



Preliminary Roost Assessment

Duckpool Farm, Duckpool Lane, Beckington, BA11 6TX

Richard Cruszcz

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Industry Guidelines and Standards

This report has been written with due consideration to:

- Chartered Institute of Ecology and Environmental Management (2017). Guidelines for Preliminary Ecological Appraisal. 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management (2018). Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine. Version 1.1. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management (2017). Guidelines on Ecological Report Writing. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management (2020). Guidelines for Accessing, Using and Sharing Biodiversity Data in the UK. 2nd Edition. Chartered Institute of Ecology and Environmental Management, Winchester.
- British Standard 42020 (2013). Biodiversity – Code of Practice for Planning and Development.
- British Standard 8683:2021 (2021). Process for Designing and Implementing Biodiversity Net Gain.

Proportionality

The work involved in preparing and implementing all ecological surveys, impact assessments and measures for avoidance, mitigation, compensation and enhancement should be proportionate to the predicted degree of risk to biodiversity and to the nature and scale of the proposed development. Consequently, the decision-maker should only request supporting information and conservation measures that are relevant, necessary and material to the application in question. Similarly, the decision-maker and their consultees should ensure that any comments and advice made over an application are also proportionate.

This approach is enshrined in Government planning guidance, for example, paragraph 174 of the National Planning Policy Framework for England.

The desk studies and field surveys undertaken to provide a Preliminary Ecological Appraisal (PEA) might in some cases be all that is necessary.

(BS 42020, 2013)

Executive Summary

Arbtech Consulting Limited was instructed by Richard Cruszcz to undertake a Preliminary Roost Assessment (PRA) at Duckpool Farm, Duckpool Lane, Beckington, BA11 6TX (hereafter referred to as “the site”). The survey was required to inform a planning application which details the renovation of an existing building which comprises an agricultural barn, workshop, potting shed, and garage to provide residential accommodation (hereafter referred to as “the proposed development”).

The following is work you will need to commission to obtain planning permission and/ or to comply with wildlife legislation and planning policy. Further information, along with opportunities for biodiversity enhancement, are outlined in Table 6 of this report.

Feature	Foreseen impacts	Recommendations <i>Measures required to adhere to guidance, legislation and planning policies.</i>
Roosting bats	<p>Evidence indicating the presence of roosting bats was recorded in the workshop within B1. As a result, the workshop is a confirmed bat roost.</p> <p>The proposed development comprises the renovation of B1 including the workshop to provide residential accommodation. Renovation works will destroy a bat roost if present and cause death or injury to bats.</p>	<p>Current guidance states that buildings assessed to represent a confirmed roost should be subject to further survey to characterise the roost type to inform both the planning application and a Natural England European Protected Species Licence.</p> <p>In line with current guidelines, it is recommended that two dusk emergence surveys and a separate dawn re-entry survey are completed for the workshop section of B1 to characterise the roost present. The dusk/ dawn surveys must be undertaken during the active bat season between May and September where at least two of the surveys are completed during the optimal survey period between mid-May and August. The surveys should be separated by a minimum of two weeks.</p> <p>Two surveyors are recommended to provide full coverage of the workshop section of B1, as shown on the plan in Appendix 3.</p> <p>An EPSL application to Natural England will be required. The EPSL application requires that surveys have been undertaken within the most recent active bat season and planning permission must have been granted and all relevant wildlife-related conditions have been discharged prior to submission.</p> <p>Please note that a Material Changes Check will be required within three months of the EPSL submission if no survey work has been undertaken within that period to inform the EPSL application. Furthermore, bat droppings collected during the PRA will need to be sent for DNA analysis to confirm the bat species present to inform the EPSL application.</p>
Foraging and commuting bats	<p>The proposed development is limited to the existing building curtilage and hardstanding only. No habitats of value to foraging and commuting</p>	<p>It is recommended that no new external lighting is installed, and all construction works are completed during daylight hours. Should external lighting need to be installed, a low impact lighting strategy should be adopted for the site as to comply with current guidelines with</p>

	<p>bats will be removed to facilitate the development.</p> <p>However, there is potential for indirect disturbance to foraging and commuting bats through an increase in artificial light pollution resulting from external lighting installation.</p>	<p>regards to the impacts or artificial lighting on bats (Bat Conservation Trust and the Institute of Lighting Professionals 2018). Further details are included within Table 4.</p>
Nesting birds	<p>The renovation of the barn and workshop sections of B1 have potential to destroy an active bird nest, if present.</p>	<p>Renovation works should commence outside of the typical nesting bird season between the 1st March and 31st August. If this timeframe cannot be avoided, a close inspection of the building should be undertaken by a qualified ecologist prior to the commencement of work. All active nests will need to be retained until the young have fledged. Should evidence indicating the presence of barn owls be recorded further mitigation may be required to reduce impacts to this species.</p>
Designated sites	<p>No impacts to designated sites are anticipated as a result of the proposed development. This is due to the small scale of works and separation between the site and nearest designated site.</p> <p>However, there are suitable access opportunities into the workshop for horseshoe bat species, which represent a qualifying feature of the SACs, through the opening above the workshop door that provides a direct flight path into the building section.</p>	<p>The further surveys recommended above will determine if there are any significant impacts to horseshoe bats as a result of the proposed works.</p>

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1.0 Introduction and Context

1.1 Background

Arbtech Consulting Limited was instructed by Richard Cruszcz to undertake a Preliminary Roost Assessment (PRA) at Duckpool Farm, Duckpool Lane, Beckington, BA11 6TX (hereafter referred to as “the site”). The survey was required to inform a planning application which details the renovation of an existing building which comprises an agricultural barn, workshop, potting shed and garage to provide residential accommodation (hereafter referred to as “the proposed development”). A proposed development plan is provided in **Appendix 1**.

