified within a potential zone of influence of the proposed development site. Due to the intervening distances, existing habitats on site and small scale of the development, no impacts upon The Mens SAC or Arun Valley SPA / SAC are likely to occur.
- 5.1.2 The site is located within the 12km wider conservation area of The Mens SAC whereby all impacts upon bat foraging and commuting routes must be avoided.

5.2 Nationally and Locally Designated Sites

- 5.2.1 One nationally and locally designated area was identified within a potential zone of influence of the site. However, none exist within or directly adjacent to the site, so would not be likely to be directly impacted by proposals.

5.3 On Site Habitats

- 5.3.1 The following section provides an evaluation of the potential impacts of proposals on the habitats on site and outlines any recommendations required in order to ensure proposals accord with planning policy and legislation (see *Appendix A*), and to maximise opportunities to deliver net gains for biodiversity. Where identified, any potential impacts should be addressed in line with the mitigation hierarchy (BSI, 2013) (CIEEM, 2022) and where possible, mitigation should be embedded in the scheme design as this gives assurance of delivery.

Biodiversity Net Gain Statement

- 5.3.2 The Development is subject of a householder application as defined within Article 2(1) of the Town and Country Planning (Development Management Procedure) (England) Order 2015, and as such is exempt from mandatory Biodiversity Net Gain.

Evaluation and Recommendations

- 5.3.3 Overall, the habitats on site were assessed as being of broad low ecological value. The existing buildings, areas of modified grassland and hardstanding are highly suitable for development, and the loss of these habitats could be compensated for within the scheme.
- 5.3.4 The greatest ecological interest at the site associated with individual tree habitats. Proposals should aim to retain and protect these areas wherever practicable. Where the loss of these habitats is unavoidable compensation measures should be sought by the planting of replacement trees throughout the site. Proposals should aim to retain and protect these areas wherever practicable.

5.4 Protected and Notable Species

- 5.4.1 Varying levels of legal protection are afforded to certain protected animals, certain species of conservation importance and broader biodiversity (see *Appendix A – Planning Policy and Legislation*). Therefore, in order to ensure proposals, accord with statutory legislation further surveys for these taxa may be required to determine their presence and, if present, to devise an appropriate mitigation strategy. Any protected / notable species assessed as having negligible potential to exist on site during the possible presence assessment were scoped out of further assessment at this stage.

Amphibians

- 5.4.2 The protected species assessment identified that the site and adjacent habitats offered some potential to support GCN and the HSI assessment of P1 suggests the pond is of good suitability. Overall, it is likely that GCN are absent, but it is not possible to scope GCN out at this stage and therefore, a single GCN eDNA survey should be completed mid-April to June inclusive, which will likely result in GCN being scoped out of further assessment. However, should GCN eDNA be identified further GCN population surveys would need to be completed, which would need to be completed between mid-March and June inclusive and in line with current guidance (Langton *et al*, 2001). Therefore, as a precaution, an eDNA survey should be completed ASAP in mid-April, to ensure time is available to complete follow up surveys, should GCN presence be confirmed.

Reptiles

- 5.4.3 The protected species assessment identified that the site and adjacent habitats offered moderate potential to support reptiles. As reptiles are protected from reckless killing and injury (Wildlife and Countryside Act, 1981), Reasonable Avoidance Measures (RAMS) prior to commencement is recommended, to avoid the need for further survey work. All suitable reptile habitat identified on-site is proposed to be retained, including deadwood and log piles and therefore, if reptiles are encountered over the course of works, they can be relocated to retained areas.

Bats

- 5.4.4 The protected species assessment identified the buildings on site offered low potential to support roosting bats, which were exemplified by the gaps and crevices in B01 and B02 and further survey work has been recommended to confirm absence / presence of a bat roost. Surveys should be conducted (May to August/September inclusive) and best practice standard methods (Collins, 2023) adhered to.
- 5.4.5 It was not possible to adequately assess the individual trees on site from ground level during the survey although lifted bark and knotholes were identified in several of the mature trees. Trees which were assessed as offering 'PRF' or 'FAR' bat roost suitability would require further survey work should they be scheduled for removal, major tree surgery works or disturbance through excessive noise and vibration.
- 5.4.6 The protected species assessment also identified that the site and adjacent habitats would be likely to be of moderate value to commuting and foraging bats in the area. The site is unlikely to support a notable assemblage of foraging / commuting bats and therefore, bat activity surveys are unlikely to be required. However, proposals should be mindful of the potential for bats to occur in the area by ensuring that trees and tree lines are protected from inappropriate nocturnal lighting, and by limiting the need for nocturnal lighting in the first instance. Any external lighting designs should comply with best practice standards in regard to external lighting and bats (BCT & ILP, 2023).

