



DARWIN ECOLOGY
integrating nature conservation

Unit 6, The Wincombe Centre,
Wincombe Business Park, Shaftesbury,
SP7 9QJ

Email: info@darwin-ecology.co.uk
www.darwin-ecology.co.uk

Ecological Impact Assessment

St Josephs College,
Upper Redlands Road,
Reading
RG1 5JT

June 2024

Darwin Ecology Ltd
Registered Office: 8 Layton Lane, Shaftesbury, Dorset SP7 8EY
Company No. 07654823

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Prepared by	Olatz Gartzia BSc MSC ACIEEM - Principal Ecologist	28th June 2024
Reviewed by	Amanda Honour BSc MSc ACIEEM - Senior Ecologist	1st July 2024
Issue number	1	
This report remains valid for 24 months from date of issue.		
Survey data are valid for 18 months from the date the survey was undertaken.		

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Whilst every effort has been made to guarantee the accuracy of this report, it should be noted that living creatures are capable of migration and whilst protected species may not have been located during the survey duration, their presence may be found on site at a later date.

The views and opinions contained within the document are based on a reasonable timeframe between the completion of the survey and the commencement of any works. If there is any delay between the commencement of works that may conflict with timeframes laid out within this document, or have the potential to allow the ingress of protected species, a suitably qualified ecologist should be consulted.

It is the duty of care of the landowner/developer to act responsibly and comply with current environmental legislation if protected species are suspected or found prior to works.

1. EXECUTIVE SUMMARY

- 1.1. Darwin Ecology Ltd was commissioned by MTP Consultants of behalf of St Joseph's College to undertake an EclA of proposals for the buildings at St Josephs College, Upper Redlands Road, Reading RG1 5JT¹. The assessment was required to support a planning application for roof repairs and the refurbishment of a section of the building and was informed by a desk study, internal and external building inspection and a single emergence survey for bats.
- 1.2. The building inspection assessed the section of the building to be impacted to hold a **low potential** to support roosting bats due to the presence of rotten wood on the soffit box creating small crevices. Therefore, in line with the Bat Conservation Trust guidelines (2023) one dusk emergence survey was conducted in June 2024.
- 1.3. During the emergence survey, no bats were seen to emerge or re-enter the building. Low activity was recorded for common pipistrelle *Pipistrellus pipistrellus*, long-eared bat *Plecotus sp.* and noctule *Nyctalus noctula* during both surveys.
- 1.4. The surveys confirmed that the building does not support a bat roost and therefore the proposals to repair the building will not directly impact any roosting bats.
- 1.5. In the unlikely event that a bat is discovered during the works, works will cease immediately and a bat licensed ecologist contacted for advice.
- 1.6. Recommendations for enhancements have been made which include the installation of a bat and bird box on a tree on site.

¹ Ordnance Survey (OS) grid reference SU 73203 72425.

2. INTRODUCTION AND BACKGROUND

- 2.1. Darwin Ecology Ltd was commissioned by MTP Consultants of behalf of St Joseph's College to undertake an EclA of proposals for the buildings and habitats at St Josephs College, Upper Redlands Road, Reading RG1 5JT². The assessment was required to support a planning application for roof repairs and the refurbishment of a section of the building and was informed by a desk study, internal and external building inspection and a single emergence survey for bats.
- 2.2. The survey and report follow the Bat Conservation Trust (BCT) Good Practice Guidelines (2023).
- 2.3. The subsequent Ecological Impact Assessment (EclA) follows the roost assessment methodology set out by Wray *et al.* (2010) and the CIEEM Guidelines for Ecological Impact Assessment in the UK and Ireland (2018).