The aim of the PRA was to determine the presence or evaluate the likelihood of the presence of roosting bats, and to gain an understanding of how bats could use the site for roosting, foraging or commuting. This has been undertaken with due consideration to the “Bat Surveys for Professional Ecologists —Good Practice Guidelines” publication (Collins, 2016).

No previous ecology reports have been produced for this site by Arbtech Consulting Limited or by any other consultancy to the knowledge of the Author.

1.2 Site Context

The site is located at National Grid Reference ST 82137 52731 and has an area of under 0.1ha. The site is characterised by a building which comprises an agricultural barn, workshop, potting shed, and garage located on a farm. The site is enclosed by farm infrastructure and open agricultural land on all aspects. A site location plan is provided in **Appendix 2**.

1.3 Scope of the Report

This report provides a description of all features suitable for roosting, foraging, and commuting bats and evaluates those features in the context of the site and wider environment. It further documents any physical evidence collected or recorded during the site survey that establishes the presence of roosting bats. It provides information on possible constraints to the proposed development as a result of bats and summarises the requirements for any further surveys to inform subsequent mitigation proposals, achieve planning or other statutory consent and to comply with wildlife legislation.

To achieve this, the following steps have been taken:

- A desk study has been carried out.
- A field survey has been undertaken, including an external survey and internal inspection of built structures and a ground level assessment of trees where possible, to determine the presence or the suitability of any features which bats could use for roosting and to assess the suitability of the site’s bat foraging and commuting habitat.
- An outline of potential impacts on any confirmed or unidentified roosts has been provided, based on the proposed development.
- Recommendations for further surveys and mitigation have been made, along with advice on the requirements for a European Protected Species Licence (EPSL) application if appropriate.
- Opportunities for the enhancement of the site for roosting, foraging and commuting bats have been set out.

2.0 Methodology

2.1 Desk Study

The desk study included a 2km radius review of statutory designated sites with bat qualifying interests, granted EPSL records for bats held on the magic.gov.uk database, and a review of relevant supplementary planning documents pertaining to bats. An assessment of the surrounding landscape structure was also completed using aerial images from Google Earth and OS maps. Furthermore, Biological Records Data (BRD) detailing the location of historic bat records and non-statutory designated sites within 2km of the site was commissioned from the Somerset Environmental Records Centre (SERC).

2.2 Field Survey

The survey was undertaken by Jonathan Stuttard BSc (Hons) MSc (Senior Consultant) on 30/06/2022. Jonathan Stuttard holds Natural England Bat Licence **2022-10409-CL17-BAT**. The PRA focussed on a single building that will be affected by the proposed development as well as providing an overview of the wider site and the surrounding landscape for bat roosting, foraging, and commuting habitat.

2.3 Suitability Assessment

The PRA comprised an assessment of the building to be impacted by the proposed development for potential to support roosting bats. The survey was led by an experienced ecologist and was based on current best practice guidelines (Collins, 2016). All features that are likely to be impacted by the proposed development were assessed for their potential to support roosting bats. The surveyor systematically surveyed all features suitable for bats and signs of bat activity.

The PRA included a visual inspection (including the use of binoculars and torches where required) of the exterior and interior of the building for evidence of bat use (e.g. droppings, scratch marks, staining and sightings). Factors considered whilst undertaking the PRA comprised internal conditions, presence of features suitable for use by roosting bats, proximity to foraging habitats or cover and potential for disturbance. Notes were made relating to relevant characteristics of features providing potential access points and roosting opportunities for bats. **Table 1** below details the rationale for determining bat roost potential of the building subject to the PRA.

Table 1: Rationale for assigning bat roost potential

Assigned Bat Roosting Potential	Description/ Rationale
Confirmed roost	Evidence of roosting bats within the building.
High	A building with one or more Potential Roost Features (PRFs) 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.
Medium	A building with one or more PRFs 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 (with respect to roost type only).

Low	A building with one or more PRF that could be used by individual bats opportunistically. However, these PRFs do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity or hibernation).
Negligible	Negligible features on site likely to be used by roosting bats.

2.4 Breeding Birds and Other Incidental Observations

The surveyor also made note of any other ecological constraints observed during the survey, notably the likelihood of presence or signs of breeding birds.

