Ecological Impact Assessment

Sussex Business Village

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Summary

The applicant has commissioned a Preliminary Ecological Appraisal, Preliminary Bat Roost Assessment, Bat Emergence Survey and Ecological Impact Assessment of proposals for residential accommodation at Sussex Business Village, Lake Lane, Barnham (*SU 97256 04593, hereafter referred to as 'the site'*). A Preliminary Ecological Appraisal, Preliminary Bat Roost Assessment and Phase 1 Habitat Survey of the site was carried out on the 6th June 2023. A bat emergence survey was undertaken of B1 on the 3rd August 2023.

The proposal area consists of existing building, introduced shrubs and sealed surfaces, of negligible ecological value, surrounded by modified grassland and urban trees of site ecological value.

The proposals are for a terrace of three new houses plus conversion of offices to 8 apartments.

The proposals are not anticipated to have any significant impact upon ecology; the habitats proposed for removal offer no significant potential for protected species.

The majority of buildings offered 'negligible' bat roost potential; 2no. buildings offered 'low' bat roost potential, and further bat emergence survey of the only building proposed for alteration did not reveal any use by bats. The proposals offer negligible risk of disturbing or harming bats. Some basic measures are proposed to ensure no harm to bats in the highly unlikely event of them being found during works, and mitigation is proposed to minimise any impacts on foraging or commuting bats.

When mitigation and enhancements have been taken into account, the proposals are not considered to have a negative impact upon designated sites, habitats or protected species in accordance with planning policy and once enhancements are considered, would result in a minor net gain. The proposals would therefore accord with the relevant Local Plan Policies.

1.0 Introduction

1.1 The applicant has commissioned a Preliminary Ecological Appraisal, Preliminary Bat Roost Assessment and Ecological Impact Assessment of proposals for 9 additional residential units across 2 floors at Antonia Court, Terminus Road, Littlehampton (TQ 02606 02116, hereafter referred to as 'the site'). A Preliminary Ecological Appraisal, Preliminary Bat Roost Assessment and Phase 1 Habitat Survey of the site was carried out on the 1st December 2023. A bat emergence survey was undertaken of B1 on the 3rd August 2023.

1.2 The following ecological impact assessment report has been completed by George Sayer (*BSc (Hons)* Environmental *Sciences, PgDip Endangered Species Recovery, MArborA, MCIEEM, NE Licence Holder – Bats Level 2 and GCN - Ecologist*). This appraisal consisted of a site visit to identify existing habitats on site; the habitats have been categorised broadly following the UK Habitats Classification Guidance V2.01 (*UKHab Ltd 2023)*. In addition, an assessment of habitats and structures on the site was made to determine their potential for protected species. Following this an on-site and desktop assessment was undertaken, of the likelihood of National or European Protected Species being present on or near site, and the constraints these may pose on the development proposals.

1.3 Based on the results of the appraisal, recommendations for potential ecological enhancements have been provided.

Site Description and Surrounding Area

1.4 The site consists of an existing business centre, formed of several buildings surrounded by access drive, parking, ornamental planting and grassland. The site covers approximately 0.56Ha.

1.5 The site is surrounded by a large detached residence to the west; by Lake Lane and further detached residence to the south; by a large glasshouse nursery and associated land to the north and east.

1.6 The site is located to the east of Barnham and is surrounded by a large mosaic of glasshouses, growing areas, reservoirs and paddocks. The wider surroundings largely consist of arable land and dispersed residential settlement.

Proposals

1.7 The proposals are for a terrace of three new houses plus conversion of offices to 8 apartments. The proposals make use of the existing access, buildings and parking areas.

2.0 Scope of Appraisal

1. *Identify habitats or features which may have potential for protected species;*
2. *Identify whether any signs of protected species are present on-site;*
3. *Recommend whether further surveys are required, or whether there are any relevant constraints with regards to protected species;*
4. *Identify impacts of the proposed development and set out appropriate avoidance, mitigation and compensation measures;*
5. *Provide suggestions as to how the site and proposals could be enhanced with regards to protected species and habitats.*

2.1 This appraisal and assessment is deemed to be relevant for a maximum of 18 months due to the possibility of changes in the habitats on-site. Should the site or proposals alter, the ecologist should be consulted to confirm that the appraisal is still valid.

3.0 Planning Policy and Legislation

National Planning Policy

3.1 The National Planning Policy Framework (NPPF) 2023 sets out the government planning policies for England and how they should be applied. 'Chapter 15: Conserving and Enhancing the Natural Environment' states that development should be 'minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.'

3.2 The Government Circular 06/2005, which is referred to by the NPPF, provides further guidance in respect of statutory obligations for biodiversity and geological conservation and their impact within the planning system.

Local Planning Policy

3.3 The site is within the Arun District; the proposals should be assessed against the Arun District Local Plan 2011-2031. Local Planning Policy relevant to this site include Policies ENV SP1 (*Biodiversity)*, W SP1 (*Flooding and Drainage)*, ENV DM1 (*Designated Sites of Biodiversity and Geological Importance*), ENV DM3 (*Biodiversity Opportunity Areas),* ENV DM4 (*Protection of Trees),* ENV DM5 (*Development and Biodiversity*) AND GI SP1 *(Green Infrastructure and development)* of the Arun Local Plan 2011 – 2031 (adopted 2018).

3.1 *The Arun District adopted Plan (adopted 2018) Policy H SP2 states development must:*

Protect, conserve or enhance the natural environment, landscapes and biodiversity;

3.2 *Policy ENV SP1 states:*

Arun District Council will encourage and promote the preservation, restoration and enhancement of biodiversity and the natural environment through the development process and particularly through policies for the protection of both designated and non-designated sites.