Site Overview

- 2.4. The site is located in an urban and residential district of the town of Reading, lying south east of the city centre north of the University of Reading Campus.
- 2.5. The site comprises a school with numerous three and four storey buildings of brick construction, joined together creating a single larger floor plan. Further outlying buildings are dispersed across the wider site. Surrounding the surveyed section of the building are areas of hardstanding, astro turf sports pitches and hedgerows and semi mature trees along the site boundary and Upper Redlands Road which lies directly to the south. Areas of hardstanding used for car parking interspersed with hedgerows and occasional trees lie to the south west. Immediately to the north are areas of residential housing. An open school grass playing field lies to the west of the main school buildings (see **Figure 1**).
- 2.6. The wider landscape comprises a mixture of residential housing with individual small amenity gardens directly to the east, north and west of the site. To the south of the site lies Upper Redlands Road followed by Reading University Campus set within open parkland and mature trees with Whiteknights Lake 430m to the south east and areas of mixed woodland further to the south of the campus site. To the south west lies further areas of residential housing, followed by Brunel Retail and industrial park (1.8km) before the River Kennet floodplain opens up with grassland meadows and extended areas of open water, lakes and reservoirs. The River Thames lies 1.4km north of the site north of the Reading - London tramline, with the Caversham lakes 2km north east (see **Figure 2**).

Scope of Assessment

- 2.7. The process of EclA aims to identify, quantify and evaluate the potential effects of development-related or other proposed actions on habitats, species and ecosystems.

² Ordnance Survey (OS) grid reference SU 73203 72425.

2.8. Potential effects on the following ecologically sensitive receptors have been considered during the EclA of St Joseph's College:

- Statutory designated sites; and
- Features of potential importance (such as loft voids or external crevice features).

2.9. The aim of this report is to:

- Identify and describe bats roosts present within the site;
- Classify the the type of roost present (e.g. day roost, maternity roost etc);
- Carry out an impact assessment of the proposed works and how they will directly / indirectly affect bats and their roosts;
- Outline the relevant legislation and protection afforded to bats; and
- Provide avoidance, compensation, mitigation and enhancement measures recommended to avoid harm / injury to roosting bats.