2.5 Limitations

It should be noted that whilst every effort has been made to describe the features on site in the context of their suitability for roosting bats, this does not provide a complete characterisation of the site. This survey provides a preliminary view of the likelihood of bats being present. This is based on suitability of the habitats on site and in the local area, the ecology and biology of bats as currently understood, and the known distribution of bats as recovered during the desk study. Bats are highly mobile and switch roost sites regularly and therefore the usage of a site by bats can change over a short period of time.

There are no site-specific limitations.

3.0 Results and Evaluation

3.1 Desk Study Results

A summary of relevant desk study results is provided below.

Review of Supplementary Planning Documents

Due to the location of the site near to the Bath and Bradford on Avon Bats Special Area of Conservation (SAC), Mells valley SAC, and the North Somerset and Mendip Bats SAC, specific guidance relating to bats published by Mendip District Council (Mendip District Council 2019) has been reviewed. In accordance with this document, the site is located within “*Bat Consultation Zone C*”.

Designated Sites

The site is not subject to any statutory or non-statutory designations and there are no statutory designated sites within 2km. However, there are two non-statutory designated sites within 2km in the form of Local wildlife Sites (LWS), as detailed in **Table 2** below. It is noted that the site lies within several Sites of Special Scientific Interest impact risk zones. However, the proposed development type is not listed as a possible high risk with regards to this designation.

Table 2: Designated sites within 2km radius of the site.

Designated site name	Distance from site (approx.)	Reasons for notification from Natural England
Edgell’s Wood LWS	1.75km southwest	An area of ancient semi-natural broadleaved woodland
Salmonds’ Copse LWS	1.9km southwest	An area of ancient semi-natural broadleaved woodland

Landscape

A review of aerial photographs (Google Earth), the magic.gov.uk database, and OS maps has been undertaken. Collated, the potential value of the wider landscape for bats is described below: The site is located rurally approximately 6.5km northeast of Frome. The landscape enclosing the site is dominated by managed agricultural land and associated boundary features including unmanaged field margins, tree lines, and hedgerows. Furthermore, other notable habitats located within 2km of the site that are likely to represent foraging, commuting, and roosting opportunities for bats include sections of deciduous woodland, ancient and semi-natural woodland, and ancient replanted woodland. These habitats are likely to have good connectivity to the site via continuous vegetated linear features such as tree lines, woodland edge, and hedgerows.

Historical Records

A search of the magic.gov.uk database for granted EPSLs within a 2km radius of the site has been completed. Displaced bats from licensed sites <1km away from the survey site will find alternative habitat either within the mitigation measures implemented as part of the licence or will relocate to other known roosts sites in close proximity to the licensed site. The review of the magic.gov.uk database returned no granted EPSL for bats within 2km of the site. Historical records of bats within 2km of the site as requested from SERC are summarised in **Table 3** below.

Table 3: Historical records of bats within 2km of the site

Common name	Scientific binomial	Nearest recorded to the site	Number of records	Number of roost records	Maternity roost records
Common pipistrelle	<i>Pipistrellus pipistrellus</i>	1.5km southeast	7	4	0
Soprano pipistrelle	<i>Pipistrellus pygmaeus</i>	1.1km southwest	5	0	0
Brown long-eared	<i>Plecotus auritus</i>	1.1km southwest	6	1	0
Serotine	<i>Eptesicus serotinus</i>	1.1km southwest	7	1	0
Lesser Horseshoe	<i>Rhinolophus hipposideros</i>	1.1km southwest	6	1	0
Greater horseshoe	<i>Rhinolophus ferrumequinum</i>	1.25km southwest	2	0	0
Noctule	<i>Nyctalus noctula</i>	1.1km southwest	7	1	0
Natterer's	<i>Myotis Nattereri</i>	2.0km south	2	1	0



3.2 Field Survey Results

The PRA focussed on a single building (B1) that will be impacted by the proposed development as well as providing an overview of the wider site and the surrounding landscape for bat roosting, foraging, and commuting habitat. The results of the field survey are illustrated in **Appendix 3**. The weather conditions recorded at the time of the survey are shown in **Table 4**. The results of the PRA are shown in **Table 5**.

Table 4: Weather conditions during the survey

Date: 30/06/2022	
Temperature	17.5°C
Humidity	30%
Cloud Cover	10%
Wind	0mph
Rain	Light showers

Table 5: Preliminary Roost Assessment results

Feature	Description and value to roosting bats	Photographs
<p>Building B1 – External</p>	<p>Building B1 is an agricultural building containing a large barn, a workshop, a garage, and a potting shed.</p> <p>B1 is constructed using blockwork and a steel frame supported by concrete foundations. The barn section of the building is clad using timber batons throughout allowing effective ventilation and the remainder of the building is clad with shiplap style timber boards. B1 retains a single pitched, clay-tiled roof. A large double door is present on the north aspect providing vehicular access into an enclosed double garage and a large sliding door is present on the south aspect that provides access into the workshop. Access to the potting shed is present on the west building aspect. The barn is mostly open, with a large entrance on the east aspect and window openings on the north aspect.</p> <p>B1 appears to be well maintained and is in good structural condition. As a result, structural features including the shiplap timber cladding, doors, windows, and fascia boards are in good condition with limited signs of dilapidation. Furthermore, the roof retains no missing, slipped or lifted tiles. As a result, there are highly limited external features suitable to support crevice-dwelling bats. However, access into the building is available for bats. Most notably, the sliding door that encloses the workshop maintains a narrow opening when closed that provides permanent access opportunities into this building section for bats. Although the barn building section is permanently open, this building section does not provide suitable roosting opportunities internally. It is noted that no access opportunities into the other building sections were recorded during the PRA.</p> <p>It is noted that no evidence indicating the presence of nesting birds was recorded during the external PRA. However, access into the barn and workshop is available for nesting birds.</p>	<div style="display: flex; justify-content: space-around;">   </div> <p style="text-align: center;">Photographs 1 & 2:</p> <p style="text-align: center;">Left – Northeast aspect of B1. Right – Southwest aspect of B1.</p>