Dormice

- 5.4.7 The protected species assessment identified that the site and adjacent habitats supported low potential to support dormice. As potential dormouse habitat identified on-site is proposed to be retained further survey work can be avoided.

[REDACTED]

[REDACTED]

[REDACTED]

Birds

- 5.4.9 The protected species assessment identified that the site and adjacent habitats offered habitats of moderate / high value to wild birds. Any habitat suitable to support nesting birds scheduled for removal, i.e., individual trees and introduced shrub, should be cleared outside of the main bird nesting season (March – August inclusive) or first be subject to a bird nesting check prior to removal, to be conducted by suitably qualified ecologist or arborist.

- 5.4.10 As detailed in *BS 42021:2022 Integral nest boxes* (BSI, 2022), integral nest boxes should be installed in all new developments, at a rate equal to the number of dwellings. This could comprise integrated bird boxes targeted for a range of species, such as swifts, as well as sparrows and starlings. Boxes should be installed to the north-facing aspect of the new buildings, avoiding areas above windows and doors.

Invertebrates

- 5.4.11 The protected species assessment identified that the site and adjacent habitats offered low potential to support a notable invertebrate assemblage. However, general provisions for invertebrates should be included in the scheme, including plants of known value to invertebrates in any soft landscaping proposals, as well as log piles / insect boxes / bee bricks etc.

6.0 OPPORTUNITIES FOR ECOLOGICAL ENHANCEMENTS

6.1 In addition to any requirement to deliver +10% Biodiversity Net Gain outlined by the Environment Act (2021), net gains for biodiversity are a requirement outlined in National Planning Policy Framework (Department for Levelling Up, Housing & Communities, 2024) and local planning policy guidance. Opportunities for ecological enhancements which could be incorporated into the scheme design are provided below:

- Installation of integrated bird and bat boxes into new buildings, and
- The use of log and compost piles in habitat creation areas to provide refugia for reptiles and amphibians;
- Installation of 'bug hotels', bird and bat boxes to mature trees;
- The use of flowering lawn in areas which require regular mowing rather than a standard amenity mix;
- Green walls and roofs wherever possible, which are simplest to achieve on small structures such as bin stores and bike sheds; and
- Installation of invertebrate boxes in both sunny and sheltered locations to cater for a range of species;

7.0 CONCLUSIONS

- 7.1 The site covers an area of c. 0.17 Hectares (ha) and is located to the northeast extent of the town of Storrington, in West Sussex. The site consists of 3no. buildings, modified amenity grassland, individual trees and introduced shrub. Farmland habitats lie to the north, and residential buildings and associated gardens to the south, east and west of site. The greatest ecological interest at the site is associated with the mature oak trees which should be retained and protected throughout proposals, wherever practicable.
- 7.2 The habitats within and adjacent to the site were found suitable to support roosting and foraging bats, reptiles and nesting birds. Therefore, 2no. further bat surveys will be required, and mitigation will be required. As the presence, or potential presence, of protected species is a material consideration in the planning process these surveys shall need to be undertaken before determination of the planning application.
- 7.3 Proposals have negligible potential to impact upon any statutory designations identified within a potential zone of influence of development. Therefore, further assessment in regard to the *Habitat Regulations (2017)* or site-specific mitigation would not be required.
- 7.4 Subject to a sensitively designed scheme, which gives due consideration to the survey and mitigation requirements outlined herein, no major ecological constraints have been identified which would preclude the provision of a well-designed development.

