Bat Survey Report: Bat Roost Presence / Absence Surveys

Land off Ellison Street

Glossop, SK13 8BY

June 2017

Prepared for: Goyt Construction Ltd.

Report prepared by: Verity Webster BSc (Hons) MSc CEcol CMIEEM

EXECUTIVE SUMMARY

- On 28th November 2016 a Preliminary Roost Assessment was undertaken at land off Ellison Street, Glossop.
- As a result of the Preliminary Roost Assessment, one building was considered to have moderate suitability for bats, whilst another was considered to have low suitability. Further survey work for bats in the form of emergence surveys were recommended.
- These surveys were undertaken on 24th May 2017 and 13th June 2017, in accordance with the current survey good practice guidance.
- Bat activity within the site was low. No bats were recorded emerging from the buildings on site..
- On the basis of the survey findings, there is a likely absence of bat roosts within the buildings on site and no mitigation is considered necessary.

1 Introduction

1.1 Application Site

1.1.1. This report details bat survey work on land off Ellison Street, Glossop, SK13 3BY. National grid reference SD 722 229.

1.1.2. Goyt Construction Ltd commissioned Verity Webster Ecology and Protected Species Consultancy to undertake the bat survey work to inform the planning application.

1.2 Objectives

1.2.1 The objectives of the Preliminary Roost Assessment and Emergence Surveys are to determine:

- Whether bats are currently using the building to roost and if so, how.
- The species and number of bats present.
- The status of any roost present.
- How bats might be using the rest of the site (garden).
- The potential impacts of the proposals on any roost present or on bats using the site.
- How any impacts might be avoided, mitigated and / or ameliorated, including advice on European Protected Species Mitigation (EPSM) application if required.

1.3 Proposals

1.3.1 The proposals for the site comprise the demolition of the existing buildings and the construction of 22 residential units. The associated landscape and access will be improved.

1.4 Ecologist

1.4.1 The Bat Emergence Survey work was lead and undertaken by Verity Webster. Verity is a licensed bat surveyor (Bat Survey Class Licence WML CL18 (Class 2) Registration number: CLS02606).

1.4.2 Verity has worked as an ecological consultant for over 10 years. She has undertaken preliminary bat assessments and further bat emergence / activity surveys for a large variety of projects and schemes, producing the required impact assessment and subsequent mitigation schemes / method statements when necessary.

2 The Survey Site

2.1 Site Location

2.0.1 The survey site is situated in the centre of Glossop, a small town on the eastern boundary of the Peak District National Park and approximately 7km east of Hyde.

2.0.2 The survey site is located in a residential area, but lies within close proximity to the surrounding countryside and areas of open space that support a variety of habitat types. Of particular note is Manor Park, which lies just 100m to the northeast of the site and comprises a large area of woodland and grassland and water bodies. Howard Park lies approximately 500m to the northwest, supporting similar habitat with large water bodies. Open countryside comprising a mix of arable and pasture, hedgerows, woodlands and tree-lines, with scattered water bodies extends east from approximately 150m to the south of the site at the closest point, but surrounds Glossop.

2.0.3 Given the good quality and good mix of habitat types in the surroundings, the survey site is considered to be in an area with potential for protected species, in particular bats. For aerial taxa such as bats, the built-up surroundings would not restrict movement into the site.

2.2 The Survey Site: Description

2.2.1 The land at Ellison Street supports a complex of four structures set within an area of hard standing. The buildings are concentrated to the southern side of the plot where they adjoin the adjacent police station. Houses with gardens lie adjacent to the north and east of the site. Ellison Street runs along the western boundary.

Structures

2.2.2 **Building 1** is composed of three sections: A single-storey, flat roofed stone building lies adjacent to Ellison Street on the western elevation. This section has a cellar. The largest portion of the structure lies to the east of this and comprises a brick and metal frame building with a triple-pitched corrugated concrete clad roof. A smaller flat-roof section extends from part of the east elevation. There is wooden cladding on the upper sides of the eastern, western and northern elevations of the flat-roofed sections of the structure. This is built-out to form a soffit box on the west elevation.
Internally this building is well-lit due to the numerous sky lights in the roof.

The north elevation of Building 1 showing part of the flat-roof stone section and the brick, pitched-roof section

2.2.3 **Building 2** is constructed of brick with concrete beams and a metal roof frame supporting a corrugated concrete material roof. The largest portion of the building is two-pitched and there is an additional extension to the east, which is part flat-roofed and part two-pitched, also composed of corrugated concrete material.

2.2.4 Internally the building is well-lit due to the numerous skylights in the roof.

2.2.5 **Building 3** is a small single-storey rectangular structure situated to the east of Building 2. It is constructed of brick with a pitched, concrete-tile roof. The underside of the tiles are lined with felt and boarded. There are numerous crevices in the roof structure where the tiles are cracked or lifted, and there are cracks in the gable ends of the roof where the mortar has cracked and fallen away.

2.2.6 **Building 4** is a small, single-storey brick structure with a flat corrugated metal roof. This building is attached to the west of Building 2.

The north elevation of Building 2

Building 3

Building 4

Habitat Description

2.2.7 Aside from the buildings, the majority of the land at Ellison Street comprises hard standing; the drive extends from the east into the site where there is a large car-park area.

2.2.8 Around the northern and eastern boundaries there is an area of soft landscape. Much of this was previously covered in scrub and small, immature trees and has since been cleared.