Building B1 – Internal conditions of the barn and potting shed

Internally, the barn is subject to external conditions due to the open nature of the baton cladding and openings on the north and east aspects. As a result, the barn is subject to high lux levels during daylight hours and external weather conditions including wind and some rainfall. Furthermore, the barn does not have an enclosed loft space and the underside of the roof tiles are fully exposed. As a result, there are no areas of refuge for bats from external conditions. No evidence indicating the presence of roosting bats was recorded during the internal inspection of the barn.

Internal conditions within the potting shed are also exposed to significant external conditions. Although this building section provides some coverage from external weather conditions, large windows on the west and south aspects in addition to roof lights result in high lux levels during daylight hours. The potting shed also does not retain an enclosed loft space and there is an absence of refuge opportunities from the high lux levels for bats. No evidence indicating the presence of roosting bats was recorded during the internal inspection of the potting shed.

Both the barn and potting shed sections of B1 are considered unsuitable to support roosting bats.

It is noted that access is available into the barn for barn owls and there are potential nesting and perching opportunities upon internal infrastructure. However, no evidence indicating the presence of barn owls was recorded during the internal inspection. The barn also provides nesting opportunities for a small number of common breeding bird species.



Photographs 3 & 4:

Left – Internal view of barn within B1.

Right – Internal view of potting shed within B1.

Building B1 – Internal conditions of the garage and workshop

Internal conditions within the garage are sheltered from external conditions. The garage door seals tightly when closed limiting exposure to external weather and high lux levels. However, the only access opportunities into the garage are through the door when open; the garage door is closed when not in use and thus there are no visible access opportunities into the garage for bats. No evidence indicating the presence of bats was recorded during the internal inspection of the garage.

Internal conditions within the workshop are also sheltered from external conditions. However, the sliding door does not close tightly and a gap is present above the door when closed. This gap provides permanent access opportunities for bats into the workshop. Although internal conditions provide suboptimal conditions to support bats for prolonged periods due to a lack of enclosed loft space and other internal cavities, the workshop is suitable to support bats for transient periods. Evidence indicating the presence of roosting bats was recorded within the workshop including bat droppings and several discarded moth wings likely to be attributed to feeding behaviour. This evidence is described further below.

No evidence indicating the presence of nesting birds was recorded within the garage section of B1 and there were no significant access opportunities into this building section for birds. Given the presence of a gap above the sliding door, there are access opportunities into the workshop for birds. Furthermore, a disused bird nest was recorded within the workshop. The bird nest is described further below.



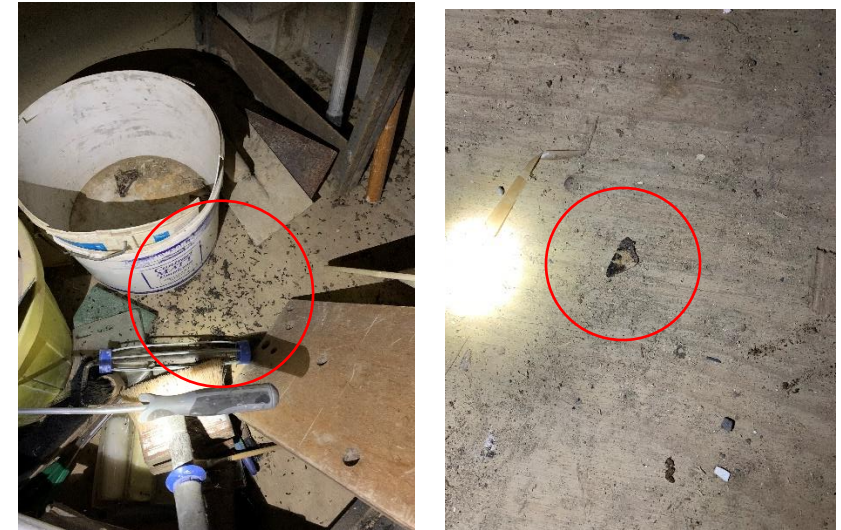
Photographs 5 and 6:

Left – Internal view of the garage within B1.

Right – Internal view of the workshop within B1.