8.0 REFERENCES

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Table No. 13 – Species List for Habitat Parcels**Modified Grassland and Native Shrubs**

Common Name	Scientific Name	DAFOR
Bramble	<i>Rubus Fruticosus</i>	O
Cocks-foot	<i>Dactylis glomerata</i>	D
Common Dock	<i>Rumex obtusifolius</i>	R
Common Ivy	<i>Hedera helix</i>	O
Curled Dock	<i>Rumex crispus</i>	O
Dandelion	<i>Taraxacum officinale</i>	O
Early Dog Violet	<i>Viola reichenbachiana</i>	O
Fern sp.	<i>Polypodiopsida</i>	LD
Fiddle Dock	<i>Rumex pulcher</i>	O
Hazel	<i>Corylus avellana</i>	R
Herb Robert	<i>Geranium robertianum</i>	O
Moss sp.	<i>Bryophyta</i>	D
Narrow Leaf Plantain	<i>Plantago lanceolata</i>	R
Nettle	<i>Urtica dioica</i>	R
Perennial ryegrass	<i>Lolium perenne</i>	LD
Ragwort	<i>Jacobaea vulgaris</i>	R
Red Fescue	<i>Festuca rubra</i>	O
Woodland sedge	<i>Carex sylvatica</i>	O
Yorkshire Fog	<i>Holcus lanatus</i>	D

Individual Trees

Common Name	Scientific Name	DAFOR
American Chestnut	<i>Castanea dentata</i>	O
Common Birch	<i>Betula pendula</i>	O
Holly	<i>Ilex aquifolium</i>	O
Horse chestnut	<i>Aesculus hippocastanum</i>	R
Oak	<i>Quercus robur</i>	O

Introduced Shrubs

Common Name	Scientific Name	DAFOR
Bird's foot Trefoil	<i>Lotus corniculatus</i>	R
Black bindweed	<i>Fallopia convolvus</i>	R
Buddleia	<i>Buddleja davidii</i>	R
Cherry Laurel	<i>Prunus laurocerasus</i>	R
Columbine	<i>Aquilegia vulgaris</i>	R
Cyclamen	<i>Cyclamen persicum</i>	R
Garden Privet	<i>Ligustrum ovalifolium</i>	R
Goat Willow	<i>Salix caprea</i>	R
Ground Flora		
Japanese Anjelica	<i>Aralia elata</i>	R
Japanese Chestnut	<i>Castanea crenata</i>	R

Nasturtium	<i>Tropaeolum majus</i>	O
Pampass grass	<i>Cortaderia selloana</i>	R
Rhododendron	<i>Rhododendron ponticum</i>	O
Rose sp.	<i>Rosa spp.</i>	R
Wild Strawberry	<i>Fragaria vesca</i>	R
Wood violet	<i>Viola odorata</i>	R

D – Dominant; A – Abundant; F – Frequent; O – Occasional; R – Rare; L – Locally

Appendix A – Planning Policy and Legislation

Legislation

Legislation relating to wildlife and biodiversity of particular relevance to this report includes:

- *The Conservation of Habitats and Species Regulations 2017;*
- *The Wildlife and Countryside Act 1981 (as amended);*
- *The Natural Environment and Rural Communities (NERC) Act 2006;*
and
- *The Environment Act 2021.*

This above legislation has been addressed, as appropriate, in the production of this report. Further details of legislation relating to the protection of particular ecological receptors are provided in the table below:

Ecological Constraint	Rationale
SACs (Special Area of Conservation), SPAs (Special Protection Areas) and Ramsars (Wetlands of International Importance)	Under the Conservation of Habitats and Species Regulations 2017 places a duty on the competent authority to maintain the favourable conservation status of designated SAC, SPA and Ramsar sites. Therefore, where it appears to the appropriate nature conservation body that a notice of a proposal relates to an operation which is, or forms, part of a plan or project which is likely to have a significant effect on a European site (either alone or in-combination with other plans or projects), and (b) is not directly connected with or necessary to the management of that site, it must make an appropriate assessment of the implications for that site in view of that site's conservation objectives. In the light of the conclusions of the assessment, it may give consent for the operation only after having ascertained that the plan or project will not adversely affect the integrity of the site.
European protected species (bats, otters, dormice, water voles, great crested newts)	It is an offence under the Conservation of Habitats and Species Regulations 2017 to deliberately kill or injure a European protected species, to destroy breeding/resting sites, or to deliberately disturb these species and affect their ability to survive, rear young, breed, or hibernate.
Nationally protected species (bats, water vole, otter)	It is an offence under the Wildlife and Countryside Act 1981 (as amended) to intentionally or recklessly disturb a species listed on Schedule 5 whilst it is in a place of shelter, or to obstruct access to a place for shelter.
Nationally protected species (reptiles)	It is an offence under the Wildlife and Countryside Act 1981 (as amended) to kill or injure common species of reptiles.
National conservation priority species (white-clawed crayfish, fish, common toad, reptiles, noctule, water vole, otter, hedgehog), i.e., UKBAPs	Section 41 of the NERC Act 2006 requires the Secretary of State to publish a list of species and habitats that are of principal importance for the conservation of biodiversity, and to take, and promote others to take, such steps to further the conservation of these habitats and species. These species and habitats will be considered by Planning Authorities in regard to the National Planning Policy Framework (Ministry of Housing, Communities & Local Government, 2021) to conserve and enhance the natural environment.
Badgers	It is an offence under the Protection of Badgers Act 1992 to damage or destroy a badger sett; obstruct any entrance of a badger sett; and disturb a badger whilst it is occupying a badger sett.

Ecological Constraint	Rationale
Wild mammals (rabbits, foxes, water vole, otter, hedgehog, badger)	It is an offence under the Wild Mammals (Protection) Act 1996 to inflict unnecessary suffering to any wild mammal with intent.
Nesting birds	It is an offence under the Wildlife and Countryside Act 1981 (as amended) to damage or destroy a bird's nest whilst it is in use, and to kill or injure a bird or destroy an egg.
Non-statutory designated sites (SNCI's, LWS, LNR's, etc.)	LNRs are designated under Section 21 of the National Parks and Access to the Countryside Act 1949, which was amended by the Natural Environment and Rural Communities Act 2006. The value for biodiversity of LNRs and LWSs are recognised, and the sites and surrounding buffers are protected by the Local Plan.
Biodiversity	Section 40 of the NERC Act 2006 states that each public authority "must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity." This legislation makes it clear that planning authorities should consider impacts to biodiversity when determining planning applications. Chapter 15 of the National Planning Policy Framework (Ministry of Housing, Communities & Local Government, 2021) states that the planning system and policies should minimise impacts on and provide net gains for biodiversity, and that, if significant harm to biodiversity would result from a development, then development should be avoided (through locating on alternative sites with less harmful impacts).
Irreplaceable habitats (ancient woodland, veteran trees, lowland meadows)	Chapter 15 of the National Planning Policy Framework (Ministry of Housing, Communities & Local Government, 2021) states that 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.
Biodiversity Net Gain	+10% Biodiversity Net Gain (BNG) for new developments will be mandatory under the Environment Act (2021), although this deadline will be extended to April 2024 for small sites and there are exemptions for development below a 25m ² threshold, and for householder applications and self-builds. BNG means that proposals must result in more and/or better-quality natural habitats than there were before development. This also requires that any proposed habitats within the scheme would be necessary to manage for at least 30 years, which would be sought through the provision of S106 legal agreements or conservation covenants.

Local Planning Policy

The South Down National Park Local Plan (SDNP, 2019) sets out the planning policies for development in the district in relation to biodiversity. Those of potential relevance to this assessment are highlighted in the table below:

Policy Reference	Policy Text
Core Policy SD2: Ecosystem Services	1. Development proposals will be permitted where they have an overall positive impact on the ability of the natural environment to contribute goods and services. This will be achieved through the use of high-quality design, and by delivering all opportunities to: a) Sustainably manage land and water environments; b) Protect and provide more, better and joined up natural habitats; c) Conserve water resources and improve water quality; d) Manage and mitigate the risk of flooding; e) Improve the National Park's resilience to, and mitigation of, climate change; f) Increase the ability to store carbon through new planting or other means; g) Conserve and enhance soils, use soils sustainably and protect the best and most versatile agricultural land; h) Support the sustainable production and use of food, forestry and raw materials; i) Reduce levels of pollution; j) Improve opportunities for peoples' health and wellbeing; and k) Provide opportunities for access to the natural and cultural resources which contribute to the special qualities. 2. Development proposals must be supported by a statement that sets out how the development proposal impacts, both positively and negatively, on ecosystem services.
Strategic Policy SD9: Biodiversity and Geodiversity part 1	Development proposals will be permitted where they conserve and enhance biodiversity and geodiversity, giving particular regard to ecological networks and areas with high potential for priority habitat restoration or creation. Prior to determination, up-to-date ecological information should be provided which demonstrates that development proposals: - Retain, protect and enhance features of biodiversity and geological interest (including supporting habitat and commuting routes through the site and taking due account of any use by migratory species) and ensure appropriate and long-term management of those features; - Identify and incorporate opportunities for net gains in biodiversity; - Contribute to the restoration and enhancement of existing habitats, the creation of wildlife habitats and the creation of linkages between sites to create and enhance local and regional ecological networks; - Protect and support recovery of rare, notable and priority species; - Seek to eradicate or control any invasive non-native species present on site; - Contribute to the protection, management and enhancement of biodiversity and geodiversity, for example by supporting the delivery of GI and Biodiversity Action Plan targets and enhance Biodiversity Opportunity Areas (BOA); and - Comply with the mitigation hierarchy as set out in national policy.
Strategic Policy SD9: Biodiversity and Geodiversity part 2	The following hierarchy of site designation will apply in the consideration of development proposals: a) Internationally Protected Sites, as shown on the Policies Map (SPAs, SACs and Ramsar Sites, or candidate and formally proposed versions of these designations):

Policy Reference	Policy Text
	i. Development proposals with the potential to impact on one or more international sites(s) will be subject to a HRA to determine the potential for likely significant effects. Where likely significant effects may occur, development proposals will be subject to Appropriate Assessment ii. Development proposals that will result in any adverse effect on the integrity of any international site will be refused unless it can be demonstrated that: there are no alternatives to the proposal; there are imperative reasons of overriding public interest why the proposal should nonetheless proceed; and adequate compensatory provision is secured b) Nationally Protected Sites SSSI, NNRs, MCZ as shown on the Policies Map: i. Development proposals considered likely to have a significant effect on nationally protected sites will be required to assess the impact by means of an EIA ii. Development proposals should avoid impacts on these nationally protected sites. Development proposals where any adverse effect on the site's notified special interest features is likely and which cannot be either avoided or adequately mitigated will be refused, unless the benefits of the development, at this site clearly outweigh the likely impact to the notified features of the site and any broader impacts on the network of nationally protected sites c) Irreplaceable Habitats (including ancient woodland as shown on the Policies Map, and veteran trees): Development proposals which result in the loss or deterioration of irreplaceable habitats, including ancient woodland and veteran trees will be refused unless there are wholly exceptional reasons and a suitable compensation strategy exists d) Locally Protected Sites (Sites of Nature Conservation Importance (SNCI)/Local Wildlife Sites (LWS)/Sites of Importance for Nature Conservation (SINC), Local Nature Reserves (LNR and Local Geodiversity Sites (LGS)) as shown on the Policies Map: i. Development proposals considered likely to have a significant effect on local sites will be required to assess the impact by means of an Ecological Impact Assessment (EcIA) ii. Development proposals that will result in any adverse effect on the integrity of any local site which cannot be either avoided or adequately mitigated will be refused, unless exceptional circumstances outweighing the adverse effects are clearly demonstrated e) Outside of designated sites i. Development proposals should identify and incorporate opportunities to conserve, restore and recreate priority habitats and ecological networks. Development proposals should take opportunities to contribute and deliver on the aims and objectives of the relevant biodiversity strategies where possible.
Strategic Policy SD8: Dark Skies	1. Development proposals will be permitted where they conserve and enhance the intrinsic quality of dark night skies and the integrity of the Dark Sky Core as shown on the Policies Map. 2. Development proposals must demonstrate that all opportunities to reduce light pollution have been taken, and must ensure that the measured and observed sky quality in the surrounding area is not negatively affected, having due regard to the following hierarchy: The installation of lighting is avoided; and If lighting cannot be avoided, it is demonstrated to be necessary and appropriate, for its intended purpose or use: Any adverse impacts are avoided; or If that is not achievable, then adverse impacts are mitigated to the greatest reasonable extent.'