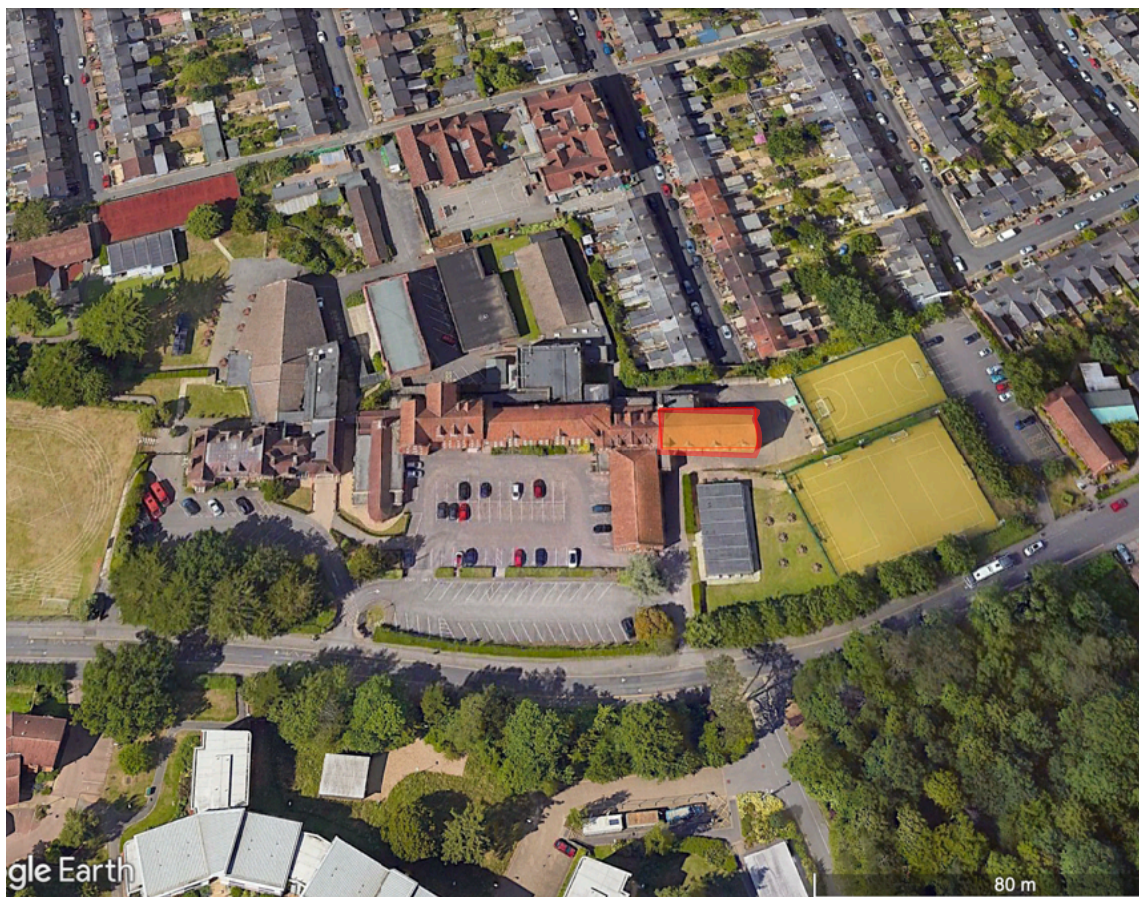


Figure 1: Site location within the local landscape, with the building surveyed outlined (Copyright Google Maps, 2024)



Figure 2: Site location within the wider landscape (Copyright Copyright Google Maps, 2024)

3. LEGISLATION & POLICY

General Wildlife Legislation

- 3.1. Wildlife in the United Kingdom (UK) is protected through European and national legislation, supported by national and local policy and guidance. Development can contribute to conservation and enhancement goals outlined by these various legislation and policy by retaining and protecting the most valuable ecological features within a site and incorporating enhancements to provide biodiversity net gain.
- 3.2. This section provides a brief summary of the principle legalisation and policy that triggers the requirement for PRA and further ecological assessments in the UK. The presence of protected species within a site are a material consideration during the planning process. PRAs and any necessary further ecological assessments provide an ecological baseline for a site and evaluation of the potential impact of proposals.
- 3.3. It is the responsibility of those involved with development works to ensure that the relevant legislation is complied with at every stage of a project. Such legislation applies even in the absence of related planning conditions or projects outside the scope of the usual planning process (i.e. permitted development projects or projects requiring Listed Building Consent only).

Bat Legislation

- 3.1. In England and Wales, all bat species and their roosts are legally protected under the European *Habitats Directive (1992)*; the *Conservation of Habitats and Species Regulations (2017)*; the *Wildlife and Countryside Act (1981) (as amended)*; the *Countryside and Rights of Way Act, 2000*; and the *Natural Environment and Rural Communities Act (NERC, 2006)*.
- 3.2. Barbastelle *Barbastella barbastellus*, Bechstein's *Myotis bechsteinii*, greater horseshoe *Rhinolophus ferrumequinum*, lesser horseshoe *Rhinolophus hipposideros*, brown long-eared *Plecotus auritus*, soprano pipistrelle, and noctule *Nyctalus noctula* bats are all species of principal importance in England under *Section 41* of the *Natural Environment and Rural Communities Act 2006*.
- 3.3. You will be committing a criminal offence if you:
 - Deliberately capture, injure or kill a bat;
 - Intentionally or recklessly disturb a bat in its roost or deliberately disturb a group of bats;
 - Damage or destroy a bat roosting place (even if bats are not occupying the roost at the time);
 - Possess or advertise/sell/exchange a bat (dead or alive) or any part of a bat; or
 - Intentionally or recklessly obstruct access to a bat roost.

- 3.4. The government's statutory conservation advisory organisation, Natural England, is responsible for administering EPS licenses that permit activities that would otherwise lead to an offence.
- 3.5. A licence can be obtained if the following three tests have been met:
- Regulation 53(9)(a) - there is "no satisfactory alternative" to the derogation, and;
 - Regulation 53(9)(b) - the derogation "will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range" and;
 - Regulation 53(2)(e) - the derogation is for the purposes of "preserving public health or public safety or other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment".