Evidence of roosting bats

Evidence indicating the presence of roosting bats was recorded in the workshop within B1. Bat droppings were recorded upon the mezzanine level within the workshop. A pile of approximately 50 droppings was recorded underneath a shelf, approximately 30 droppings were recorded within a cobweb underneath a roof rafter, and under 10 individual droppings were recorded scattered across the mezzanine level. No bat droppings were recorded on the ground level of the workshop. Furthermore, a total of four moth wings were recorded across the mezzanine level within the workshop. The moth wings were located adjacent to bat droppings and are likely to represent bat feeding remains.

**Photographs 7 and 8:**

Left – A pile of bat droppings located in the workshop within B1.

Right – A moth wing likely to represent bat feeding remains located in the workshop within B1.

Evidence of nesting birds

A disused bird nest was recorded on a timber roof rafter above the mezzanine level of the workshop. Due to the size and construction, the nest is thought to be attributed to swallows *Hirundo rustica* or house martins *Delicon urbicum*.

**Photograph 9:**

A disused bird nest located over the mezzanine level of the workshop.

4.0 Conclusions, Impacts and Recommendations

4.1 Informative Guidelines

A summary of the relevant legislation and planning policies is provided in **Appendix 4**.

Bats

Bats are protected under the Wildlife and Countryside Act and the Conservation of Habitats and Species Regulations 2017 (amended by the Conservation of Habitats and Species Regulations (amendment) (EU Exit) Regulations 2019).

There are three possible outcomes of this survey, each with specific recommendations. These are outlined below:

Confirmed bat roost

Best practice survey guidelines (Collins, 2016) recommend additional surveys for confirmed roosts. Three further surveys are required to characterise the bat roost present including species, roost type and access points to inform an EPSL application to Natural England. Surveys must be completed during the active bat season (May – September). At least two of the surveys should be completed during the optimal survey period mid-May to August, and at least one of the surveys should be a dawn re-entry survey.

Low, moderate or high likelihood of a bat roost present

Best practice survey guidelines (Collins, 2016) recommend additional surveys for features assessed as having low to high suitability for roosting bats. One, two or three further surveys are required to confirm presence or likely absence of a bat roost, based on a low, medium or high roost likelihood evaluation. Surveys must be completed during the active bat season (May – September). If more than one survey is recommended, at least one of them should be completed during the optimal survey period mid-May to August, and at least one of the surveys should be a dawn re-entry survey. If two or one further survey is recommended these surveys must be completed during the optimal survey period (mid-May to August). For low and moderate roost likelihood evaluation the survey effort recommended at this stage is iterative and if bats roosts are confirmed in the building, a further survey will be required to provide sufficient information to inform an EPSL application to Natural England.

Negligible likelihood of a bat roost present

Buildings assessed as comprising negligible suitability for roosting bats do not normally require further surveys. However, if bats are found during any stage of the development, work should stop immediately, and a suitably qualified ecologist should be contacted for further advice.

Birds

Legislation protects all wild birds whilst they are breeding, and prohibits the killing, injuring or taking of any wild bird or their nests and eggs. Certain species of bird, including the barn owl, are subject to special provisions; it is an offence to disturb any bird or their young during the breeding season.

4.2 Evaluation

Considering the results of the desk study and field survey, **Table 6** presents an evaluation of the value of the site for bats and details any other ecological constraints identified such as nesting birds in relation to the proposed development.

Table 6: Evaluation of the site for bats and any other ecological constraints

Feature	Survey conclusions	Foreseen impacts	Recommendations <i>Measures required to adhere to guidance, legislation and planning policies.</i>	Biodiversity Enhancements <i>The Local Planning Authority has a duty to ask for enhancements under the NPPF (2021) and Local Planning Policy.</i>
Bats	<p>Evidence indicating the presence of roosting bats was recorded in the workshop within B1. As a result, the workshop is a confirmed bat roost.</p> <p>No evidence indicating the presence of roosting bats were recorded within the other buildings sections. Furthermore, the other building sections are considered unsuitable to support roosting bats due to internal exposure to external conditions or a lack of access opportunities.</p>	<p>The proposed development comprises the renovation of B1 including the workshop to provide residential accommodation. Renovation works will destroy a bat roost if present and could cause death or injury to bats.</p>	<p>Current guidance states that buildings assessed to represent a confirmed roost should be subject to further survey to characterise the roost type to inform both the planning application and a Natural England European Protected Species Licence.</p> <p>In line with current guidelines, it is recommended that two dusk emergence surveys and a separate dawn re-entry survey are completed for the workshop section of B1 to characterise the roost present. The dusk/dawn surveys must be undertaken during the active bat season between May and September where at least two of the surveys are completed during the optimal survey period between mid-May and August. The surveys should be separated by a minimum of two weeks.</p> <p>Two surveyors are recommended to provide full coverage of the workshop section of B1, as shown on the plan in Appendix 3.</p> <p>An EPSL application to Natural England will be required. The EPSL application requires that surveys have been undertaken within the most recent active bat season and planning permission must have been granted and all</p>	<p>To be confirmed pending further survey results.</p>