2.2.9 The ground flora present includes common hogweed (*Heracleum sphondylium*), honeysuckle (*Lonicera periclymenum*),

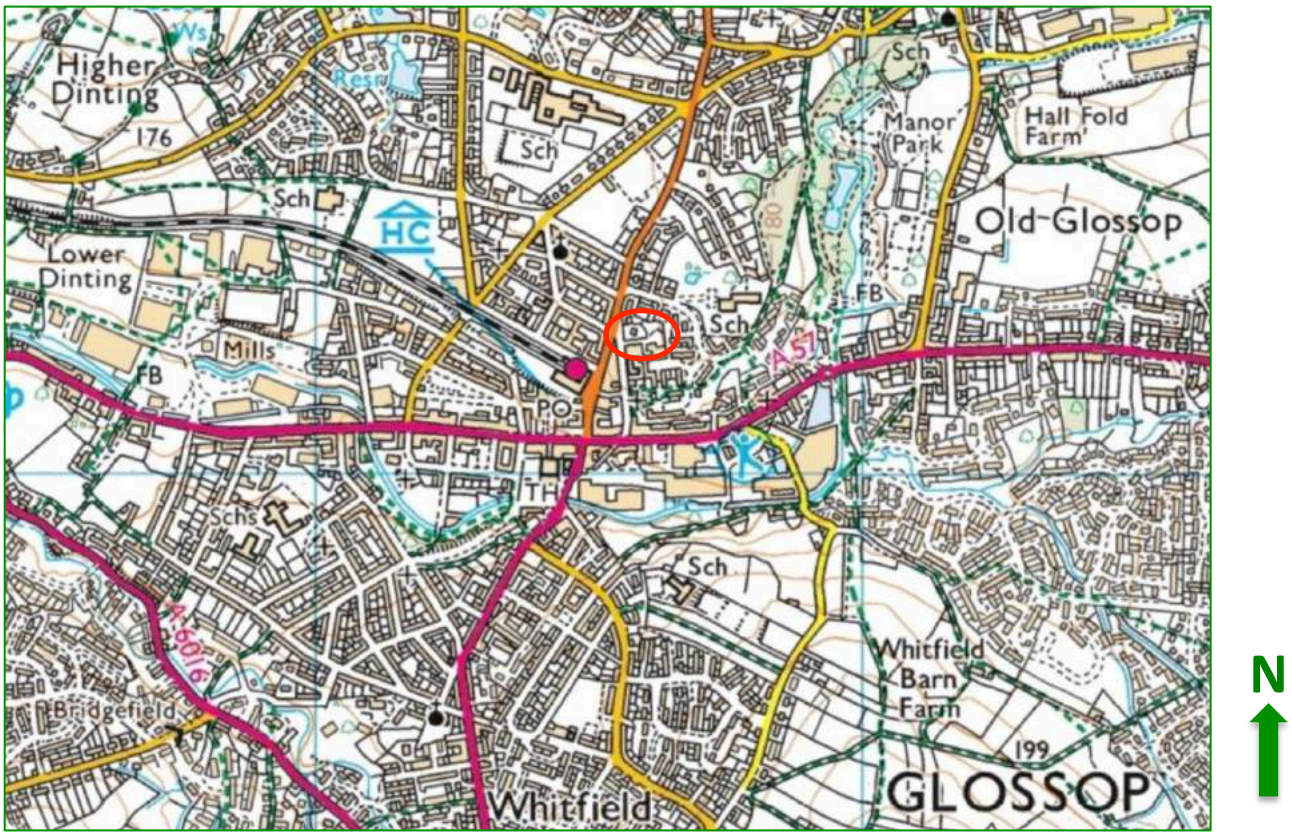
The east boundary, looking south

buddleia (*Buddleja davidii*), bramble (*Rubus fruticosus* agg.), broad-leaved dock (*Rumex obtusifolius*) and rosebay willowherb (*Chamaenerion angustifolium*).

2.2.10 Ruderal plants have colonised cracks in the concrete and within the gaps around the base of the buildings. These species include buddleia, ivy (*Hedera helix*), dandelion (*Taraxacum* agg.), rye grass (*Lolium perenne*), greater plantain (*Plantago lanceolata*) and common mugwort (*Artemisia vulgaris*).

2.2.11 Trees and shrubs around the site boundaries include sycamore (*Acer pseudoplatanus*), privet (*Ligustrum vulgare)* and holly *(Ilex aquifolium).*

Figure 1: Ordnance survey map showing the location of the proposed development site.



Ordnance survey 1:25000

Key

Survey site

Figure 2: Aerial image showing the proposed development site and immediate surroundings