3.3 *Policy W SP1 states development will be supported when it:*

Takes account of flood risk and promotes the incorporation of appropriate mitigation measures into new development, particularly Sustainable Drainage Systems that reduces the creation and flow of surface water and improves water quality;

3.4 *Policy ENV DM1 Designated Sites of biodiversity or geological importance states:*

a. Proposed development likely to have an adverse effect on land with the designated features of any Site of Biodiversity or Geological Importance as listed in Tables 17.1 - 17.7 or any subsequently designated sites (either individually or in combination with other developments), will not normally be permitted. Consideration will be given to the exact designated features present on the site, their scarcity/rarity and recognition of the protection offered by their existing status. Development on wildlife sites with the highest value will only be permitted exceptionally where the following can be demonstrated:

i. There is no alternative solution (which shall be adequately demonstrated by the developer).

ii. There are reasons of public health or public safety or Adoption Arun Local Plan 2011-2031 (July 2018) Arun District Council 209 17 Natural Environment

iii. There are benefits of primary importance to the environment or iv. There are imperative reasons of overriding public interest. Notwithstanding the above however, the presumption in favour of sustainable development does not apply where development requiring appropriate assessment under the Birds or Habitats Directives is being considered, planned or determined.

b. In determining any planning application affecting Sites of Biodiversity or Geological Importance the Council will ensure that the intrinsic natural features of particular interest are safeguarded or enhanced having regard to;

i. The European, National or Local status and designation of the site;

ii. The nature and quality of the site's features, including its rarity value; iii. The extent of any adverse impacts on the notified features of interest; iv. The need for compensatory measures in order to re-create remaining features of habitats on or off the site. c. Where appropriate the Council will ensure the effective management of designated sites through the imposition of planning conditions or Section 106 agreements as appropriate.

3.5 *Policy ENV DM3 Biodiversity Opportunity Areas states that development shall:*

a. Retain and sympathetically incorporate locally valued and important habitats, including wildlife corridors and stepping stones

b. Be designed in order to minimise disturbance to habitats

Development proposals that do not reasonably address opportunities for enhancing these through their design, layout and landscaping or access/management shall not be permitted. Where a development scheme would result in a habitat loss, mitigation measures will be proposed as part of the proposed scheme and such measures agreed with the Local Planning Authority prior to the determination of any planning application. Within Biodiversity Opportunity Areas (BOAs) identified on the Policies Maps or where likely to have an impact on species or habitats within the BOAs, any application for planning permission shall include a properly conducted survey of the presence of that species and habitat and impact(s) that development may have on the BOA.

3.6 *Policy ENV DM4 Protection of trees states that:*

Development will be permitted where it can be demonstrated that trees protected by a Tree Preservation Order(s), (TPO) identified as Ancient Woodland, in a Conservation Area or contributing to local amenity, will not be damaged or destroyed now and as they reach maturity, unless development:

a. Would result in the removal of one or more trees in the interests of good arboricultural practice. This shall be demonstrated by the developer following the advice of a suitably qualified person which shall be guided by BS 5837 (2012). Details of any advice received having regard to BS 5837 (2012) shall be submitted, in writing, as part of a planning application; or

b. Would enhance the survival and growth prospects of other protected trees;

c. The benefits of the proposed development in a particular location outweigh the loss of trees or woodland, especially ancient woodland.

Where planning permission is granted in any of the above instances, conditions shall be used to ensure that, for any trees which are removed as part of a development, at least an equivalent number of a similar species and age (where practical) are planted on the proposed development site. Sufficient space for replacement trees to mature without causing future nuisance or damage shall be provided. The planting of new trees shall form an integral part of the design of any development scheme. Proper provision must be made for the protection and management of trees or areas of woodland on-site when undertaking development. A management plan shall be provided as part of a planning application in accordance with BS 5837 (2012) in order to ensure that trees are adequately protected during development and appropriately maintained in the future. Conditions for the continued protection of trees on sites shall be included in any planning permission given. Where there are existing trees on or adjacent to a development site, developers shall be required to provide:

d. Land and tree surveys

e. A tree constraints plan

f. An arboricultural impact assessment to include a tree protection plan and arboricultural method statement

These will ensure that development is planned to take a comprehensive view of tree issues at an early stage in the design process and that development works do not have a negative impact on existing trees.

3.7 *Policy ENV DM5 Development and biodiversity states that:*

Development schemes shall, in the first instance, seek to achieve a net gain in biodiversity and protect existing habitats on site. They shall also however incorporate elements of biodiversity including green walls, roofs, bat and bird boxes as well as landscape features minimising adverse impacts on existing habitats (whether designated or not). Development schemes shall also be appropriately designed to facilitate the emergence of new habitats through the creation of links between habitat areas and open spaces. Together, these provide a network of green spaces which serve to reconnect isolated sites and facilitate species movement. Where there is evidence of a protected species on a proposed development site, planning applications shall include a detailed survey of the subject species, with details of measures to be incorporated into the development scheme to avoid loss of the species. This involves consideration of any impacts that will affect the species directly or indirectly, whether within the application site or in an area outside of the site, which may be indirectly affected by the proposals. All surveys shall be carried out at an appropriate time of year and shall be undertaken by a qualified and, where appropriate, suitably licensed person. All developments shall have regard to Natural England's standing advice for protected species.

3.8 *Policy GI SP1 Green Infrastructure and development states:*

The existing Green Infrastructure Network, as shown on the Green Network Maps for each parish and town, must be considered at an early stage of the design process for all major development proposals.

All major development must be designed to protect and enhance existing Green Infrastructure assets, and the connections between them, in order to ensure a joined up Green Infrastructure Network. The Green Infrastructure Network must be protected from light pollution to ensure that areas defined by their tranquillity are protected from the negative effects of light in development.

Where compatible with nature conservation objectives, development proposals must identify opportunities to connect existing Green Infrastructure assets with the coast, the South Downs National Park or to the District's inland villages. Opportunities to enhance the network should take account of the multiple functions of Green Infrastructure assets and should be based upon those opportunities set out in the supporting text.

Legislation

3.9 Legislation relating to wildlife and biodiversity of particular relevance to this EcIA 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;
- The Hedgerow Regulations 1997;
- The Protection of Badgers Act 1992;
- The Protection of Mammals Act 1996;
- The Environment Act 2021.