			<p>relevant wildlife-related conditions have been discharged prior to submission.</p> <p>Please note that a Material Changes Check will be required within three months of the EPSL submission, if no survey work has been undertaken within that period to inform the EPSL application. Furthermore, bat droppings collected during the PRA will need to be sent for DNA analysis to confirm the bat species present to inform the EPSL application.</p>	
Foraging and commuting bats	<p>Building B1 is enclosed by hardstanding infrastructure that presents no value to foraging and commuting bats. The hardstanding present will provide suitable access around the building during the development. No vegetated habitats will be impacted by the proposed development. However, a large pond is located approximately 50m to the southwest of B1. The pond is likely to attract a significant number of invertebrates that will provide a foraging resource for local bat populations.</p>	<p>The proposed development is limited to the existing building curtilage and hardstanding only. No habitats of value to foraging and commuting bats will be removed to facilitate the development.</p> <p>However, there is potential for indirect disturbance to foraging and commuting bats through an increase in artificial light pollution resulting from external lighting installation.</p>	<p>It is recommended that no new external lighting is installed, and all construction works are completed during daylight hours. Should external lighting need to be installed, a low impact lighting strategy should be adopted for the site, which should include the following measures as to comply with current guidelines with regards to the impacts or artificial lighting on bats (Bat Conservation Trust and the Institute of Lighting Professionals 2018):</p> <ul style="list-style-type: none"> • Use of narrow spectrum light sources to lower the range of species affected by lighting. • Use of light sources that emit minimal ultra-violet light. • Avoidance of white and blue wavelengths of the light spectrum to reduce insect attraction and where white light sources are required in order to manage the blue shortwave length content they should be of a warm / neutral colour temperature <4,200 kelvin. • Absence of bare bulbs and any light pointing upwards. The spread of light will be kept in line with or below the horizontal. 	<p>To be confirmed pending further survey results.</p>

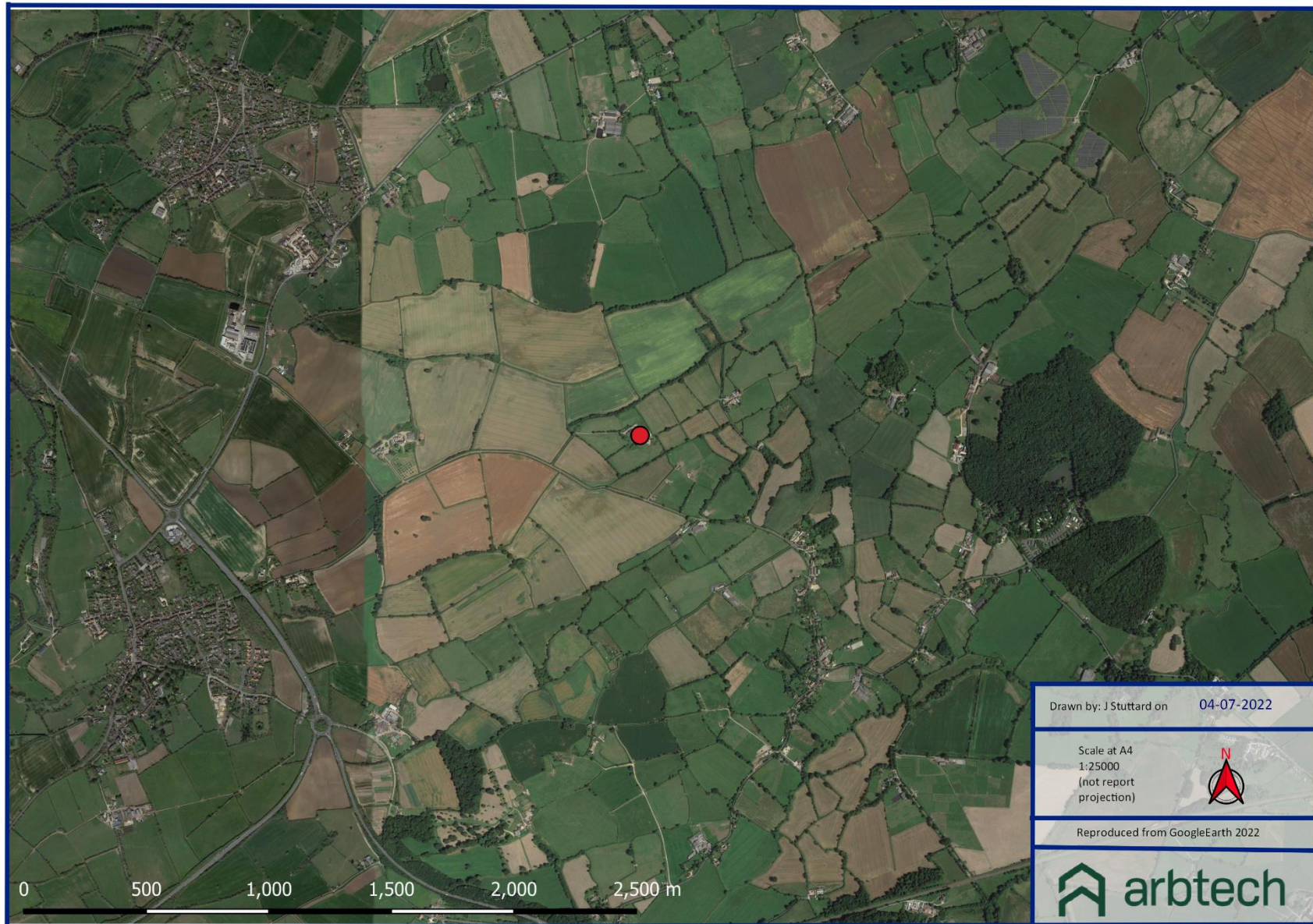
			<p>Light spill should be reduced via the use of low-level lighting used in conjunction with hoods, cowls, louvers and shields. Lights will also be directional to ensure that light is directed to the intended areas only.</p> <p>External lighting should be on PIR sensors that are sensitive to large objects only (so that they are not triggered by passing bats) and will be set to the shortest time duration to reduce the amount of time the lights are on.</p>	
<p>Nesting birds</p>	<p>Access is available into the barn and the workshop for nesting birds. Although no evidence indicating the presence of nesting birds was recorded within the barn section of B1, a disused nest though to be attributed to swallows or house martins was recorded within the workshop.</p> <p>It is noted that access is available into the barn for barn owls and there are potential nesting and perching opportunities upon internal infrastructure. However, no evidence indicating the presence of barn owls was recorded during the internal inspection. No other sections of the building are suitable to support barn owls.</p>	<p>The renovation of the barn and workshop sections of B1 have potential to destroy an active bird nest, if present.</p>	<p>Renovation works should commence outside of the typical nesting bird season between the 1st March and 31st August. If this timeframe cannot be avoided, a close inspection of the building should be undertaken by a qualified ecologist prior to the commencement of work. All active nests will need to be retained until the young have fledged. Should evidence indicating the presence of barn owls be recorded further mitigation may be required to reduce impacts to this species.</p>	<p>The installation of a single bird box or integrated bird brick should be incorporated into the proposed development. recommended bird boxes/ bricks include:</p> <ul style="list-style-type: none"> • Schwegler No 17 Swift Nest Box • Schwegler 1SP Sparrow Terrace • Schwegler 1B Nest Boxes • Schwegler 2H Robin Boxes • Woodstone Nest Box <p>Bird boxes and bricks should be positioned approximately 3m above ground level where they will be sheltered from prevailing wind, rain and strong sunlight. Small-hole boxes are best placed approximately 1-3m above ground on an area of the tree trunk where foliage will not obscure the entrance hole. Swift and sparrow boxes should be positioned at the eaves of a building and can be incorporated into the fabric of the building during construction.</p>