National Planning Policy

- 3.1. The *National Planning Policy Framework (2021)* aims to minimise impacts on biodiversity and provide net gains in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity. Chapter 15 'Conserving and enhancing the natural environment' details what local planning policies should seek to consider with regard to planning applications.
- 3.2. Planning policies and decisions should contribute to and enhance the natural and local environment by:
- 174 a) Protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);
 - 174 b) Recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;
 - 174 d) Minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;
 - 175) Plans should: distinguish between the hierarchy of international, national and local designated sites; allocate land with the least environmental or amenity value, where consistent with other policies in this Framework; take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement

of natural capital at a catchment or landscape scale across local authority boundaries;

176) Great weight should be given to conserving and enhancing landscape and scenic beauty in National Parks, the Broads and Areas of Outstanding Natural beauty which have the highest status of protection in relation to these issues. The conservation and enhancement of wildlife and cultural heritage are also important considerations in these areas, and should be given great weight in National Parks and Broads. The scale and extent of development within all these designated areas should be limited, while development within their settings should be sensitively located and designed to avoid or minimise adverse impacts on the designated area.

3.3. Specific policies regarding habitats and biodiversity comprise:

179) To protect and enhance biodiversity and geodiversity, plans should:

a) identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity, wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation and

b) promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species and identify and pursue opportunities for securing measurable net gains for biodiversity.

180) When determining planning applications, local planning authorities should apply the following principles:

a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;

b) development on land within or outside of Sites of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the feature of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;

c) 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; and

d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around development should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.

3.4. *Circular 06/05: Biodiversity and Geological Conservation* provides guidance on the application of the law relating to planning and nature conservation and complements the *National Planning Policy Framework*.

3.5. *Biodiversity 2020: A strategy for England's wildlife and ecosystem services* provides the *UK Biodiversity Action Plan* and country level biodiversity strategies for England, based on the list of habitats and species listed on *Section 41* of the *Natural Environment and Rural Communities Act 2006*. These are considered the habitats and species of principal importance requiring conservation action.

Local Planning Policy

3.6. The relevant local plan to the site is the Reading Borough Local Plan (2019-2036) which sets out the strategic vision for development in the borough, policies and objectives regarding its delivery and outlines measures to protect the environment up to 2036. Relevant policies regarding ecology, nature conservation or development comprise:

Policy EN12: Biodiversity and the Green Network

a) The identified Green Network, the key elements of which are shown on the Proposals Map, shall be maintained, protected, consolidated, extended and enhanced. Permission will not be granted for development that negatively affects the sites with identified interest or fragments the overall network. The Green Network comprises:

- Sites with identified biodiversity interest - Local Wildlife Sites, Local Nature Reserves, Biodiversity Opportunity Areas, protected and priority species and their habitats, Priority and Biodiversity Action Plan habitats, and the River Thames and all its tributaries (including the River Kennet and the Kennet & Avon Canal); and
- Areas with potential for biodiversity value and which stitch the Green Network together – designated Local Green Space and open green spaces, and existing and potential Green Links.

New development shall demonstrate how the location and type of green space, landscaping and water features provided within a scheme have been arranged such

that they maintain or link into the existing Green Network and contribute to its consolidation. Such features should be designed to maximise the opportunities for enhancing this network. All new development should maximise opportunities to create new assets and links into areas where opportunities are as yet unidentified on the Proposals Map.

b) On all sites, development should not result in a net loss of biodiversity and geodiversity, and should provide a net gain for biodiversity wherever possible. Development should:

- Protect and wherever possible enhance features of biodiversity interest on and adjacent to the application site, incorporating and integrating them into development proposals wherever practicable; and
- Provide new tree planting, wildlife friendly landscaping and ecological enhancements (such as wildlife ponds, bird and bat boxes) wherever practicable.

In exceptional circumstances where the need for development clearly outweighs the need to protect the value of the site, and it is demonstrated that the impacts cannot be: 1) avoided; 2) mitigated or; 3) compensated for on-site; then new development will provide off-site compensation to ensure that there is “no net loss” of biodiversity. Provision of off-site compensation shall be calculated in accordance with nationally or locally recognised guidance and metrics. It should not replace existing alternative habitats, and should be provided prior to development.

