BIODIVERSE
CONSULTING

SUNDERLAND ROAD

BAT REPORT

FOR: MR AND MRS MASOOD

BIOC22-040 | V1

Client	Project	
Mr and Mrs Masood,	Project Name:	Sunderland Road
215 Sunderland Road,	Project code:	BioC22-040
South Shields,	Prepared by:	Angus Walker
NE34 6AQ	Reviewed by:	Luc Hanse-Foster MSc AIEMA
	Approved by:	Victoria Mordue MSc MIoD AIEMA
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EXECUTIVE SUMMARY

Biodiverse Consulting Ltd was commissioned in August 2022 to undertake a Preliminary Bat Roost Assessment (PBRA) of land and buildings at 215 Sunderland Road, South Shields, NE34 6AQ NE13. The site, a two-storey split level residential dwelling with gardens to the front and rear is be developed to provide additional living space and garage facilities.

The purpose of this report is to inform the feasibility of the proposal and highlight key ecological constraints in relation to bats. The table below presents a summary of this survey and assessment findings.

ECOLOGICAL CONSIDERATIONS FOR THE PROPOSALS			
Feature	**Key Results**	**Requirement for further survey?**	**Licence?**
Main Building and attached single storey garage.	No suitable potential roosting features. Negligible bat roosting suitability.	None	No
Other features / species	The building may support small numbers of urban bird species.	Nesting bird check should works take place in the nesting season (March to August inclusive).	No

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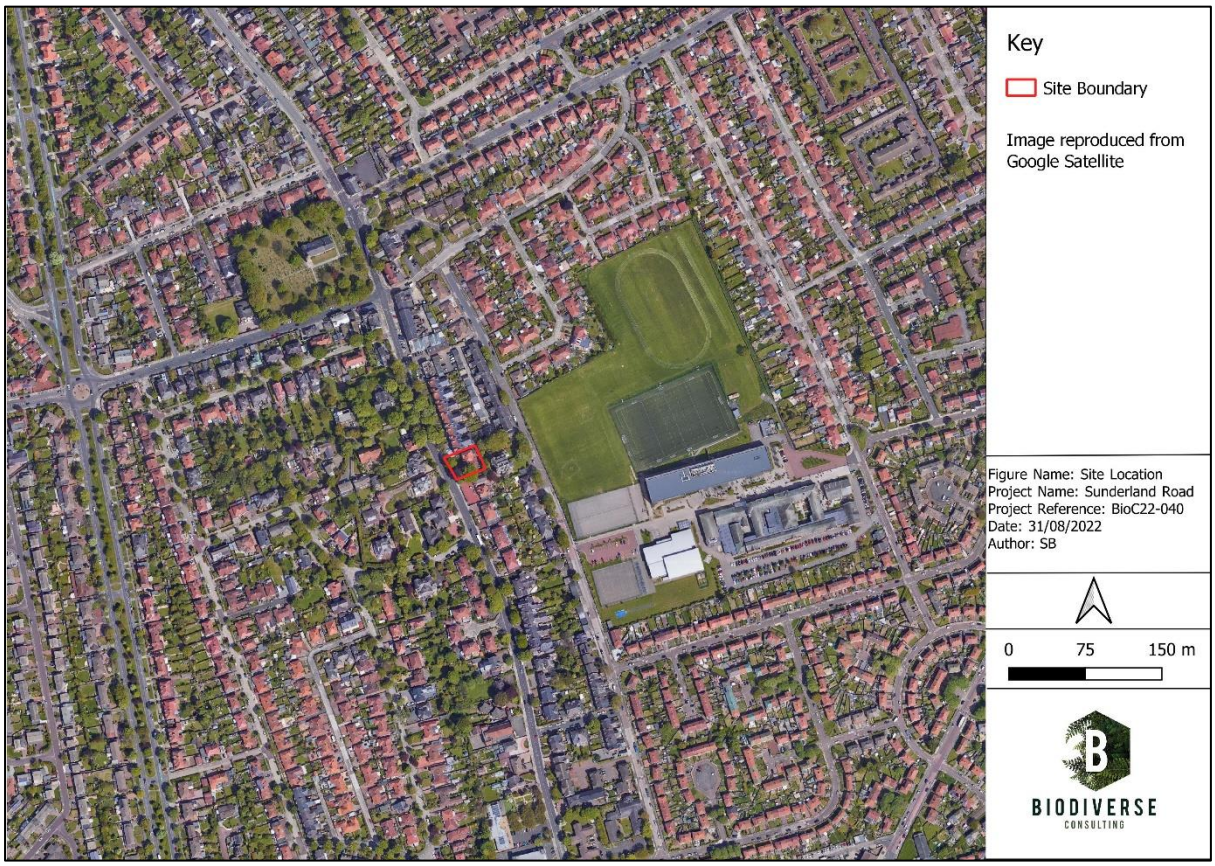
1 INTRODUCTION.