3.10 All species of bat and their roosts are protected under The Conservation of Habitats and Species Regulations 2017 and The Wildlife and Countryside Act 1981. It is an offence to intentionally kill, injure or handle a bat, to possess a bat (live or dead), disturb a roosting bat, or sell or offer a bat for sale without a licence. It is also an offence to damage, destroy or obstruct access to any place used by bats for shelter, whether they are present or not.

3.11 All UK bird species are protected against disturbance whilst occupying a nest under the Wildlife and Countryside Act 1981. Developments that could predictably disturb, kill or injure nesting birds could result in an offence. Furthermore, a number of bird species are targets of UK and Local Biodiversity Action Plans and listed as Species of Principle Importance under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006. This obligates local authorities to have regard to the purpose of conserving biodiversity with particular emphasis on targeted species.

3.12 All widespread reptiles are protected against killing and injury under the Wildlife and Countryside Act 1981, with rarer reptiles receiving further protection under EU regulation. Reptiles must also be given consideration under the NERC Act 2006 as part of the planning process.

3.13 Great crested newts (GCN) are protected under The Conservation of Habitats and Species Regulations 2017. It is an offence for anyone to intentionally kill, injure or disturb a GCN or to damage, destroy or block access to areas of suitable habitat.

3.14 Badgers are protected under the Protection of Badgers Act 1992. It is an offence to harm badgers or disturb badgers and their setts.

3.15 Water voles are fully protected under Schedule 5 of the Wildlife and Countryside Act 1981 and is a priority conservation species. It is an offence to intentionally capture, kill or injure water voles, damage, destroy or block access to their places of shelter or protection (on purpose or by not taking enough care), disturb them in a place of shelter or protection (on purpose or by not taking enough care), possess, sell, control or transport live or dead water voles or parts of them (not water voles bred in captivity).

3.16 In the UK, dormice are legally protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and have significant further protection as a European Protected Species under the Conservation of Habitats and Species Regulations 2017 (as amended). Dormice are also a 'Species of Principal Importance for the conservation of biodiversity' listed under section 41 of the Natural Environment and Rural Communities Act 2006 (NERC). It is an offence for anyone to intentionally kill, injure or disturb a dormouse or to damage, destroy or block access to areas of suitable habitat.

3.17 All other mammals receive general protection against cruelty, inhumane killing or injuring under the Protection of Mammals Act 1996.

4.0 Methodology

Desktop Study

4.1 A desktop study was conducted using the government 'MAGIC' Map GIS tool; a search was carried out for all international statutory designated sites (Ramsar, SAC, SPA) within 12.0 km of the site; national statutory designated sites (SSSI, NNR, LNR) within 2.0 km of the site; and non-statutory designated sites (SNCI) and priority habitats within 1.0 km of the site. These have been summarized below and their significance considered in the context of the development proposals. A search was also carried out to identify features of ecological interest in the area, such as water bodies and ancient woodland. Given the overall scale and nature of the site and the proposals, a full data search from SxBRC was not considered appropriate. This is in accordance with CIEEM current guidance for such projects.

Site Visit

4.2 A site visit was conducted on 6th June 2023, during suitable weather (21 degrees, wind force 1; 1/8 cloud, dry). Habitats were recorded according to the UK-Habs Classification System as described within the UK Habitats Manual, V2.01 (UKHab Ltd. 2023).

4.3 During the survey any constraints with regard to protected species were considered; the site was considered for their potential for protected species even when signs of these species were not noted at the time of survey.

4.4 The site and surroundings were searched for signs of badgers, such as snuffle holes, push-unders, latrines, trapped fur and setts.

4.5 The building was assessed externally by an experienced, licenced bat surveyor (George Sayer 2018-34434-CLS) for its potential to hold roosting bats; roof voids were assessed where relevant, and access points identified. Any evidence of bats such as grease marks, bat droppings, urine splashes were noted. Trees were assessed for features conducive to roosting bats such as flaking bark, knot holes, deadwood and heavy ivy. The bat roost assessment was conducted following the recent Bat Conservation Trust - Bat Surveys for Professional Ecologists: Good Practice Guidelines (2016).

4.6 Due to the site visit being carried out over one day, it is possible that some signs of protected species may not be apparent within this short timeframe. This is a constraint recognised within best practice guidelines and all reasonable effort has been made to identify evidence of protected species.

Bat Emergence Survey

4.7 A single bat emergence survey was undertaken of B1 in August 2023 in accordance with the Bat Conservation Trust - Bat Surveys for Professional Ecologists: Good Practice Guidelines (2016) and the Interim Guidance on the Use of Night Vision Aids (2022). B3 offered 'low' bat roost potential, but due to no significant works being proposed to the roof no survey was undertaken of B3.

4.8 The dusk emergence surveys began c.15 minutes before sunset and continued until c.1.5 hours after.

Table 1 – Summary of Bat Survey

03/08/2023	Dusk	20:46	20:31	22:16	18°C	17°C	WFo, 5/8 Cloud, Dry

4.9 Two experienced surveyors surveyed the dwelling on the survey, with 4no. external infrared cameras (a combination of Canon XA10 and Sony AX100 night vision video cameras, Nightfox Red and Nightfox Whisker, with IR flood and torch Illuminators) to improve coverage, better vision later into the survey and the ability to review potential emergences. The surveyors and cameras thoroughly covered the survey area and the likelihood of bats being missed is very low. All surveys were designed and led by a licenced bat ecologist with multiple years' survey experience (George Sayer BSc (Hons) MCIEEM, Level 2 Bat Licence 2018-34434).

4.10 Bat detection was carried out using Echo Meter Touch 2 Pro and Peersonic RPA3 Full Spectrum Recording Bat Detectors, with analysis of recordings carried out where necessary on Kaleidoscope software. Infrared camera footage was reviewed at between 0.8-1.5x speed on VLC media player where necessary.