<p>Designated Sites</p>	<p>The site is not subject to any statutory or non-statutory designations and no designated sites are located within 2km. Two non-statutory designated sites are located within 2km, the nearest located 1.75km southwest.</p> <p>The site lies within Bat Consultation Zone C in accordance with supplementary planning guidance pertaining to nearby SACs published by Mendip District Council (Mendip District Council 2019).</p>	<p>No impacts to designated sites are anticipated as a result of the proposed development. This is due to the small scale of works and separation between the site and nearest designated site.</p> <p>However, there are suitable access opportunities into the workshop for horseshoe bat species, which represent a qualifying features of the SACs, through the opening above the workshop door that provides a direct flight path into the building section.</p>	<p>The further surveys recommended above will determine if there are any significant impacts to horseshoe bats as a result of the proposed works.</p>	<p>To be confirmed pending further survey results.</p>
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Appendix 2: Site Location Plan



Appendix 3: PRA Survey Plan



Appendix 4: Legislation and Planning Policy Related to Bats

LEGAL PROTECTION

The ***Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019*** came into force when Britain left the European Union on 31st January 2020. It covered amendments relevant to this survey to:

- Wildlife and Countryside Act 1981: England and Wales (x1 amendment)
- Conservation of Habitats and Species Regulations 2017 (x29 amendments)

All species of bat are fully protected under ***The Conservation of Habitats and Species Regulations 2017*** (amended by the ***Conservation of Habitats and Species Regulations (amendment) (EU Exit) Regulations 2019*** which continue the same provision for European protected species, licensing requirements and protected sites after the UK leaves the EU) through their inclusion on Schedule 2.

Regulation 43: Protection of certain wild animals - offences

(1) A person is guilty of an offence if they:

- (a) Deliberately captures, injures or kills any wild animal of a European protected species,
- (b) Deliberately disturbs wild animals of any such species,
- (c) Deliberately takes or destroys the eggs of such an animal, or
- (d) Damages or destroys a breeding site or resting place of such an animal,

(2) For the purposes of paragraph (1) (b), disturbance of animals includes in particular any disturbance which is likely—

- (a) To impair their ability:
 - (i) To survive, to breed or reproduce, or to rear or nurture their young; or
 - (ii) In the case of animals of a hibernating or migratory species, to hibernate or migrate; or
- (b) To affect significantly the local distribution or abundance of the species to which they belong.