Policy Reference	Policy Text
	3. Lighting which is proposed to be installed must meet or exceed the level of protection appropriate to the environmental zone 4. Outdoor lighting proposals are required to provide a statement to justify why the proposed lighting is required.

Local Planning Policy

Horsham District Planning Policy (Excluding South Down National) 2015 sets out the planning policies for development in the district in relation to biodiversity. Those of potential relevance to this assessment are highlighted in the table below:

Policy Reference	Policy Text
Policy 31 Green infrastructure and Biodiversity	1. Development will be supported where it can demonstrate that it maintains or enhances the existing network of green infrastructure. Proposals that would result in the loss of existing green infrastructure will be resisted unless it can be demonstrated that new opportunities will be provided that mitigates or compensates for this loss and ensures that the ecosystem services of the area are retained. 2. Development proposals will be required to contribute to the enhancement of existing biodiversity and should create and manage new habitats where appropriate. The Council will support new development which retains and /or enhances significant features of nature conservation on development sites. The Council will also support development which makes a positive contribution to biodiversity through the creation of green spaces, and linkages between habitats to create local and regional ecological networks. 3. Where felling of protected trees is necessary, replacement planting with a suitable species will be required. 4. a) Particular consideration will be given to the hierarchy of sites and habitats in the district as follows: i. Special Protection Area (SPA) and Special Areas of Conservation (SAC) ii. Sites of Special Scientific Interest (SSSIs) and National Nature Reserves (NNRs) iii. Sites of Nature Conservation Importance (SNCIs), Local Nature Reserves (LNRs) and any areas of Ancient woodland, local geodiversity or other irreplaceable habitats not already identified in i & ii above. b) Where development is anticipated to have a direct or indirect adverse impact on sites or features for biodiversity, development will be refused unless it can be demonstrated that: i. The reason for the development clearly outweighs the need to protect the value of the site; and, ii. That appropriate mitigation and compensation measures are provided. 5. Any development with the potential to impact Arun Valley SPA or the Mens SAC will be subject to a HRA to determine the need for an Appropriate Assessment. In addition, development will be required to be in accordance with the necessary mitigation measures for development set out in the HRA of this plan.
Policy 32 Strategic Policy: The Quality of the new development	High quality and inclusive design for all development in the district will be required based on a clear understanding of the local, physical, social, economic, environmental and policy context for development. In particular, development will be expected to: 1. Provide an attractive, functional, accessible, safe and adaptable environment;

Policy Reference	Policy Text
	2. Complement locally distinctive characters and heritage of the district; 3. Contribute a sense of place both in the buildings and spaces themselves and in the way they integrate with their surroundings and the historic landscape in which they sit; 4. Optimise the potential of the site to accommodate development and contribute to the support for suitable complementary facilities and uses; and 5. Help secure a framework of high-quality open spaces which meets the identified needs of the community
Policy 33 Development Principles	In order to conserve and enhance the natural and built environment developments shall be required to: 1. Make efficient use of land, and prioritise the use of previously developed land and buildings whilst respecting any constraints that exist; 2. Ensure that it is designed to avoid unacceptable harm to the amenity of occupiers/users of nearby property and land, for example through overlooking or noise, whilst having regard to the sensitivities of surrounding development; 3. Ensure that the scale, massing and appearance of the development is of a high standard of design and layout and where relevant relates sympathetically with the built surroundings, landscape, open spaces and routes within and adjoining the site, including any impact on the skyline and important views; 4. Are locally distinctive in character, respect the character of the surrounding area (including its overall setting, townscape features, views and green corridors) and, where available and applicable, take account of the recommendations/policies of the relevant Design Statements and Character Assessments; 5. Use high standards of building materials, finishes and landscaping; and includes the provision of street furniture and public art where appropriate; 6. Presume in favour of the retention of existing important landscape and natural features, for example trees, hedges, banks and watercourses. Development must relate sympathetically to the local landscape and justify and mitigate against any losses that may occur through the development; and, 7. Ensure buildings and spaces are orientated to gain maximum benefit from sunlight and passive solar energy, unless this conflicts with the character of the surrounding townscape, landscape or topography where it is of good quality