Ecological Impact Assessment

4.11 The methodology for Ecological Impact Assessment (EcIA) follows best practice guidelines set by the Chartered Institute of Ecology & Environmental Management (CIEEM): 'Guidelines for Ecological Impact Assessment' (CIEEM, 2022). This includes identifying the baseline conditions on the site and subsequently rating the potential effects of the development based on the sensitivity and value of the resource affected, combined with the magnitude, duration and scale of the impact (or change). This is initially assessed without mitigation measures, and then assessed again after allowing for the proposed mitigation measures; this provides the residual effects. The assessment is divided into construction effects and longer-term operational effects.

4.12 Each ecological feature within the site has been considered within a defined Geographic context such as:

- International and European;
- National;
- Regional;
- County;
- District;
- Local;
- Site Level;
- Negligible.

4.13 Based upon CIEEM guidance, value was determined with reference to the following factors:

- Its inclusion as a Designated Site or other protected area;
- The presence of habitat types of conservation significance, e.g. Habitats of Principal Importance (NERC 2006);
- The presence (or potential presence) of species of conservation significance e.g. Species of Principal Importance (NERC 2006);
- The presence of other protected species e.g. those protected under The Wildlife and Countryside Act 1981;
- The sites social and economic value.

4.14 Specifically in the case of bats, the impact assessment has been conducted in accordance with the recently published Bat Mitigation Guidelines (Reason and Wray 2023).

5.0 Baseline Ecological Conditions and Protected Species Assessment

Desktop Study

Designated Sites and Habitats

5.1 The following is a summary of all protected and notable wildlife sites, with sites of local and national importance recorded within 2.0km of the site and sites of international importance within 12.0 km. These are divided into statutory and non-statutory; those with full legal protection and those without, but which the Local Planning Authority should still consider when deciding on planning policy and applications. These sites are summarized in tables 1 and 2 below. A description of locally designated sites is also made below.

5.2 This information is included so that the site can be considered within the ecological context of the surrounding area, guiding decisions related to habitat change and protected species; these sites are not necessarily representative of the habitat on or surrounding the site and may not be influenced by the proposals.

5.3 The site is within the Impact Risk Zone (IRZ) of several SSSIs, but do not to require consultation with Natural England nor to contribute to the Bird Aware Scheme to offset recreational impacts on the Solent Suite of Sites.

5.4 The site is not within 12.0 km of the 'South Downs Bat SACs' (*namely Singleton and Cocking Tunnels SAC, Ebernoe Common SAC and The Mens SAC*) and is therefore outside their conservation areas.

5.5 The MAGIC Mapping shows the site not to be inside the Sussex North Water Supply Zone, and the proposals do not have to demonstrate water neutrality.

Table 1: Statutory Protected Designated Sites

Site Name	***Reason for designation***	***Distance from site***
Pagham Habour SPA, RAMSAR (also LNR, SSSI)	*Areas of coastal and harbour habitat noted for its importance for over wintering birds. Designated an SPA for Common tern, Dark-bellied brent goose; Little tern and ruff.*	*11.4 km SW*
Arun Valley SAC, SPA, Ramsar	*Consists of three SSSIs in an area of wet meadows on the floodplain of the River Arun between Pulborough and Amberley, subject to occasional flooding, dissected by a network of ditches, several of which support rich aquatic flora and invertebrate fauna. The site is of outstanding ornithological importance for wintering waterfowl and breeding waders. It supports seven wetland invertebrate species that are listed as threatened in Britain, one of which is endangered, and there are four nationally rare and four nationally scarce plant species.Designated an SPA for the population of Bewick's swan Cygnus columbianus bewickii. Designated an SAC for the population of Ramshorn snail Anisus vorticulus.*	*10.0 km NE*
Duncton to Bignor Escarpment SAC	*An example of mature beech Fagus sylvatica woodland located on the steep scarp face of the South Downs. All stages in the ecological succession from chalk grassland through scrub to woodland are represented here and this range of habitats accounts for the interest of the site.*	*8.35 km N*

5.6 No non-statutory designated sites are recorded within 1.0 km of the proposal site.

Habitats

Desk Study

5.7 UK Priority Habitats within 1.0 km of the site include deciduous woodland, traditional orchard, woodpasture and parkland and ancient woodland.

Site Assessment

5.8 The site is given over to the habitats discussed further below.

u1b5 - Buildings

5.9 The site contains a series of buildings, in use as commercial offices. The buildings are in good overall condition and offer **negligible ecological value** in a broader sense. The potential for the buildings to support protected species is discussed in the preliminary bat roost assessment and protected species assessment below.

U1b - Developed Land; Sealed Surface

5.10 The site is accessed along a tarmac access drive, which leads to block-paved parking areas. The habitat is of **negligible ecological value.**

U1c – Artificial Unvegetated, Unsealed Surface

5.11 A large gravel parking area is present to the south. The habitat is of **negligible ecological value.**

U1d 847 – Suburban Mosaic of Developed and Natural Surface – Introduced Shrub

5.12 The site contains planting beds with introduced shrubs such as *Euonymus sp., Berberis sp.,* and *Cotoneaster sp.*. The habitat is of **negligible ecological value.**

G4 32 108 – Modified Grassland – Frequently Mown with Scattered Trees

5.13 There is a grassed amenity area to the south-east, and several narrow verges. The grassland is dominated by perennial ryegrass *Lolium perenne* with common forbs such as daisy *Bellis perennis*. The habitat is of **site ecological value.**

5.14 The grassland contains scattered trees with species such as green alder *Alnus viridis.* A line of urban trees line the northern and eastern boundary, containing semi-mature specimens of oak *Quercus robur,* ash *Fraxinus excelsior,* and lime *Tilia sp.*

H2b 11 – Other Native Hedge with Trees

5.15 A short hedge is present on the western boundary, formed of hawthorn *Crataegus monogyna* and elder *Sambucus nigra* with dense emergent ash trees. The hedge is a priority habitat of **site ecological value.**

6.0 Protected Species Assessment

Bats

Desk Study

6.1 2no. EPSML licences are recorded within 2.0 km of site, for common pipistrelle and brown long-eared. The nearest is c.500.0 m west. West Sussex contains at least 15 native bat species.