1.1 SITE LOCATION & DESCRIPTION.

The site is located at 215 Sunderland Road, South Shields NE34 6AQ at an approximate central grid reference of NZ 37719 64785 as illustrated in Figure 1.

The 0.07ha site comprises of a single 187m^2 residential two storey split level building with gardens to the west and south of the building, a single storey attached garage to the north and a patio area to the east. Trees and shrubbery are limited to the property's boundary line with Sunderland Road.

Figure 1. Site Location Map



1.2 REPORT OBJECTIVES.

The objectives of this report are to:

- Present survey results.
- Assess the value of the site to bats.
- Identify any additional survey requirements in relation to bats.

1.3 Development Proposals.

The site is proposed for development to the existing private dwelling. A garage is to be built to the east of the existing building and the existing single storey garage to the west of the building is to be developed into a two-storey dwelling extension. The site red line boundary is shown in Figure 2.

Figure 2: Site Red Line Boundary Map



2 METHODOLOGY.

2.1 DESK STUDY.

- A desk study was undertaken to assess the nature of the surrounding habitats and included an assessment of aerial imagery and Ordnance Survey mapping.
- A search of the MAGIC website for designated sites and European protected species within 2km of the survey area.

2.2 FIELD SURVEY

2.2.1 PRELIMINARY BAT ROOST ASSESSMENT (PBRA)

Survey effort and assessment are based on the Bat Conservation Trust Good Practice Survey Guidelines[1], which classifies the suitability (negligible, low, moderate or high) of the roosting, foraging and commuting habitats within a site. Full details of the classifications are provided in Appendix A.

Structures and trees within the site were fully inspected[2], where access was available, for potential roosting features (PRFs) and to record any field signs, including bats, if present[3]. Survey was undertaken on 22/08/2022 by experienced ecologist, Angus Walker and assistant Madelaine Money.

The following equipment was utilised during survey:

- Binoculars.
- Torch.
- Digital camera.

The survey was undertaken in the weather conditions presented in Table 1.

Table 1: Survey Weather Conditions.

Temperature	Cloud Cover	Precipitation	Wind Conditions (Beaufort)
16°C	50%	Light Shower	1 (SW)

[1] Collins, J. (ed) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd Edition). Bat Conservation Trust

[2] It should be noted that assessment relates entirely on the structure or tree's suitability to support bats or other protected species. Assessment must in no way be taken as an assessment of the structure's integrity or safety.

[3] If bats are recorded during appropriate measures are undertaken to limit any potential disturbance

2.3 Assessment Methodology.

Assessment methods for bats have been undertaken with reference to Wray *et al*. (2010)[4], which corresponds to the Chartered Institute of Ecology and Environmental Management (CIEEM) geographic frame of reference used in Ecological Impact Assessment (EcIA) (Appendix B). Within this, the relative rarity of each species is defined based on the known distribution[5] at the time and the value of the roost type, assuming that roosts such as feeding perches are of lower value that maternity roosts or sites that have a high level of fidelity.

3 Results.

3.1 Desk Study.

3.1.1 European Protected Species Licencing

The MAGIC website identified one granted European Protected Species (EPS) license for bats within 2km (Table 2).

Table 2: Granted EPS licenses within 2km.

Reference	Species	Start and End Date	Type
EPSM2009-1146	Common Pipistrelle	02/09/2009 31/08/2011	Destruction of a resting place

3.1.2 General Land Use.

A review of aerial imagery and Ordnance Survey mapping highlighted the general land use in the surrounding area as residential housing with St Mary's Ave to the east, and Glenhurst Grove/North Ave to the west. Sunderland Road continues to both the south and north of the site. To the immediate east of St Mary's Avenue is "Harton Academy" a school with large areas of grass playing fields.

[4] Wray et al (2010) Valuing Bats in Ecological Impact Assessment. In Practice. Based on a presentation at the Mammal Society – Specific Issues with Bats.

[5] It should be noted that there are regular changes to our understanding of distribution as further studies are undertaken.

3.2 FIELD SURVEYS.

The results of the preliminary bat roost assessment are summarised in Table 3.