Policy EN13: Major Landscape Features and Areas of Outstanding Natural Beauty

Development which affects the setting of an Area of Outstanding Natural Beauty (AONB) will be accompanied by a Landscape and Visual Impact Assessment that demonstrates that there is no detrimental impact on the North Wessex Downs or Chilterns AONBs in terms of scale, design, layout or location. None of Reading Borough falls within an AONB, but where the urban area meets the Chilterns AONB is shown on the Proposals Map.

Policy EN14: Trees, Hedges and Woodlands

Individual trees, groups of trees, hedges and woodlands will be protected from damage or removal where they are of importance, and Reading's vegetation cover will be extended. The quality of waterside vegetation will be maintained or enhanced.

New development shall make provision for tree retention and planting within the application site, particularly on the street frontage, or off-site in appropriate situations, to improve the level of tree coverage within the Borough, to maintain and enhance the character and appearance of the area in which a site is located, to provide for biodiversity and to contribute to measures to reduce carbon and adapt to climate change. Measures must be in place to ensure that these trees are adequately maintained.

4. METHODOLOGY

Desk Study

- 4.1. A desk study was undertaken for designated sites and bat species and habitat records within 2km of the site:
- The MagicMap website was reviewed, to obtain information on any designated sites of nature conservation interest within 2km of the site and details of any EPS licences issued within 1km;
 - The Reading Borough Council Planning Portal was searched for past and pending planning applications that may have associated ecological documents detailing results of bat surveys; and
 - Google Maps and Ordnance Survey (OS) Leisure Maps was utilised to view aerial photographs, maps and mapnik data, and to assess the ecological context of the site within the wider landscape.
- 4.2. Natural England has developed a tool to help assess the potential risks to Sites of Special Scientific Interest (SSSIs) by proposed developments. These are known as 'Impact Risk Zones' (IRZs) and they define the area around a SSSI that could be sensitive to development, considering the particular sensitivities of the feature for which the site is designated.
- 4.3. The IRZs help inform whether a development proposal may affect a SSSI and if so, whether it is necessary for the Local Planning Authority (LPA) to seek pre-application advice from Natural England. Information on the IRZs was determined from the MAGIC website to determine if the LPA is required to seek consultation for the current development.

Building Inspection

- 4.4. Principal Ecologist Olatz Gartzia ACIEEM conducted a building inspection at the site at St Josephs College, Upper Redlands Road, Reading RG1 5JT on 14th February 2024. The weather conditions at the time of the survey were dry with a light breeze and approximately 12°C. The following methodology was followed:

External Survey

- 4.5. An investigation was carried out of external features with potential for use by roosting bats, such as gaps under roof and ridge tiles, gaps at soffit boxes or fascias. A search for bat droppings was made beneath each potential entry/exit point identified where accessible. The surveyor used binoculars and powerful, low-heat LED torch.

Internal Survey

- 4.6. An investigation was carried out of the roof void (including the floor and walls) for signs of bats roosting and the access potential into the roof void for bats. The surveyor looked for

bats, bat droppings, likely access points, signs of feeding, dead bats, scratch marks and staining, and made a suitability assessment of the structure of the roof.

Potential to support roosting bats

- 4.7. Each building and tree was assessed for its potential to support roosting bats as detailed in **Table 1** below which is taken from the Bat Conservation Trust 2023 guidelines Table 4.1 and Table 7.3.

Table 1: Roost classification from the Bat Conservation Trust (2023) guidelines.

Category	Description of roosting habitat	Number of surveys required
None	No habitat features on site likely to be used by any roosting bats at any time of the year (i.e. a complete absence of crevices/suitable shelter at all ground/underground levels).	No further surveys
Negligible	No obvious habitat features on site likely to be used by roosting bats; however, a small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion.	No further surveys
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of the year. However, these potential roost sites do not provide enough space, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis by large numbers of bats.	Single survey between May to August
Moderate	A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, condition and surrounding habitat but unlikely to support a roost of high conservation status.	Two surveys with at least one survey between May to August.
High / Confirmed	A structure with one or more potential roost sites that are obviously suitable for use by a larger number of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat. These structures have the potential to support high conservation status roosts.	Three surveys with at least two surveys between May to August.