Site Assessment

6.2 The main office block (B1) consists of a modern building of a low brick course and timber frame above, which is clad in wooden weatherboarding. The roof is gabled and covered in machined clay tiles. The soffits and fascias are of timber and generally in good condition with a single hole noted at a gable end. Several raised weatherboards and a single knot hole in a board provide potential access points, but these displayed light cobwebbing and no evidence of bats. The loft is large and well-sealed. No evidence of bats was observed internally; a single dropping of a size suggestive of bats was found, and sent for DNA analysis. This returned an 'inconclusive' result and it is thought more likely that this is a mouse dropping or other organic matter. Given the overall lack of evidence and limited number of access points, the building is considered to offer 'low' bat roost potential.

6.3 B2 consists of a part-single, part-two storied office building of brick with small areas of timber weatherboarding and slate tiled roofs. Overall the weatherboarding was tightly sealed, as was the roof. No evidence of bats was found externally. The building is largely vaulted with no loft space. The building overall offers 'negligible' bat roost potential.

6.4 B3 consists of a rendered single-storey section with a clay tiled gable roof. The roof tiles are modern but many display a slight camber. The camber creates a gap generally considered too small for bats, but this cannot conclusively be ruled out. The bargeboards and gable end tiles are well-sealed. A small loft is present and was found to be tightly-sealed and devoid of evidence of bats. Overall the building is considered to offer 'low' bat roost potential, with individual bats possible but unlikely under larger tile gaps.

6.5 B4 consists of a single storied office building of brick with small areas of timber weatherboarding and slate tiled roof. Overall the weatherboarding was tightly sealed, as was the roof. No evidence of bats was found externally. The building is largely vaulted with no loft space. The building overall offers 'negligible' bat roost potential.

6.6 B5 consists of a single storied office building of brick slate tiled roof. Overall the roof was well-sealed. No evidence of bats was found externally. The building contains a small loft space, devoid of any evidence of bats and tightly sealed. The building overall offers 'negligible' bat roost potential.

Bat Emergence Survey

6.7 The survey did not reveal use of B1 by bats; whilst use of B3 was not ruled out, the first pipistrelle calls (by soprano pipistrelle) were not recorded until c.32 minutes after sunset with only several noctule passes before this. The majority of bat activity then consisted of occasional soprano pipistrelle, noctule and more rarely serotine bats which were largely heard

but not seen. At 21:52, 1 hour and 6 minutes after sunset the security lights on-site turned off. From 21:58 a common pipistrelle and Myotis bat were recorded foraging around the boundaries.

6.8 In summary the site is unlikely to contain any bat roosts, and the margins of the site are used largely by common light-tolerant species but also at certain points by at least 1no. light-shy bat. The site itself was not used for foraging by bats. The internal areas are of **negligible value** to bats, with the treelined margins of **site value.**

Birds

Desk Study

6.9 Numerous bird species are present in the local area, including a number of wetland and coastal species. Birds relevant to the proposals which are present locally include swift *(Apus apus)* and house sparrow (*Passer domesticus)*.

Site Assessment

6.10 No evidence of active nesting birds was noted and there is currently no significant potential for birds to nest in the well-sealed buildings. The shrubs and trees offer low potential, with the small size of shrubs and semi-mature nature of trees limiting potential. The habitats are of **site value** to birds.

Dormice

Desk Study

6.11 Several EPSM licences for dormice are present at Fontwell, c.2.0 km north-west. They are not well-recorded in the immediate surroundings.

Site Assessment

6.12 The hedge to the north-west contains suitable species and is relatively well-connected to other hedges. The hedge appears to be off-site. Other hedges surround the site but are also outside the site's ownership. The habitats within the site offer **negligible value.** The habitats are of **site value** to dormice.

Other Species

6.13 No potential for or evidence of any other protected species was recorded. The grassland on-site offers negligible potential for reptiles or amphibians, with only nursery reservoirs in the immediate vicinity offering aquatic habitat. No evidence of badgers or other such mammals was noted on or surrounding the site. The grassland is suitable for hedgehogs. No impacts upon other protected species are considered likely and have not been assessed further.

7.0 Evaluation of Impacts and Mitigation

Designated Sites

Potential Impacts

7.1 Given the intervening distances, and the nature of the proposals, any impacts upon local designated sites would be of minor magnitude and highly unlikely to occur. The site is within the 12.0 km buffer of the Arun Valley SPA but would have no impacts upon Bewick's swan. Consultation with Natural England is not required.

7.2 The site is over 1.0 km from the nearest non-statutory site. No significant impacts would occur.

Mitigation and Compensation

7.3 None required.

Residual Impacts

7.4 The impacts will be negligible and non-significant.

Habitats

Potential Impacts

7.5 The proposals would impact only the building and developed land, modified grassland, several scattered trees and introduced shrubs. In the absence of mitigation, the proposals would include dust, noise and light pollution of adjacent trees and hedge. Given the proposals' nature and scale, impacts are of **minor magnitude** at no more than **site level.**

Mitigation and Compensation

7.6 All construction will be undertaken in accordance with best practice advice with regards to control of dust, noise and emissions. Any chemicals or fuel shall be stored appropriately and on existing surfaces. All trees proposed for retention shall be protected in accordance with British Standard 5837(2012). Any trees removed shall be replaced on at least a like-for-like basis. The loss of grassland shall be compensated through enhancement of the retained grassland.

Residual Impacts

7.7 Once mitigation is taken into account, the impacts will be negligible and non-significant.

Bats

Potential Impacts

7.8 The buildings B1, B2, B4 and B5 are highly unlikely to support bats, but one building (B3) still offers 'low' bat roost potential; there is no significant risk of disturbing a bat roost; however, individual pipistrelles roosting or hibernating in tile gaps in the building cannot conclusively be ruled out.