Table 3: Preliminary Bat Roost Assessment Results

- Description: Brick-built, partly rendered (upper storey) two storey split level residential dwelling.
- Doorframes and windowframes mix of wood and plastic double glazed frames.
- No gaps to brickwork or mortar, all windows and doors well sealed. One gap/brick missing on porch entrance, but no access to cavity wall.
- Mix of plastic and metal guttering , all barge boards and facias well sealed. Some deteriation to the rear kitchen barge boards, but no gaps evident.
- Tiled roof sealed well at the edges, flashing and ridge tiles all intact with no gaps.
- No suitable potential access points for bats.
- Attic and roof voids well sealed with no visible gaps, breathable membrane in place and secure. No evidence of bats was recorded externally, or internally.

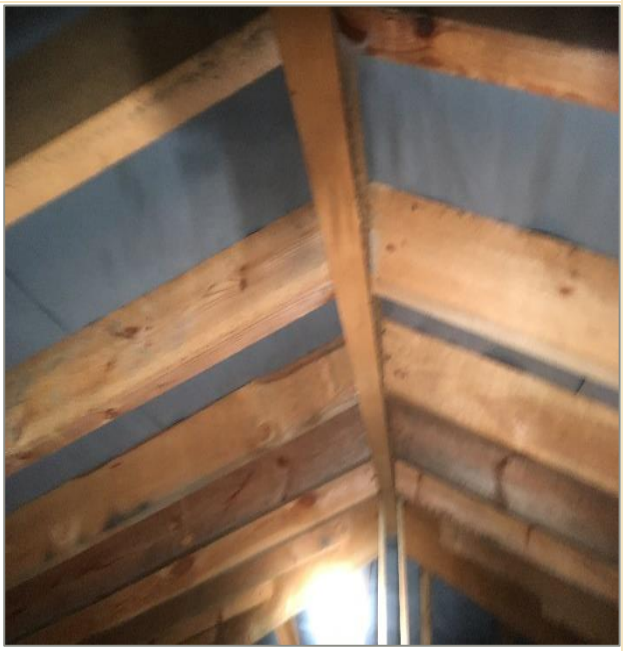
Potential Roosting Features (PRFs).	None.
Suitability for Roosting Bats.	Negligible.
Image 1: Main Roof Loft.	**Image 2: Porch/Games Roof Void.**
	

Image 3: East Elevation/Missing Brick.



Image 4: Rear Elevation.



Image 5: West Elevation.



Image 6: Front Elevation.



4 SITE ASSESSMENT.

4.1 SURVEY LIMITATIONS.

The assessment is based on survey effort undertaken to date and may change in the future. No external inspection of the garage roof could take place due to the proximity of the adjacent building and hight of the pitched roof. However, this is not a significant limitation given the characteristics of the building and the thoroughness of the garage internal survey.

4.2 Assessment of Value.

The building has no suitable roosting features, the site is situated in a residential area with linked gardens to the north, south and west of the property offering potential commuting routes. Within the wider area to the east, open playing fields and bordering private gardens provide foraging and commuting habitats.

Overall, the site has negligible suitability for roosting bats in relation to the BCT guidance, thus the site is of negligible value for this species.

4.3 Impact Assessment.

- No significant impacts on bats are predicted from the proposed development of the building.
- Potential harm and/or disturbance to nesting birds, should works be undertaken in the breeding bird season (March to August inclusive).

4.4 Additional Survey Requirements.

No further bat surveys of the site are required. This recommendation is in line with the Bat Conservation Trust Guidelines[1] (Appendix A).

Though no evidence of current or old nests were observed during survey, it may be that the site could provide suitable nesting habitat. A nesting bird check is recommended should works take place during the nesting season (March to August inclusive).

If no works are completed within 12 months of the date of this report, additional survey work may be required to update the findings.