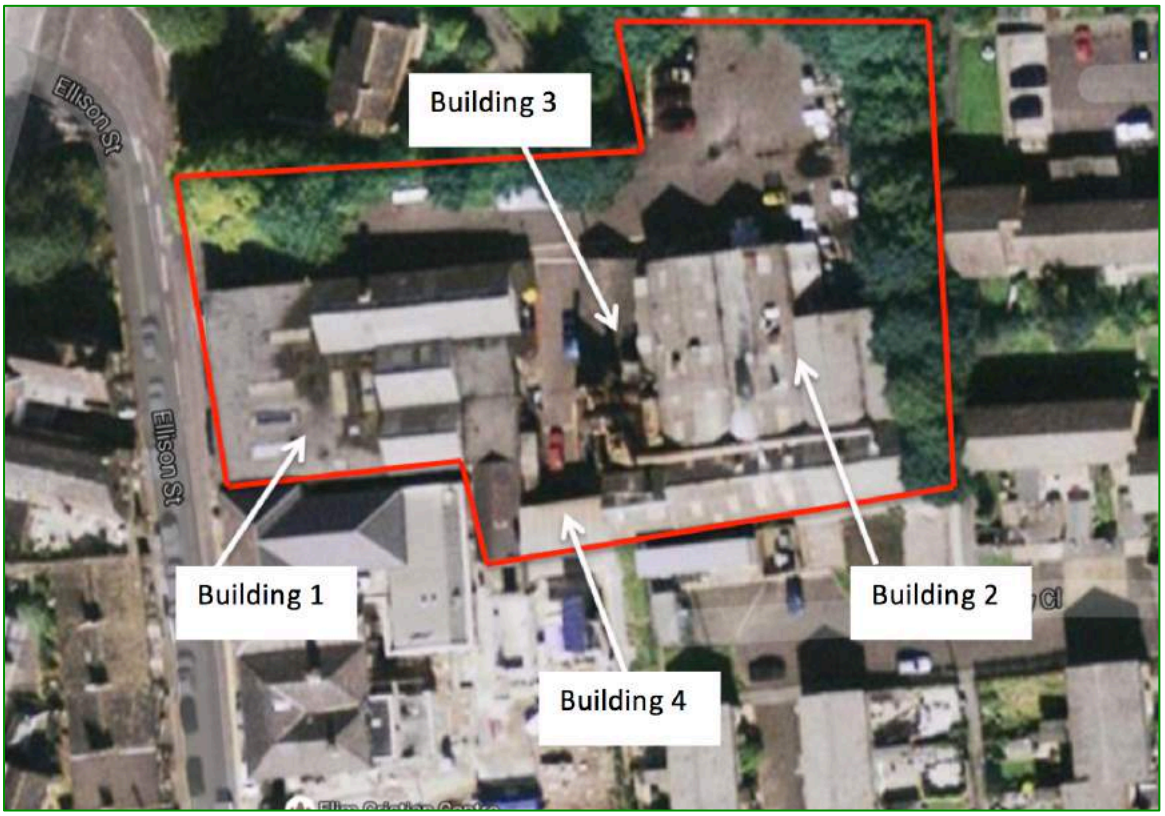
From National Biodiversity Network Interactive Map

100m

Key

Survey site

Figure 3: Showing the survey site and associated buildings



3 Legislation

Full details of relevant legislation and planning policy can be found in Appendix A.

3.1 UK and EU Legislation

3.1.1 Key legislation regarding the protection of bats:

- Wildlife and Countryside Act 1981 (as amended)
- The Countryside and Rights of Way Act (CROW), 2000
- The Natural Environment and Rural Communities Act (NERC, 2006)
- Conservation of Habitats and Species Regulations (2010)

3.1.2 Under the Wildlife and Countryside Act 1981 and the Conservation of Habitats and Species Regulations 2010,it is a criminal offence to:

- 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
- Intentionally or recklessly obstruct access to a bat roost.

3.2 Planning Policy and Legislation

3.2.1 Under the NERC Act 2006, planning authorities are obliged to make sure that they have all the information on the presence of protected species on site before they make a decision on the planning permission.

3.2.2 The National Planning Policy Framework (NPPF) encourages Local Planning Authorities to conserve and enhance biodiversity.

3.2.3 Chapter 11, Para 109 of NPPF states: ''*The planning system should contribute to and enhance the natural and local environment by…minimising impacts on biodiversity and providing net gains in biodiversity where possible…*''

3.2.4 Paragraph 118 states: ''*if significant harm 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*''

3.2.5 The local planning authority has a responsibility, therefore, to obtain all information regarding the potential for protected species on a site prior to making a decision about a proposal.

3.3 Local Policy

3.1.1 The High Peak Borough Council Adopted Local Plan (2016.) Includes Policies EQ5: Biodiversity, EQ8: Green Infrastructure and EQ 9: Trees, Woodland and Hedgerows, all of which relate to the natural environment.

Policy EQ 5: Biodiversity, states:

The biodiversity and geological resources of the Plan Area and its surroundings will be conserved and where possible enhanced by ensuring that development proposals will not result in significant harm to biodiversity or geodiversity interests.

This will be achieved by:

- *Conserving and enhancing sites of international, European, and national importance. On these sites the Council will not permit any development proposal that has an adverse effect on the integrity of a European site (or wildlife site given the same protection as European sites under the NPPF) either alone or in combination with other plans or projects.*
- *Conserving and enhancing any Sites of Special Scientific Interest. On these sites the Council will not permit any development proposal which would directly or indirectly (either individually or in combination with other developments) have an adverse effect on a Site of Special Scientific Interest*

- *Conserving and enhancing regionally and locally designated sites. On these sites the Council will not permit any development proposal which would directly or indirectly result in significant harm to geological and biodiversity conservation interests, unless it can be demonstrated that:*
-
    - *there is no appropriate alternative site available; and*
    - *all statutory and regulatory requirements relating to any such proposal have been satisfied; and*
    - *appropriate conservation and mitigation measures are provided, such mitigation measures should ensure as a minimum no net loss and wherever possible net gain for biodiversity;*
    - *or if it is demonstrated that this is not possible;*
      the need for, and benefit of, the development is demonstrated to clearly outweigh the need to safeguard the intrinsic nature conservation value of the site and compensatory measures are implemented
- *Encouraging development to include measures to contribute positively to the overall biodiversity of the Plan Area*
  Working with partners to help meet the objectives and targets in the Peak District Biodiversity Action Plan or its successor
- *Working with partners to protect and enhance watercourses*
  Identifying local ecological networks and supporting their establishment and protection in accordance with Local Plan Policy EQ8, preferentially creating biodiversity sites where they have the potential to develop corridors between habitats (both terrestrial and freshwater)
  Working with partners in the public, private and voluntary sectors to develop and secure the implementation of projects to enhance the landscape and create or restore habitats of nature conservation value, and to secure the more effective management of land in the Plan Area and its surroundings

4 Survey Methodology

4.0.1 The Bat Surveys were undertaken in accordance with current accepted guidance: Collins, J. (ed.) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd Edn). The Bat Conservation Trust, London.