7.9 Construction noise, dust, lighting and vibration may temporarily make the adjacent off-site garden slightly less suitable for foraging bats, and bats commuting along the treelines. Given the overall size and nature of the site, the potential impacts to foraging bats is very low.

7.10 The enhancement of marginal grassland is likely to result in increased foraging potential for bats, as might reductions in site lighting.

Mitigation and Compensation

7.11 No significant roof works are proposed to B3. If any alterations to the roof (e.g. for installation of flues or soil pipes) are required, all tiles being removed shall be carefully removed by hand, with the gaps behind being constantly checked for signs of bats. In the unlikely event that a bat is found, it should be moved to a nearby bat box by a licenced ecologist if necessary and Natural England contacted for advice. Should larger works such as re-roofing be required, a further single emergence survey between May-August must be undertaken to confirm no bat roosts are present.

7.12 Any works shall be undertaken with due consideration and measures to minimise dust, lighting and noise. No external works lighting shall be used other than for emergency purposes. All new lighting shall accord with the principles of the BCT/ILP Guidance Note 08/23. There is already a significant degree of lighting in the form of security lighting and lampposts present; any alterations to the lighting should aim to not increase the level of illumination, and if possible lighting should be reduced, particularly along the northern boundary of site to improve the foraging potential for bats.

Residual Impacts

7.13 The overall impact of the scheme will be negligible. New roosting features and enhancement of the site would result in a gain for bats.

Nesting Birds

Potential Impacts

7.14 No evidence of nesting birds was noted within the buildings, but low potential for disturbance of nesting birds in shrubs and trees exists.

Mitigation and Compensation

7.15 Any tree and shrub removal, and pruning back of hedges shall be undertaken between September-February inclusive. If this is not possible a detailed check and/or supervision by an ecologist would be required to ensure active birds' nests are not disturbed. Any nests found must be confirmed as defunct or allowed to fledge before removal.

Residual Impacts

7.16 The overall impact of the scheme will be negligible.

Dormice

Potential Impacts

7.17 No significant impacts exist. The boundary hedge might require pruning but as a standard management practice this is unlikely to result in any harm.

Mitigation and Compensation

7.18 None required.

Residual Impacts

7.19 The overall impact of the scheme will be negligible.

Hedgehogs

Potential Impacts

7.20 There is a low risk of hedgehogs being harmed during movement of materials, falling into excavations or being trapped in pipes.

Mitigation and Compensation

7.21 Any materials such as timber, sand and gravel must be kept on existing hard surfaces. Grass within the construction zone shall remain well-managed, and all excavations, pipes over 100mm diameter and any other hazards must either be covered nightly or fitted with rough timber planks to allow mammal escape.

Residual Impacts

7.22 The overall impact of the scheme will be negligible.

8.0 Ecological Enhancements

8.1 As the proposals only affect the building and immediate surroundings, development proposals will be expected to demonstrate an overall positive impact on the natural environment as set out in Local Policy. The following ecological enhancements have been proposed as suited to the location and the proposals and would result in a Biodiversity Net Gain, in accordance with Local and National Policy:

- Incorporation of wall-mounted bird boxes into the new buildings at appropriate heights and orientations, such as a house sparrow terrace and a swift box.
- Installation of bird boxes to the existing buildings; B1 in particular would be suitable for swift boxes;
- Installation of a bat box onto the existing buildings and integration into new buildings; at least 1no. box per building. These should be sited on the rear southern aspects, away from lighting and windows. These should be a combination of small crevice-style and cavity-style boxes;
- Addition of bee bricks to south-facing aspects of the new buildings;
- Addition of log piles to the corners of the site, including some buried logs;
- Enhancement of existing grassland, through manual harrowing and seeding with a hedgerow seed mix which would thrive under the trees as they mature;
- Addition of suitable native shrubs or trees to retained communal areas, such as crab apple, rowan, wayfaring tree, or cherry;
- Planting of new native hedges, between gardens and potentially around the outer perimeter of the site to create new habitat and connectivity.

9.0 Conclusions

9.1 Overall, the proposals are considered to represent a 'negligible' impact upon ecology and no further surveys are recommended. The proposal area consists of existing building, introduced shrubs and developed land, of negligible ecological value, surrounded by grassland and trees of site value.

9.2 The proposals are not anticipated to have any significant impact upon ecology; the proposals stand a 'negligible' chance of disturbing bats or their roosts provided basic avoidance measures are incorporated into construction. No further surveys are recommended at the site for these proposals.

9.3 No significant effects are anticipated upon any designated sites or priority habitats.

9.4 When mitigation and enhancements have been taken into account, the proposals are not considered to have a negative impact upon habitats or protected species in accordance with planning policy and once enhancements are considered, would result in a net gain.

10.0 References

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11.0 Species Lists

Modified Grassland

Common Name	Scientific Name	DAFOR
Catsear	*Hypochaeris radicata*	O
Creeping thistle	*Cirsium arvense*	R
Daisy	*Bellis perennis*	LA
Dandelion	*Taraxacum officinale*	O
Perennial rye-grass	*Lolium perenne*	D
Ragwort	*Jacobaea vulgaris*	R
Selfheal	*Prunella vulgaris*	LF
Spotted Medick	*Medicago arabica*	O
White Clover	*Trifolium repens*	LF
Wood Sorrel	*Oxalis acetosella*	R
Yarrow	*Achillea millefolium*	O

Trees and Hedges

Common Name	Common Name	DAFOR
Ash	*Fraxinus excelsior*	O
Cherry	*Prunus sp.*	F
Elder	*Sambucus nigra*	LF
Elm	*Ulmus minor*	O
English oak	*Quercus robur*	F
Field maple	*Acer campestre*	O
Green Alder	*Alnus viridis*	O
Hawthorn	*Crataegus monogyna*	LD
Lime	*Tilia sp.*	O
Mulberry	*Morus sp.*	R

Introduced Shrubs

Common Name	Common Name	DAFOR
Barberry	*Berberis sp.*	F
Bay Laurel	*Laurus nobilis*	O
Cotoneaster	*Cotoneaster sp.*	O
Dogwood	*Cornus sp.*	R
Lavender	*Lavandula angustifolia*	F
Smokebush	*Cotinus sp.*	O
Spindle	*Euonymus sp.*	F
Sweet Box	*Sarcococca sp.*	O

12.0 Appendix 1 – Site Photos

Photo 1 – View of B1 from the north.