Bats are also protected under the ***Wildlife and Countryside Act 1981 (as amended)*** through their inclusion on ***Schedule 5***. Under this Act, they are additionally protected from:

- Intentional or reckless disturbance (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection
- Selling, offering or exposing for sale, possession or transporting for purpose of sale

NATIONAL PLANNING POLICY (ENGLAND)

National Planning Policy Framework 2021

The National Planning Policy Framework promotes sustainable development. The Framework specifies the need for protection of designated sites and priority habitats and species. An emphasis is also made on the need for ecological infrastructure through protection, restoration and re-creation. The protection and recovery of priority species (considered likely to be those listed as species of principal importance under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006) is also listed as a requirement of planning policy.

In determining a planning application, planning authorities should aim to conserve and enhance biodiversity by ensuring that: designated sites are protected from harm; there is appropriate mitigation or compensation where significant harm cannot be avoided; measurable gains in biodiversity in and around developments are incorporated; and planning permission is refused for development resulting in the loss or deterioration of irreplaceable habitats including aged or veteran trees and also ancient woodland.

The Natural Environment and Rural Communities Act 2006 and the Biodiversity Duty

Section 40 of the Natural Environment and Rural Communities (NERC) Act 2006, requires all public bodies to have regard to biodiversity conservation when carrying out their functions. This is commonly referred to as the 'biodiversity duty'.

Section 41 of the Act requires the Secretary of State to publish a list of habitats and species which are of 'principal importance for the conservation of biodiversity'. This list is intended to assist decision makers such as public bodies in implementing their duty under Section 40 of the Act. Under the Act these habitats and species are regarded as a material consideration in determining planning applications. A developer must show that their protection has been adequately addressed within a development proposal.

LOCAL PLANNING POLICY

Mendip District Local Plan Part I

The Mendip District Local Plan Part I is the key document outlining the long-term spatial vision for the district. The document includes policies which relate to biodiversity and nature conservation which are relevant to this report. Such policies are detailed below:

Part I Policy DP5: “Biodiversity and Ecological Networks” states:

“The Council will use the local planning process to protect, enhance and restore Somerset’s Ecological Network within Mendip.

1. *All development proposals must ensure the protection, conservation and, where possible, enhancement of internationally, nationally or locally designated natural habitat areas and species.*
2. *Proposals with the potential to cause adverse impacts on protected and/or priority sites, species or habitats are unlikely to be sustainable and will be resisted. Exceptions will only be made where:*
 - a. *the impacts cannot be reasonably avoided.*
 - b. *offsetting/compensation for the impacts can be secured.*
 - c. *other considerations of public interest clearly outweigh the impacts, in line with relevant legislation.*

Offsets as mitigation or compensation required under criterion b) will be calculated using Somerset County Council's Biodiversity Offsetting methodology."

Part I Policy DP6: "Bat Protection" states:

"Planning Applications for development on sites within the Bat Consultation Zone will require a 'test of significance' under the Habitats Regulations to be carried out. Applicants must provide, with their application, all necessary information to enable compliance with the Habitats Regulations (or their successor), including any necessary survey work, reports and avoidance / mitigation measures."

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

A European Protected Species Licence (EPSL) issued by Natural England will be required for works likely to affect a bat roost or for operations likely to result in a level of disturbance which might impair their ability to undertake those activities mentioned above (e.g. survive, breed, rear young and hibernate). The licence is to allow derogation from the relevant legislation but also to enable appropriate mitigation measures to be put in place and their efficiency/success to be monitored. The legislation may also be interpreted such that, in certain circumstances, important foraging areas and/or commuting routes can be regarded as being afforded *de facto* protection, for example, where it can be proven that the continued usage of such areas is crucial to maintaining the integrity and long-term viability of a bat roost (Garland & Markham, 2008).

There are 17 species of bat breeding in England and Natural England issues licences under Regulation 55 of the Habitats Regulations to allow you to work within the law.

Licences are issued for specific purposes stated in the Regulations, if the following three tests are met:

- The purpose of the work meets one of those listed in the Habitats Regulations (see below);
- That there is no satisfactory alternative;
- That the action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status (FCS) in their natural range

The Habitats Regulations permits licences to be issued for a specific set of purposes including:

1. ***include preserving public health or public safety or other imperative reasons of over-riding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment;***
2. scientific and educational purposes,
3. ringing or marking
4. conserving wild animals

Development works fall under the first purpose and Natural England issues bat mitigation licences for developments.

EUROPEAN PROTECTED SPECIES POLICIES

In December 2016 Natural England officially introduced the four licensing policies throughout England. The four policies seek to achieve better outcomes for European Protected Species (EPS) and reduce unnecessary costs, delays and uncertainty that can be inherent in the current standard EPS licensing system. The policies are summarised as follows:

- Policy 1; provides greater flexibility in exclusion and relocation activities, where there is investment in habitat provision;
- Policy 2; provides greater flexibility in the location of compensatory habitat;
- Policy 3; provides greater flexibility on exclusion measures where this will allow EPS to use temporary habitat; and,
- Policy 4; provides a reduced survey effort in circumstances where the impacts of development can be confidently predicted.

The four policies have been designed to have a net benefit for EPS by improving populations overall and not just protecting individuals within development sites. Most notably Natural England now recognises that the Habitats Regulations legal framework now applies to 'local populations' of EPS and not individuals/site populations.