

Nocturnal Bat Survey Report

Calliards Mill, Smithy Bridge Road

Reference: 82-591-R4-1

Date: September 25





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EXECUTIVE SUMMARY

Site Address	Smithy Bridge Road, Littleborough, OL15 8RF
Coordinates	E 392498, N 415597
Site Area	Approximately 0.72 ha
Current Site Use	The site comprised an area of land associated with Calliards Mill, consisting of two buildings, a retaining structure, other woodland; broadleaved, tall forbs, other neutral grassland, mixed scrub, bramble scrub, developed land; sealed surface, artificial unvegetated, unsealed surface, and a single wet reedbed. Stubley Mill Road forms the northern site boundary. Agricultural land forms the eastern site boundary. The River Roch lies approximately 10 m south of the southern site boundary. Calliards Mill and its associated landscaping form the majority of the western site boundary, with Smithy Bridge Road forming the remainder of the western site boundary. Agricultural land extends immediately northeast, east, south and west of the site, with residential housing extending further northwest and south
Proposed Development	Development proposals include the removal of individual trees, broadleaved woodland and vegetation in the centre and north of the site, and the construction of semi-detached residential dwellings with associated hardstanding and landscaping.
Results	Common and widespread species were identified using the site for foraging and commuting. These primarily comprised of common pipistrelles. Two soprano pipistrelles and an unidentified Myotis species were also recorded. No bats were observed emerging from the structure, and no bats were observed within proximity to any potential roost features.
Conclusions and Recommendations	No further surveys, or a Natural England bat licence are required for the proposed works to proceed. In the unlikely instance that any bats are located within the structure during the works, works should cease, and a suitably qualified ecologist should be contacted.



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1. INTRODUCTION

1.1. BACKGROUND

E3P has been commissioned by Hallmark Developments (NW) to undertake a Nocturnal Bat Survey at Calliards Mill, Littleborough; hereafter referred to as “the site”.

The report was produced by Graduate Ecologist, Lucy Hayward BSc (Hons). Lucy has experience in undertaking nocturnal bat emergence surveys on projects across the UK

1.2. PREVIOUS SURVEYS

In August 2025, E3P conducted a Preliminary Roost Assessment (PRA) as part of a Preliminary Ecological Appraisal (PEA) at the site (report reference: 82-591-R1) encompassing two on-site buildings (B1 and B2), and one on-site structure (S1) with surrounding habitats comprising other woodland; broadleaved, tall forbs, other neutral grassland, mixed scrub, bramble scrub, developed land; sealed surface, artificial unvegetated, unsealed surface, and a single wet reedbed.

The survey involved undertaking a systematic search of the two buildings and singular structure, searching for signs of bats, or spaces where bats would be able to access. The methodology followed that set out in Collins (2023).

B1 was assessed as having Negligible bat roosting potential, due to the lack of potential roost features present.

B2 was assessed as having No bat roosting potential, due to no potential roost features being present.

S1 comprised a single retaining structure made up of large stone bricks, approximately 4m in height. The lower levels of brickwork were well sealed, however, the brickwork to the centre and top of the structure had large areas of missing mortar. Due to the height of the structure and size of the bricks, the depth of the features could not be identified, and may support a small number of opportunistic bats on an occasional basis. As such, S1 was assessed as having Low bat roosting potential on a precautionary basis.

1.3. PROPOSED DEVELOPMENT

Development proposals include the removal of individual trees, broadleaved woodland and vegetation in the centre and north of the site, and the construction of semi-detached residential dwellings with associated hardstanding and landscaping.