Photo 2 – The loft of B1.

Photo 3 – View of the gap in the soffit of B1.

Photo 4 – View of B2 from the south-east.

Photo 5 – View of B3 from the north.

Photo 6 – Loft of B3.

Photo 7 – View of B4 from the south.

Photo 8 – View of B5 from the south.

Photo 9 – View of the courtyard to centre south.

Photo 10 – View of the site from the north-east.

Photo 11 – View of the northern part of site from the north-east.

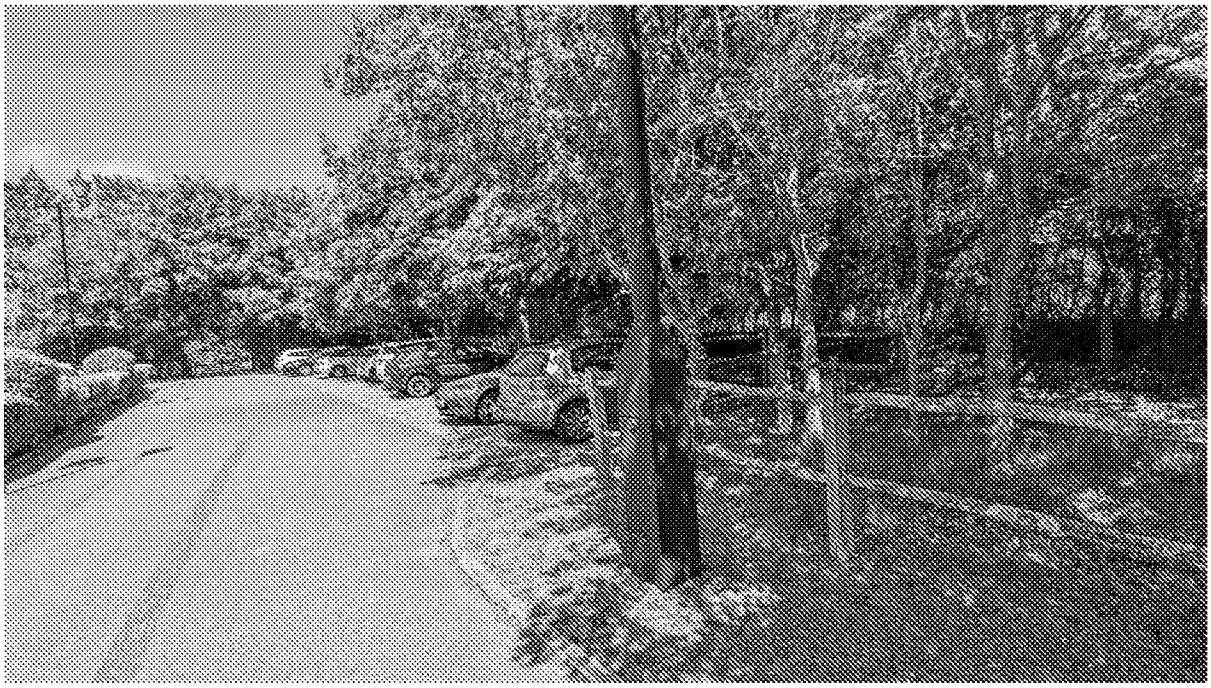
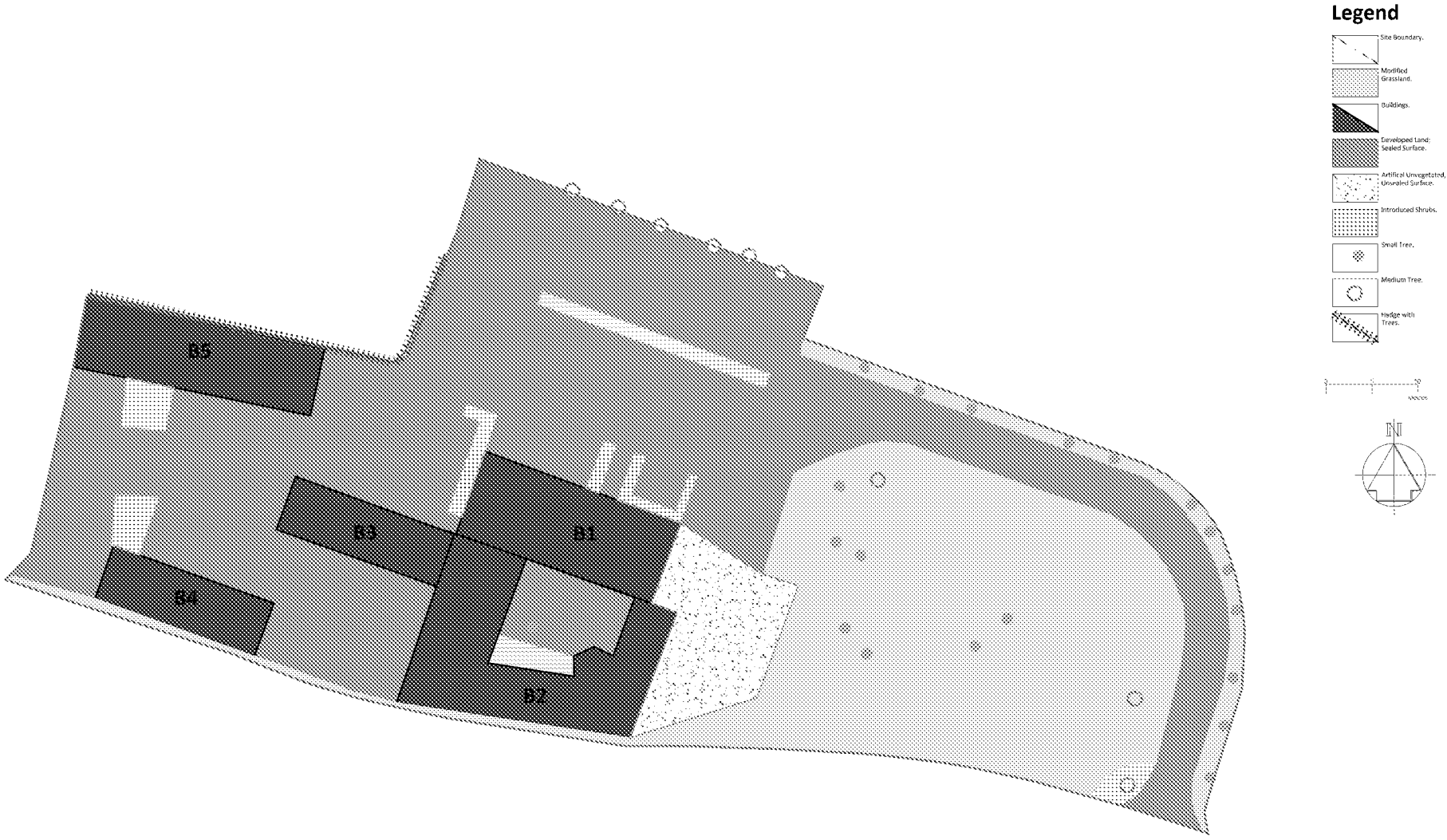