4.1 Desk Study

4.1.1 Data sources used to establish background information about bats and their likely presence in the locality:

- Records data from the Derbyshire Wildlife Trust
- Magic Map, Natural England (2014)

4.1.2 An analysis of bat data available from Derbyshire Wildlife Trust was used to determine the likely presence of roosts within close proximity to the survey site and to make a rough assessment of the species frequently recorded in the local area.

4.1.3 Satellite mapping, Ordnance survey, road map, habitat and designated site data from Magic Map (Natural England, 2014) was used to assess the value of the surrounding habitat for bats in the area at a landscape scale (5km), including any potentially important habitat corridors (linear habitat features), feeding grounds or potential roost opportunities, such as large expanses of woodland. The features and habitats immediately surrounding the site (local area) were also assessed at a finer scale as these influence the likely presence of bats within the survey site.

4.2 Preliminary Roost Assessment

4.2.1 An internal and external inspection of the bungalow on site was undertaken during daylight to determine the potential for bats and establish, if possible, whether bats are using the building or have been using the building in the past.

4.2.2 All accessible parts of the buildings were inspected, including the loft voids , to look for bats and signs of the presence of bats, including:

- Droppings.
- Feeding remains including moth and butterfly wings.
- Staining from urine or oils near crevices or holes or on timber (such as roof beams), walls, chimney breasts etc.
- Scratch marks on walls and timber.
- Squeaking or chattering calls.

4.2.3 The systematic search inside the buildings included inspection of beams, floors, surfaces of stored materials, loose roof insulation or felt covering, junctions between roof timbers and timbers and the walls, crevices within brickwork. Potential access into the building was also inspected by searching for holes in insulation and any light penetration into the interior from the outside.

4.2.4 The assessment outside the buildings included inspection of all walls, windows, window sills, fascias, soffits, eaves and tiles, including a search for any crevices under tiles, under lifted lead flashing or lifted roofing felt, missing mortar, gaps in the ridge or gable end of the roofs, crevices in brickwork or under flaking paintwork or render, gaps in cladding or hanging tiles and any other potential bat roost opportunities.

4.2.5 Equipment: During the survey close-focussing binoculars and a strong torch with directional beam was used to inspect the building.

4.2.6 As a result of the preliminary roost assessment, the buildings on site were characterised as having 'negligible', 'low', 'medium' or 'high' suitability for bats. It may also be possible to confirm presence of a roost.

4.2.7 Buildings or structures typically characterised as having:

- **Negligible** suitability for bats will lack features with any potential to support roosting bats. Modern or newly-built well-sealed structures may fall into this category. Structures that are metal clad with metal internal beams might have negligible potential if there are no favourable roosting spaces. Structures may also be unfavourable due to the level of disrepair, being subject to poor weather conditions.

- **Low** suitability for bats will have sub-optimal roost features with limited potential for roosting bats. Features may be used by single bats opportunistically, but do not provide enough space, shelter, protection, appropriate conditions and / or suitable surrounding habitat to be used on a regular basis by large numbers of bats.

- **Medium** suitability for bats may have few features with potential for bats, that provide enough space, shelter, protection and other suitable conditions, or several features with limited potential for bats. It may also be that a potentially suitable structure is situated in an area with habitat that has only low potential for foraging and commuting bats.

- **High** suitability for bats will support at least one or more features that provide opportunities for roosting bats such that they might be used regularly, for longer periods by larger numbers of bats. These may be external features, such as lifted weatherboard or crevices in brick or stonework, or internal, such as large loft spaces with potential access. Barns, with open doorways and windows with wooden rafters and beams may fall into this category. If a structure is close to good habitat, such as a waterway, marshland or woodland, this also increases potential for roosting bats.

- **Confirmed** roost presence when it is evident as a result of signs from inspection, such as droppings, or sight of bats, that a roost exists within the building. It is not always possible to ascertain presence or absence of a roost even if some signs, such as droppings or feeding remains are found.

4.3 Bat Emergence / Re-entry Surveys

4.3.1 Following the Preliminary Roost Assessment Building 1 was considered to have low suitability for bats and Building 3 was considered to have moderate suitability for bats. Buildings 2 and 4 were considered to have negligible suitability.

4.3.2 Given the level of bat activity in the area, two evening emergence surveys were considered sufficient to give confidence in a negative result (absence of a roost).

4.3.3 Table 7.1 of Collins, J. (ed.) (2016). Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd Edn). The Bat Conservation Trust, London:

Table 7.3 Recommended minimum number of survey visits for presence/absence survey to give confidence in a negative result for structures.

Low roost suitability	Moderate roost suitability	High roost suitability
One survey visit. One dusk emergence or dawn re-entry survey.	Two separate survey visits. One dusk emergence and a separate dawn re-entry survey.	Three separate survey visits. At least one dusk emergence and a separate dawn re-entry survey. The third visit could be either dusk or dawn.

4.3.4 Two evening emergence surveys were undertaken. The bat emergence surveys was undertaken from 15minutes before sunset to 1.5 hours after sunset. It was decided that emergence surveys provide more accurate data than dawn surveys as frequently bats have been recorded returning to roost much earlier than the requirement for the start of dawn surveys (usually undertaken 1.5 hours before dawn to 30 minutes after dawn). Bats emerging from roosts therefore provide more reliable data.

4.3.5 During the evening emergence survey three surveyors were positioned around the Buildings 1 and 3 such that two elevations were easily observed by each surveyor. The skyline was such that it was clear to see bats against the sky if they were to emerge.