Emergence Surveys

- 4.8. One dusk emergence survey was conducted on the building to be impacted during the 2024 survey season. Surveys were undertaken in line with BCT Good Practice Guidelines (2023), with any limitations outlined below.
- 4.9. Surveyors were positioned strategically around the building in order to provide adequate coverage of all elevations. Surveyors focused on any features identified during the Preliminary Roost Assessment (PRA) as having potential to be used as bat access points. The location of the surveyors and building numbers / names are shown on **Figure 3, Bat Survey Results**.
- 4.10. Dusk surveys began 15 minutes prior to sunset and lasted 1.5 hours after sunset. Surveyors recorded bat activity using hand-held Echometer Touch detectors connected to Android or iPhone devices. Analysis of recordings was undertaken after the surveys to confirm species identification. Observations recorded during surveys included bat access

points, bat species, time, and type of activity (e.g. emergence, re-entry, commuting, foraging, etc.). Incidental records of bats within the vicinity of the building (but not necessarily roosting) were also recorded.

- 4.11. A Canon AX20 video camera and Black Sun 2 B502 infra-red illuminator were also used to film bat activity at a fixed position, covering an aspect of the building not visible to the surveyors. The video footage was reviewed following the survey to identify any bat activity captured and any significant activity patterns and access points were identified and recorded.
- 4.12. A summary of the survey date and weather conditions is provided in **Table 2**.

Table 2: Emergence survey dates and weather conditions

Date	Survey type	Sunset/sunrise time	Start weather conditions	End weather conditions	Surveyors
26/06/24	Dusk Emergence	21:25	Rain: 0 Wind: 1 Cloud cover: 0% Temperature: 17°C	Rain: 0 Wind: 1 Cloud cover: 0% Temperature: 15°C	Agnes Rutter Rachel Richards

Limitations

- 4.13. The surveys were undertaken in accordance with the best practice guidelines within the peak bat activity period (May to August inclusive). The results are therefore considered to be an accurate representation of the general use of the building by roosting bats.
- 4.14. The desk study does not include data from the local environmental records centre (LERC). However, following Bat Conservation Trust guidelines a full data search is not necessary for smaller projects e.g. projects impacting a single house or barn and formal gardens. This is a small scale project where the proposed works are restricted to the building on site. Therefore the lack of LERC data is not considered a limitation to the ecological assessment of the site.
- 4.15. Many species of bat in the UK are crevice-dwelling, and bats or signs of bats can be difficult to find within a building. In addition, there may be areas that are inaccessible to the surveyor, for instance the eastern roof aspect was difficult to observe from the ground.
- 4.16. No other limitations were encountered, or assumptions made during either the desk study or the field survey and it is considered that with the access gained and recording undertaken an accurate assessment of the site's ecological importance has been made.

5. SURVEY RESULTS

Desk Study

- 5.1. There are two statutorily designated sites within 2km of the site at St Joseph's College, including two Local Nature Reserves (LNRs). These are detailed on **Table 3**.

Table 3: Statutory designated sites within 2 km of the site at St Joseph's College.

Designated sites	Name and designation type	Reason for designation	Approximate distance from site
Within 2 km of the site	Highwood Local Nature Reserve (LNR)	Mixed Lowland Woodland with Heathland; including exotic tree species part of an arboretum.	1.6km east
	Maiden Eriagh Park Local Nature Reserve (LNR)	Lowland deciduous woodland, ancient semi natural woodland and eutrophic open water	1.9km south east

- 5.2. MagicMaps returned a total of eight records for EPS licenses concerning bats within 2km of the application site, they are as follows