APPENDICES

APPENDIX A: VALUE OF ECOLOGICAL RECEPTORS

Examples of Ecological Receptors of Differing Value

Value	Examples
International	• An internationally designated site or candidate site (SPA, pSPA, SAC, cSAC, pSAC, Ramsar site) or an area which meets the designation criteria for such sites. • Internationally significant and viable areas of a habitat type listed in Annexe 1 of the Habitats Directive, or smaller areas of such habitat, which are essential to maintain the viability of a larger whole. • Any regularly occurring, globally threatened species. • A regularly occurring population of an internationally important species, which is threatened or rare in the UK, of uncertain conservation status • A regularly occurring, nationally significant population/number of any internationally important species.
National	• A nationally designated site (e.g., SSSI, NNR) or a discrete area which meets the published selection criteria for national designation (e.g., SSSI selection guidelines) irrespective of whether or not it has yet been notified. • A viable area of a UK BAP priority habitat, or smaller areas of such habitat which are essential to maintain the viability of a larger whole. • A regularly occurring significant number/population of a nationally important species e.g., listed on the Wildlife and Countryside Act 1981 (as amended). • A regularly occurring population of a nationally important species that is threatened or rare in the county or region. • A feature identified as being of critical importance in the UK BAP.
Regional/County	• Viable areas of key habitat identified in the Regional or County BAP or smaller areas of such a habitat, which are essential to maintain the viability of the larger whole. • Regional/county significant and viable areas of key habitat identified as being of regional value in the appropriate English Nature (now Natural England) Natural Area. • A regularly occurring significant population/number of any important species important at a regional/county level. • Any regularly occurring, locally significant population of a species which is listed in a Regional/County Red Data Book or BAP on account of its regional rarity or localisation. • Sites of conservation importance that exceed the district selection criteria but that fall short of SSSI selection guidelines.
City/District/Borough	• Areas of habitat identified in a District/City/Borough BAP or in the relevant Natural Area profile. • Sites that the designating authority has determined meet the published ecological selection criteria for designation, including Local Nature Reserves selected on District/City/Borough ecological criteria. • Sites/features that are scarce within the District/City/Borough or which appreciably enrich the District/City/Borough habitat resource. • A diverse and/or ecologically valuable hedgerow network.

	• A population of a species that is listed in a District/City/Borough BAP because of its rarity in the locality or in the relevant Natural Area profile because of its regional rarity or localisation. • A regularly occurring, locally significant number of a District/City/Borough important species during key phases of its life cycle.
Local	• Areas identified in a Local BAP or the relevant natural area profile. • Sites/features which area scarce in the locality or which are considered to appreciably enrich the habitat resource within the local context, e.g., species-rich hedgerows. • Local Nature Reserves selected on Parish/Local ecological criteria. • Significant numbers/population of a locally important species e.g., one which is listed on the Local BAP. • Any species, populations or habitats of local importance.
Low	• Habitats of moderate to low diversity which support a range of locally and nationally common species, the loss of which can be easily mitigated.

APPENDIX B – BAT SUITABILITY AND SURVEY EFFORT

Classifications of suitability are based on those provided within the Bat Conservation Trust Good Practice Survey Guidelines[6], with the table below taken from page 35 of the guidelines (table 4.1).

Guidelines for assessing the potential suitability of proposed development sites for bats **(based on the presence of habitat features within the landscape, to be applied using professional judgement)**		
Suitability	**Description**	
	Roosting Habitats	**Commuting and foraging habitats**
Negligible	Negligible habitat features on site, likely to be used by roosting bats	Negligible habitat features on site, likely to be used by commuting and foraging bats
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions[a] 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[b]. A tree of sufficient size and age to contain PRFs but with none seen from the ground or features seen with only very limited roosting potential[c].	Habitat that could be used by small numbers of commuting bats such as gappy hedgerow or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat. Suitable but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.
Moderate	A structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions[a] and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only – the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed).	Continuous habitat connected to the wider landscape that could be used by bats for commuting such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
High	A structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions[a] and surrounding habitat	Continuous high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees and woodland edge. High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as

[6] Collins, J. (ed) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd Edition). Bat Conservation Trust

		broadleaved woodland, tree lined watercourse and grazed parkland. Site is close to and connected to known roosts.

a. For example in terms of temperature, humidity, height above ground level, light levels or levels of disturbance.
b. Evidence from the Netherlands shows mass swarming events of common pipistrelle bats in the autumn followed by mass hibernation in a diverse range of building types in urban environments (Korsten et al., 2015). This phenomenon requires some research in the UK but ecologists should be aware of potential for larger numbers of this species to be present during the autumn and winter in larger buildings in highly urbanised environments.
c. The system of categorisation aligns with BS 8596:2015 Surveying for bats in trees and woodland (BSI, 2015)

The classification of the suitability relates to the level of further survey recommended.

Survey effort and timing depending on suitability of the structure or tree (Tables 7.1-7.3 in the BCT Guidelines			
	Low roost suitability	**Moderate roost suitability**	**High roost suitability**
Survey Effort	One survey visit One dusk emergence or dawn re-entry survey	Two separate visits One dusk emergence and a separate dawn re-entry survey	Three separate visits At least one dusk emergence and a separate dawn re-entry survey. The third can be either dusk or dawn.
Timings	May-August (structures) No further survey (trees)	May to September. At least one must be in the optimum period (May to August)	May to September. two must be in the optimum period (May to August)
If bats are recorded	If bats emerge during surveys, the survey schedule will be adjusted to increase the survey effort so that enough information can be collected to characterise the roost and provide data should a Natural England Licence be required.		