4.3.6 Batbox Duet detectors and Echo Meter Touch detectors were used so that any calls heard that could not be identified were recorded for later analysis.

4.3.7 The time, activity (emergence, foraging, commuting) and species of bats (where possible) were recorded when observed. Notes were made of the activity of bats elsewhere on site as well as around the building. The number of bat passes were recorded to provide an indication of bat activity level within the site.

5 Survey Limitations

5.0.1 The survey work was undertaken in late-May and mid-June. This is the optimal time to undertake survey work within the bat survey period. At this time of year bats would be expected within their summer roosts. Given the nature of the potential roost features upon the building pipistrelle bat species were most likely to be expected, if a roost were present. The surveys undertaken and data obtained are considered sufficient to make an adequate, reliable assessment of the likely presence / absence of a bat roost within the structures.

6 Findings: Desk Study

6.1 Potential for bats in the area

Site location in relation to bats

6.1.1 At a landscape level, the habitat surrounding the survey site is very good for bats. Refer to Figure 2.. Within the immediate vicinity there are parks and gardens, whilst within the wider open countryside there is a matrix of woodland, arable land and grazed pasture with water bodies. This mixture of habitat types provides good potential foraging and roosting habitat for a variety of species.

6.1.2 The vegetative habitat within the survey site is restricted and is unlikely to be of importance to bats in the area. The proposals to develop the site are therefore very unlikely to impact foraging bats.

6.2 Records Data

The Conservation Status of Bats in the Area

6.2.1 The conservation status of bats in the area is shown in Table 1.

***Table 1**: The Conservation Status of Bats in the area at a Local, County and Regional Level*

Species	***Local***	***County***	***Regional***
Common pipistrelle	*Likely to be common in the area. There are records of this species in the area (10km).*	*Common and widespread Frequently recorded.*	*Common and widespread Frequently recorded across the Northwest*
Soprano pipistrelle	*Likely to be present due to the presence of riparian habitat.*	*Widespread. Frequently recorded.*	*Common and widespread Frequently recorded across the Northwest*
Nathusius's pipistrelle	*Likely to be rare in the area.*	*Infrequently recorded, but this may be due to low survey effort. Not yet recorded breeding in the county.*	*Rare across the northwest. A migratory species.*
Brown long-eared bat	*Likely to be in the area. There is a recent record of this species within 10km of the site.*	*Common and widespread Frequently recorded.*	*Common and widespread Frequently recorded across the Northwest.*
Natterer's bat	*Likely to be in the area, although this species favours woodland habitat, which is infrequent in the landscape.*	*Scattered distribution in Lancashire..*	*Widespread and scattered across the Northwest.*
Noctule	*Present*	*Widespread and frequently recorded.*	*Common and widespread. Frequently recorded in the Northwest.*
Whiskered bat	*Present but likely rare*	*Present*	*Widespread.*
Brandt's bat	*Rare / absent*	*Present*	*Widespread.*
Alcathoe's bat	*Unknown*	*Unknown*	*Widespread. Likely under-recorded.*

Daubenton's	*Presence is likely due to the riparian habitat present.*	*Widespread, frequently recorded near water.*	*Widespread*
Serotine	*Rare / absent*	*Unknown*	*Restricted to south and southwest Britain, rarely recorded in the northwest.*
Leislers	*Rare*	*Unknown*	*Rare, but widespread in Britain. Present in the northwest.*
Barbastelle	*Unlikely to be present in the area. This species is a woodland-specialist and there is a lack of this habitat present.*	*Unknown*	*Present south of a line from North Wales to the Wash.*

Data Search Results

6.2.2 Data from the Derbyshire Wildlife Trust contains records of three bat species within 1km of the site:

- Daubenton's bat (Myotis daubentonii)
- Common pipistrelle (Pipistrellus pipistrellus)
- Brown long-eared bat (Plecotus auritus)

6.2.3 The low number of species recorded is unlikely to represent a lack of bat species richness in the area, but is likely reflective of the low number of bat surveyors in the locality. Bat species including whiskered / brandt's bat (*Myotis mystacinus / brandtii*), soprano pipistrelle (*Pipistrellus pygmaeus*) and noctule (*Nyctalus noctula*) are, for example, expected to be present in the locality.

6.2.4 There are records of seven bat roosts in Glossop, including those of common pipistrelle bat and brown long-eared bat. The closest recorded roost is approximately 280m to the south.

6.2.5 There are no records of bats within the survey site.

7 Findings: Preliminary Roost Assessment

7.1 Preliminary Roost Assessment

Refer to Section 2.2 for building descriptions

7.1.1 **Building 1:** Internally this building is well-lit due to the numerous sky lights in the roof. There are very few internal features that may be utilised by crevice-roosting bats, such as pipistrelle species as the metal beams are all exposed. Feral pigeons currently inhabit the building and the droppings on the floor made it difficult to determine the presence of droppings. No evidence of bats was found in the main body of the building, however, and was not expected. The presence of pigeons is likely to deter bats. Although there is no scientific evidence of this, bats are rarely found where pigeons are numerous.

7.1.2 The cellar does have potential to support hibernating bats as the cool, damp interior is suitable for them. However, there are few crevices that may be utilised and at the time of survey no bats or signs of bats (droppings) were found present. There is no visible access into the cellar directly from the

exterior (not gaps were seen), so bats would have to enter through the main body of the building.

7.1.3 Recommendations were made in November 2016 to prevent use of the cellar by bats to avoid complications at a later date, in case bats were to find and utilise the feature.

7.1.4 Externally the wooden cladding, some of which has lifted or has fallen away, has potential to support crevice-roosting bats in the summer months.