- License reference EPSM2013-6155 allowing the destruction of a resting place for common pipistrelle *Pipistrellus pipistrellus* bat, located approximately 1.8km north west of the application site.
- License reference 2019-44194-EPS-MIT allowing the destruction of a resting place for common and soprano pipistrelle *Pipistrellus pygmaeus* bats, located approximately 1.5km north west of the application site.
- License reference 2016-22301-EPS-MIT allowing the damage and destruction of a resting place for common pipistrelle bat, located approximately 1.2km from the application site.
- License reference 2014-3941-EPS-MIT allowing the damage and destruction of a resting place for common and soprano pipistrelle bats, located approximately 530m to the west of the application site.
- License reference 2014-441-EPS-MIT for the damage and destruction of a resting place for common and soprano pipistrelle bats, located approximately 1.8km to the west.
- Licence reference EPSM2012-4478 for the destruction of a resting place for common and soprano pipistrelle bats, located approximately 890m south east of the application site.
- License reference EPSM2010-2266 concerning the destruction of a resting place and a breeding site for common pipistrelle and brown long-eared *Plecotus auritus* bats, located approximately 780m south east of the application site.
- License reference EPSM2010-2126 allowing the destruction of a resting place for common pipistrelle bat, located approximately 222m south east of the application site.

- 5.3. A search of the planning portal returned a record of a bat survey conducted on a different section of the same building, during which no evidence of bats were found.
- 5.4. There are 43 areas of priority deciduous woodland site located within 1km of the application site, with the closest located 75m to the south. These areas of woodland are also registered on the National Forest Inventory (Woodland - Broadleaved)].
- 5.5. There are no areas of ancient woodland within 1km of the application site.
- 5.6. Further priority habitats within 1km of the site comprise Woodpasture and Parkland BAP located 160m south west of the application site.

Preliminary Roost Assessment

External Assessment

- 5.7. The building surveyed comprised the eastern wing of the main school building which was a three storey brick wall construction with a pitched roof clad with interlocking concrete tiles. The roof had a single pitch with the ridge spanning east to west, with three gable end dormer on the southern elevation. A wooden soffit was present which was in good condition on the southern aspect but had signs of rotting and water damage on the northern aspect. The roof tiles were generally tightly fitted but small numbers were slightly raised providing suitability for bat roosting.
- 5.8. The gable end was a loaded brick wall facing east which appeared having a missing brick by the northern eave potentially providing access to a gap in the wall plate.

Internal Assessment

- 5.9. Internally the building comprised a single void measuring approximately 14m (l) x 9m (w) x 2.5m (t). The void was of a wooden timber construction with struts every 2m throughout, and wooden panelling along each of the the roof pitches. The panelling was in good condition and tightly sealed along the apex as well as at the eaves and each gable end. No recorded areas of light ingress were noted, however some water damage was evident from staining on the wood. Both gable ends were exposed brick and largely clean, with some cobwebbing on the eastern gable. There was a small external air vent in this wall, and a connecting door on the western wall. The floor of the loft void was covered in fibreglass insulation throughout and no evidence of bat droppings were recorded on the floor as well as along the wooden panelling and at each of gable ends. No bats or signs of bat activity was evident within the loft void.
- 5.10. Overall, the building was assessed as providing a **low potential** to support roosting bats due to the presence of a small number of potential roosting features, namely areas of raised tiles, a section of rotting soffit box and a missing brick on the eastern gable.

Site Photographs



Image 1: Northern aspect



Image 2: Southern aspect



Image 3: Interlocking tiles on northern roof pitch



Image 4: Missing brick on eastern gable end



Image 5: Rotting soffit box from water damage on northern elevation



Image 6: Internal loft void looking east



Image 7: Gable end with cobwebbing

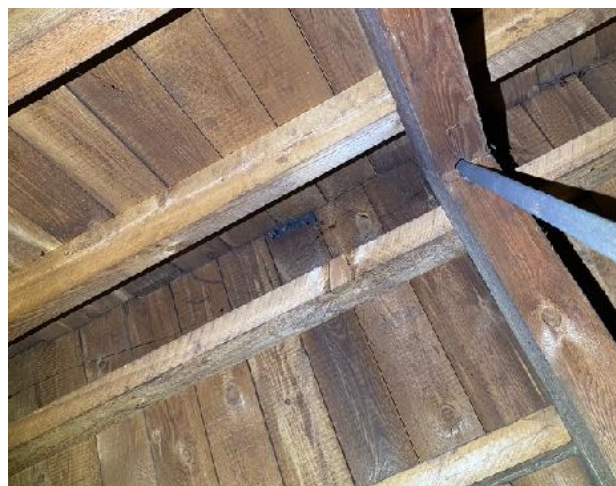


Image 8: Wooden panelling with tightly sealed ridgeline



Image 9: Water stained wooden panelling.