Photo 12 – View of the access, trees and grassland from the north.

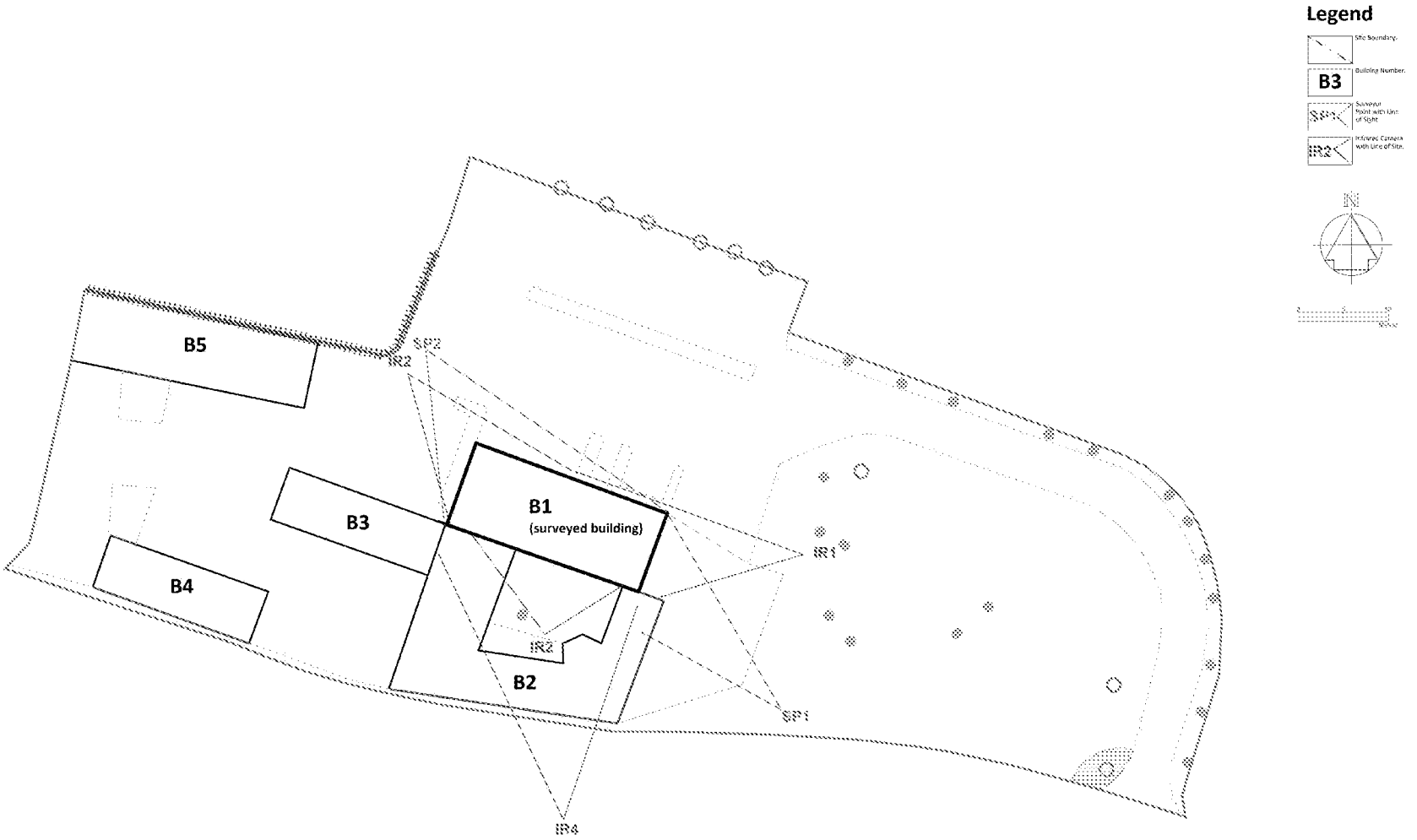
13.0 Figure No. 01 – Site Habitat Plan



Site Habitat Plan
Sussex Business Village
GS142.SBV.SHP
Version: 1
Date: 02.02.24

GS142.SBV.EcIA.V1.0

14.0 Figure No. 02 – Bat Survey Plan



Bat Survey Plan
Sussex Business Village
GS142.SBV.BSP
Version: 1
Date: 02.02.24

15.0 Site Aerial