7.1.5 **Due to the suitability of the external features only, it is concluded that Building 1 has low suitability for bats.**

7.1.6 **Building 2:** Internally the building is well-lit due to the numerous skylights in the roof. There are very few features internally and externally that might be utilised by roosting bats. No bats or signs of bats (including droppings, staining and feeding remains) were found during the inspection.

7.1.7 **This building is considered to have negligible suitability for bats.**

7.1.8 **Building 3:** The underside of the tiles are lined with felt and boarded. There are numerous crevices in the roof structure where the tiles are cracked or lifted, and there are cracks in the gable ends of the roof where the mortar has cracked and fallen away. These features have potential to support crevice-roosting bats, such as pipistrelle bat species, in the summer months.

7.1.9 No bats or signs of bats were found during the inspection, but signs of bats utilising the roof features would not be expected as they would be confined in the internal roof structure, while external signs may have been washed away by the weather.

7.1.10 **This building is considered to have moderate suitability for bats.**

7.1.11 **Building 4:** It was not possible to inspect this building internally during the survey, but the construction is considered to be unfavourable for bats. The corrugated metal roof would fluctuate widely in temperature and internally would likely offer few potential roosting opportunities.

7.1.12 **This building is considered to have negligible suitability for bats.**

7.1.1 Given that no evidence of bats was found, and because the features that may allow bats to roost in the building are limited, the suitability of the building for bats is considered to be low. The close proximity of known common pipistrelle maternity roosts increases the likelihood that bats may roost in the building, however, and further survey to establish the presence or absence of a roost is recommended.

8 Findings: Emergence Survey

8.1 Survey 1: Evening Emergence on 24th May 2017

Surveyors: Verity Webster Bsc MSc CEcol MCIEEM (bat licence Class 2), Ross Tetlow (three years bat survey experience) and Scott Tetlow (three years bat survey experience).
Weather: 18°c at sunset. Clear sky, dry, humidity 81%, still (beaufort scale 0-1).
Sunset: 21:15
Time on site: 20:45– 22:45

Findings

8.1.1 One of bat was recorded on site: common pipistrelle (*Pipistrellus pipistrellus*).

8.1.2 No bats were seen emerging from the building.

8.1.3 Bat activity within site during the survey was low. The majority of activity recorded was that of a single bat foraging up and down the sheltered driveway and over adjacent gardens. There were only distant and infrequent passes from bats commuting across the site.

8.1.4 The first bat was recorded on site at 21:54, 39 minutes after sunset suggesting that the bat emerged from a roost some distance from the survey site.

Table 1: Emergence Survey 1 data. *Pip 45 = Common pipistrelle. Pip 55 = Soprano pipistrelle.*

Time	Surveyor	Species	No. Passes	Activity/ notes
21:54	A	Pip 45	1	Flew east up drive from southwest.
21:58	B	Pip 45	1	Commuting north, flying along fence-line.
22:05 – 22:22	A	Pip 45	30+	Foraging up and down (east and west) the driveway. Occasionally the bat would fly out of the site and south down the road before returning. This was continuous until 22:22.
22:05 – 22:15	C	Pip 45	15	Continual passes along drive whilst foraging. The bat would occasionally fly south between the buildings and circle before completing the usual route.
22:07 – 22:15	B	Pip 45	20+	Continual foraging up and down the driveway. The bat would also foraging briefly over adjacent gardens.
22:31	A	Pip 45	1	Commuting north along the road
21:35	A	Pip 45	1	Brief pass - not seen.
21:40	B	Pip 45	1	Brief pass - not seen.
21:41	C	Pip 45	1	Breif pass – not seen.

8.2 Survey 2: Evening Emergence on 13th June 2017

Surveyors: Verity Webster Bsc MSc CEcol MCIEEM (bat licence Class 2), Ross Tetlow (three years bat survey experience) and Scott Tetlow (three years bat survey experience).
Weather: 20.3°c at sunset. 100% cloud cover, dry, humidity 60%, light breeze (beaufort scale 1-2).
Sunset: 21:37
Time on site: 21:20– 23:10

Findings

8.2.1 One of bat was recorded on site: common pipistrelle (*Pipistrellus pipistrellus*).

8.2.2 No bats were seen emerging from the building.

8.2.3 Bat activity within site during the survey was low, but the activity reminiscent of that recorded on the first survey in May. The majority of activity recorded was that of a single bat foraging up and down the sheltered driveway and over adjacent gardens. There were only distant and infrequent passes from bats commuting across the site.