Emergence Survey Results

Emergence Survey 26.06.24

- 5.11. During the dusk emergence survey on the 26th June 2024 no bats were recorded emerging from the building by either surveyor or cameras. Very little activity was recorded during the survey, with single common pipistrelle bat passes recorded as well as noctule and long-eared bats.
- 5.12. The site had security lighting which made sections of the building very light reducing its suitability to support roosting bats.
- 5.13. Images 10 and 11 show supporting camera footage recorded during the survey at the brightest and darkest points of the survey.



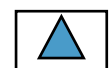
Image 10 & 11: Snapshot of infrared camera footage at lightest (left) and darkest (right) points of the survey



*NOTE Areas are indicative and are not shown to exact scale.



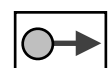
Building surveyed



Surveyor Location

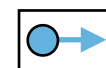


Camera Location



Bat Emergence/ Re-entry Location
and Flight Path (coloured by species)

Bat Species



Common Pipistrelle



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Info@darwin-ecology.co.uk
www.darwin-ecology.co.uk

Project: St Joseph's College,
Reading

Figure 3: Emergence/ Re-entry
Survey Results

Date: June 2024

6. IMPACT ASSESSMENT AND RECOMMENDATIONS

Designated Sites and Desk Study

- 6.1. It is not anticipated that any designated sites will be impacted with the scope of the proposed plans.
- 6.2. The site sits within the Impact Risk Zone for Lodge Wood and Sanford Mill SSSI, located approximately 4.6km to the east. However the restrictions set are for aviation proposals, air pollution related to livestock and poultry units and manure stores, and general waste combustion. The application for this site does not fall within these categories and therefore no further action is required.

Nesting birds

- 6.3. During the survey no records of active birds nests were found and no signs that birds were using the building were recorded.
- 6.4. It is recommended the building is repaired outside bird nesting season (March to August inclusive). If works to the building are to be conducted during the breeding bird season an ecologist must conduct a breeding bird check no more than 48hours prior to the works to ensure no birds are nesting within the building.
- 6.5. To enhance the site for birds a bird box is recommended to be installed on site.

Evaluation of Bat Roosts on Site

- 6.6. Phase 2 bat surveys have confirmed that no bats are roosting within the section of the building to be impacted by the works at St Joseph's college. Low activity from commuting common pipistrelle, long-eared and noctule bats was recorded during the survey.
- 6.7. The proposed works to conduct roof repairs the building will not result in the loss or impact of bat roosts and therefore, works can proceed without any requirement of a protected species licence or mitigation.
- 6.8. **In the unlikely event that a bat is discovered during the works, works must cease immediately and a bat licence ecologist contacted for advice.**
- 6.9. No additional lighting has been proposed for the site.
- 6.10. To compensate for the loss of crevices within the building, it is recommended a bat box, such as the Greenwood's Ecohabitats ecostyrocete bat box is installed onto the eastern gable end of the building. The box should be installed at a height of at least 4m (but higher is preferable).
- 6.11. *Habitats:* The proposals do not result in a significant loss of foraging habitat for bats, however, a wildlife-friendly landscaping scheme is recommended to enhance the site for bats and other wildlife.

- 6.12. Any future landscape planting should seek to enhance biodiversity, improve connectivity to the surrounding habitats and provide food and shelter for a wide range of wildlife. All amenity planting and formally landscaped areas should be designed using a variety of plant species beneficial for wildlife. These do not necessarily have to be native but should be chosen for their ability to provide nectar or fruit and should be non-invasive species. There are a number of specialist seed mixes available specific to certain soil types, growing conditions and designed to benefit different groups of species such as bees or butterflies and moths.

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