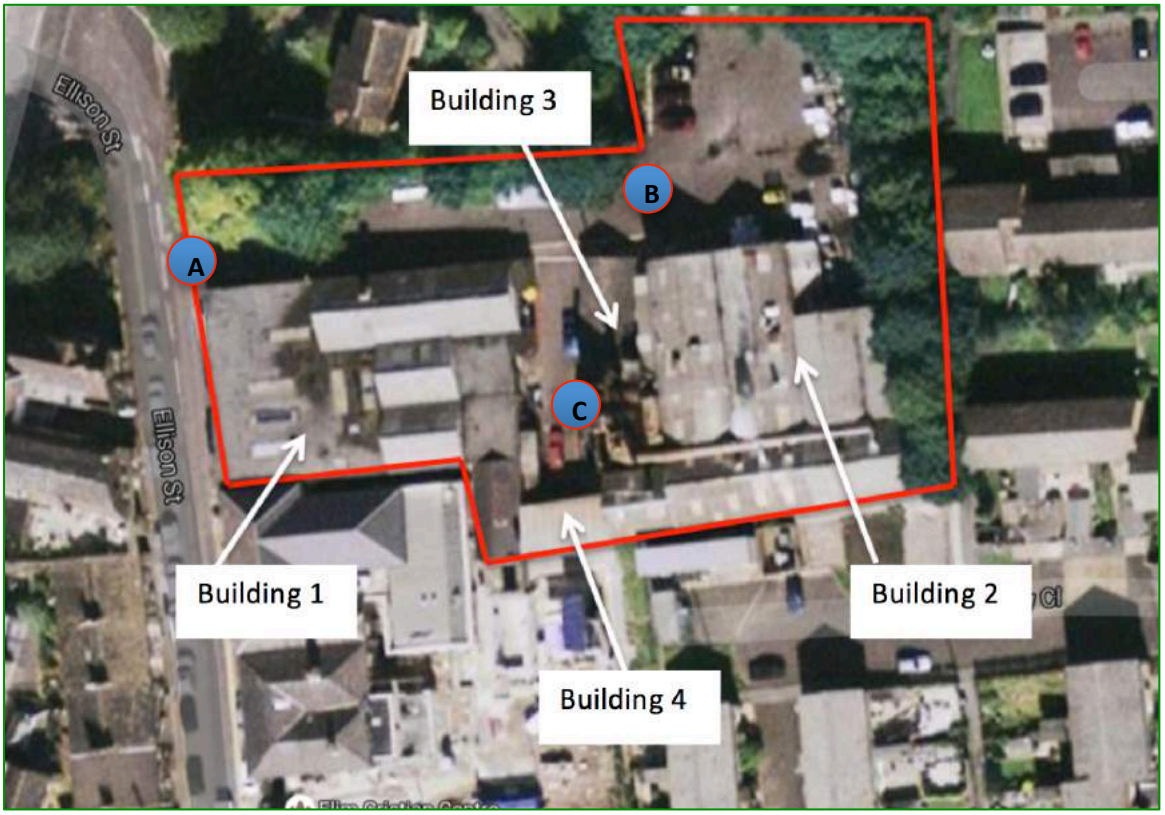
8.2.4 The first bat was recorded on site at 22:09, 32 minutes after sunset suggesting that the bat emerged from a roost some distance from the survey site.

8.2.5 The bat activity on site ceased at 22:34, suggesting the bats recorded were foraging on site during a commute elsewhere.

Table 1: Emergence Survey 1 data. *Pip 45 = Common pipistrelle. Pip 55 = Soprano pipistrelle.*

Time	Surveyor	Species	No. Passes	Activity/ notes
22:09	A	Pip 45	1	Flew east up drive.
22:09	B	Pip 45	1	Flew east up drive.
22:15	A	Pip 45	1	Pass. Not seen
22:15	B	Pip 45	3	Circling around car park and flew north.
22:23	C	Pip 45	1	Brief pass. Not seen
22:23	A	Pip 45	1	Brief pass. Not seen
22:24-22:34	C	Pip 45	5	Foraging between the buildings and around the car park.
22:25-22:34	B	Pip 45	1	Foraging around the car park.

Figure 4: The positions of surveyors during emergence and re-entry surveys



9 Appraisal and Impact Assessment

9.1 Appraisal

9.1.1 A single species of bat was recorded within the survey site: common pipistrelle. Bat activity within the site was generally low. Both surveys, although three weeks apart indicated similar bat activity on site, which give confidence that the surveys undertaken are representative of regular activity on the site.

9.1.2 The first bats were recorded over 30 minutes after sunset, which suggests the bats emerged from sites some distance from the survey area.

9.1.3 No bats were recorded emerging from the buildings on-site.

9.1.4 The surveys are therefore considered sufficient to give confidence in a negative result (likely absence of a roost within the building).

9.2 Assessment of Impacts

9.2.1 The survey work indicates the likely absence of a bat roost within the buildings on site. The proposals to demolish the building will have no foreseen negative impact upon bats roosting in the area.

9.2.2 No mitigation for bats is considered necessary.

9.2.3 The proposals to demolish the buildings are very unlikely to have a negative impact upon individual bats or bat populations in the locality.

10 References

- Collins, J. (ed.) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn). The Bat Conservation Trust, London. ISBN-13 978-1-872745-96-1
- Google maps (Accessed 2015) https://www.google.co.uk/maps
- MAGIC Map (Accessed 2015) http://www.magic.gov.uk/MagicMap.aspx. DEFRA.

APPENDIX A: Wildlife Legislation and Planning Policy

UK AND EU LEGISLATION

1.1. KEY LEGISLATION

1.1.1. Key legislation regarding the protection of bats:

- Wildlife and Countryside Act 1981 (as amended)
- The Countryside and Rights of Way Act (CROW), 2000
- The Natural Environment and Rural Communities Act (NERC, 2006)
- Conservation of Habitats and Species Regulations (2010)

1.2. WILDLIFE AND COUNTRYSIDE ACT 1981 (AS AMENDED)

1.2.1. The Wildlife and Countryside Act 1981 is UK legislation.

1.2.2. Bats are listed on Schedule 5 of the Wildlife and Countryside Act (WCA) 1981. Under Section 9 of this legislation it is an offence to:

- Kill, injure or take a bat.
- Possess, a live or dead bat.
- Intentionally or recklessly damage or destroy any structure of place which any bat uses as shelter or protection.
- Intentionally or recklessly disturb a bat whilst it is occupying a structure or place which it uses for shelter or protection.
- Internationally or recklessly obstruct access to any structure or place which a bat uses as shelter or protection.
- Sell, offer or expose for sale any live or dead bat.

1.3. COUNTRYSIDE AND RIGHTS OF WAY ACT 2000

1.3.1. Schedule 12 of the Countryside and Rights of Way (CROW) Act 2000, amended by the Wildlife and Countryside Act 1981 by removing the need to prove intent to damage a roost / harm (etc) a bat or other species listed on Schedule 1 by adding the words 'or recklessly' after 'intentionally' into the wording in Section 9 of the WCA 1981. The CROW act also strengthened the penalties for offences to bats and other species listed on Schedule 5.

1.4. CONSERVATION OF HABITATS AND SPECIES REGULATIONS 2010

1.4.1. The Conservation of Habitats and Species Regulations 2010 consolidate all the various amendments made to the Conservation (Natural Habitats, &c.) Regulations 1994 in respect of England and Wales.

1.4.2. The 1994 Regulations transposed Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (EC Habitats Directive) into national law. The regulations came into force on 30 October 1994.

1.4.3. The Regulations provide for the designation and protection of European Sites and European Protected Species, including bats.

1.4.4. Under the Regulations, competent authorities (ie any government department or public body) have a general duty, in the exercise of any of their functions, to have regard to the EC Habitats Directive.

1.4.5.With regard to European Protected Species (including bats), the Regulations make it an office to:

- Deliberately capture;
- Kill;
- Disturb or;
- Trade in animals listed in Schedule 2, which include all UK bat species.

1.5. European Protected Species (EPS) Licenses and the Three Tests

1.5.1.These actions can me made lawful through the granting of licenses by the appropriate authorities. Licenses may be granted for a number of purposes (such as science and education, conservation, preserve public health and safety). For such a licence to be granted the appropriate authority would have to be satisfied that an application has met the three tests, which are:

1)- The licence may be granted ''to preserve public health or public safety or for reasons of overriding public interest, including those of a social or economic nature and beneficial consequences or primary importance for the environment''

2)- There must be ''no satisfactory alternative''

3)- The proposal ''will not be detrimental to the maintenance of the species at a favourable conservation status in its natural range''

1.6. NATURAL ENVIRONMENT AND RURAL COMMUNITIES (NERC) ACT 2006 (PLANNING SYSTEM)

Planning Authorities: A Duty to Conserve Biodiversity

1.6.1.Under this legislation, planning authorities are obliged to make sure that they have all the information on the presence of protected species on site *before* they make a decision on the planning permission.

1.6.2.Part 2, Section 40 confers on the planning authorities a duty to conserve biodiversity and states:

''*Every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of biodiversity*''

Species of Principal Importance

1.6.3.Part 3, Section 41 requires the Secretary of State to ''*publish a list of the living organisms and types of habitat which in the Secretary of State's opinion are of* ***principle importance*** *for the purpose of conserving biodiversity*''.

1.6.4.This requirement lead to production of a list of species and habitats of Principal Importance. This lists includes all UK bats.

PLANNING POLICY

1.7. NATIONAL PLANNING POLICY FRAMEWORK

1.7.1.In March 2012 the Government introduced the National Planning Policy Framework (NPPF).

Chapter 11: Conserving and Enhancing the Natural Environment

1.7.2. Chapter 11: Conserving and Enhancing the Natural Environment replaces PPS 9: Biodiversity and Geological Conservation.

1.7.3. Chapter 11, Para 109 of NPPF states: ''The planning system should contribute to and enhance the natural and local environment by…minimising impacts on biodiversity and providing net gains in biodiversity where possible…including establishing coherent ecological networks that are more resilient to current and future pressures''.

1.7.4. Para 114 states: ''Local Planning authorities should set out a strategic approach in their local plans, planning positively for the creating, protection, enhancement and management of networks of biodiversity and green infrastructure''.

1.7.5. Para 117 gives guidance about how impacts on biodiversity and geodiversity should be minimised at a landscape scale by identifying and mapping components of local ecological networks and connecting them, and promotes the preservation, restoration and re-creation of priority habitats and ecological networks in relation to priority species populations, and specifies suitable indicators should be identified for the purposes of monitoring.

1.7.6. Para 118 states: ''When determining planning applications, local planning authorities should aim to conserve and enhance biodiversity by applying the following principles:

- **if significant harm 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;**

- **proposed development on land within or outside a Site of Special Scientific Interest likely to have an adverse effect on a Sites of Special Scientific Interest (either individually or in combination with other developments) should not normally be permitted.** Where an adverse effect on the site's notified special interest features is likely, an exception should only be made where the benefits of the development, at this site, clearly outweigh both the impacts that it is likely to have on the features of the site that make it of special scientific interest and any broad impacts on the national network of Sites of Special Scientific Interest;

- **Development proposals where the primary objective is to conserve or enhance biodiversity should be permitted;**
    - opportunities to incorporate biodiversity in and around developments should be encouraged;
    - planning permission should be refused for development resulting in the loss or deterioration of habitats, including ancient woodland and the loss of aged or veteran trees found outside ancient woodland, unless the need for, and benefits of, the development in that location clearly outweigh the loss;
    - and the following wildlife sites should be given the same protection as European sites:

        - Potential Special Protection Areas and possible Special Areas of Conservation
        - listed or proposed Ramsar sites; and
        - sites identified, or required, as compensatory measures for adverse effects on European sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites.''

ODPM CIRCULAR 06/2005: BIODIVERSITY AND GEOLOGICAL CONSERVATION

1.7.7. This document, to be read in conjunction with NPPF provides administrative guidance on the application of the law relating to planning and nature conservation as it applies in England. It makes

it clear that it is the intention of the government that local authorities and developers consider protected species at the earliest possible stage in the planning process. Any planning application that is likely to affect protected species should come with details of the surveys which have been undertaken and should include, if necessary, recommendations for mitigation. Applications which do not include sufficient data should be rejected.