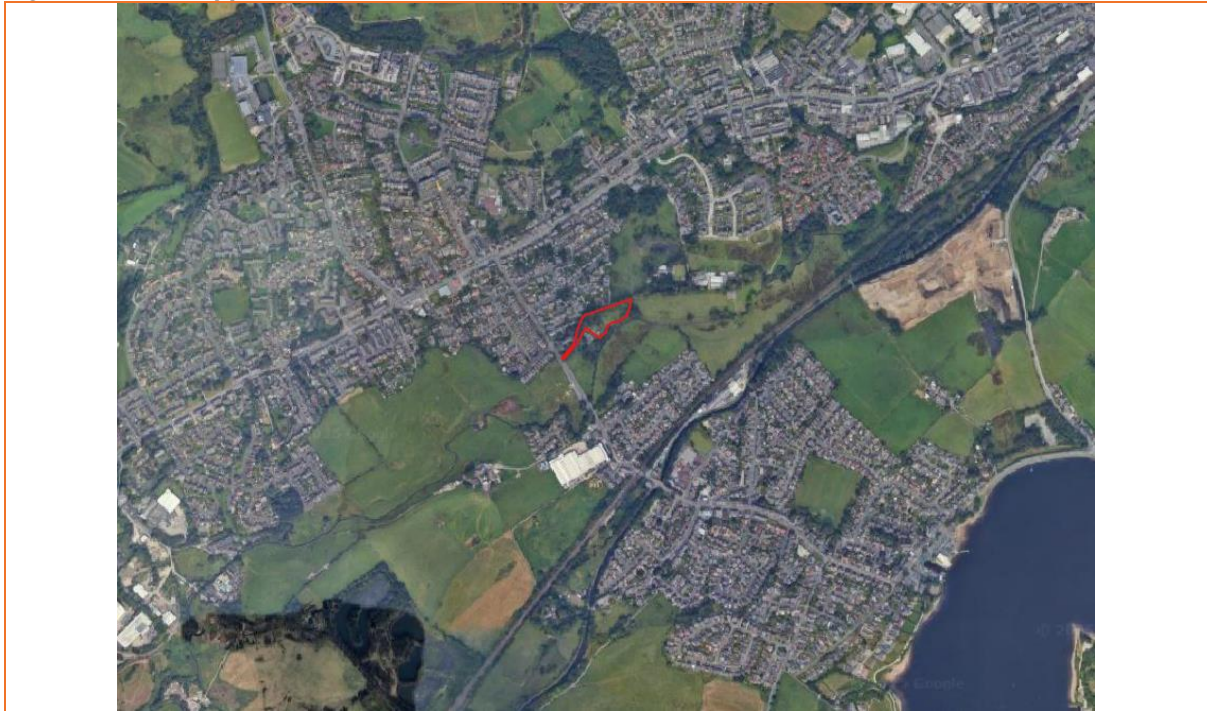
1.4. SITE DESCRIPTION

The site is located to the southwest of Littleborough, northeast of Rochdale. Stubley Mill Road forms the northern site boundary. Agricultural land forms the eastern site boundary. Calliards Mill and its associated landscaping form the majority of the western site boundary, with Smithy Bridge Road forming the remainder of the western site boundary. Agricultural land extends immediately northeast, east, south and west of the site, with residential housing extending further northwest and south. The River Roch is located approximately 10 m south of the site at its closest point, running east to southwest. An active railway line is located approximately 300 m south of the site, running east to west. Rochdale Canal is located approximately 320 m south of the site.

Please refer to **Figure 1** for the approximate site location.



Figure 1 **Approximate Site Location**



1.5. OBJECTIVES

The objectives of the Nocturnal Bat Surveys were to identify:

- ✦ Any existing roosts within the site.
- ✦ Potential impacts of the proposed development on bats.
- ✦ The need for mitigation.

The survey findings are detailed in this report, along with any recommendations.



2. METHODOLOGY

2.1. NOCTURNAL SURVEYS

One Bat Emergence Survey was undertaken following guidance set out in Collins (2023). The survey was conducted using Canon XA60 4K Camcorders, appropriate handheld bat detectors suitable for commercial use; an Echo Meter Touch 2, Magenta Bat 4 and a Titley Scientific Chorus Recorder (set to continuous mode).

The survey was undertaken by competent and suitably trained bat surveyors Hannah Brodie BSc (Hons) MSc, and Ollie Nicholson BSc (Hons). Hannah Brodie acted as leads on these surveys. Hannah has undertaken numerous nocturnal bat surveys and Preliminary Roost Assessments across the UK. Please see Table 1 for details of the surveys, and please refer to Appendix I for the full survey forms.

Table 1 Emergence Survey Details

SURVEYS	DATE	SUNSET	SURVEY TIMINGS	WEATHER CONDITIONS
DUSK SURVEY	27/08/2025	20:12	19:57 – 21:42	Dry, 17°C, 7mph wind speed

For the survey, two Canon XA60 4K Camcorders were positioned at two vantage points around the structure. Each vantage point was also monitored by a suitably trained bat surveyor to consistently monitor the areas of highest bat roosting potential throughout the survey. Please refer to Figure 2 for the approximate location of the vantage points regarding the on-site structure, and Table 2 for the details of each vantage point during the surveys.

Table 2 Survey Vantage Point Details

VANTAGE POINT	DATE	DETECTOR	SURVEYOR
V1	27/08/2025	Magenta	Ollie Nicholson
V2	27/08/2025	Echo Meter Touch 2 and Chorus Recorder	Hannah Brodie



Figure 2 **Approximate Location of Vantage Points**



2.2. DATA ANALYSIS

A Chorus Recorder and Echo Meter Touch 2 were used to record bat echolocation. The data from these instruments was converted from WAV to ZCA using Wildlife Acoustics Kaleidoscope Software. On the 2nd September 2025, Lucy Hayward analysed this data using AnalookW to determine species.

The recordings from the camcorders were analysed by Lucy Hayward on 29th August 2025 and this involved reviewing the footage for any emergences and bat activity.

2.3. SURVEY LIMITATIONS

Nocturnal Bat Surveys are completed following guidance set out in Collins (2023) and are carried out by competent and trained surveyors. However, due to the surveys being conducted by observation during low light conditions, this may cause constraints of visual assessments. This was resolved by using cameras as aids. All potential roosting features were observed throughout the survey time period. All surveys were conducted in optimum weather conditions, following guidance set out in Collins (2023).



3. SURVEY RESULTS

The following section provides a summary of bat activity noted on the Dusk Emergence Survey. Please refer to Appendix I for the full survey forms and Appendix II for the stills of the camcorders during the darkest part of the survey.

3.1. DUSK EMERGENCE SURVEY 27TH AUGUST

During the dusk emergence survey, there was a moderate amount of commuting and foraging activity observed on site, the majority of which comprised the species common pipistrelle (*Pipistrellus pipistrellus*). The earliest pass recorded was that of a common pipistrelle, heard but not seen, at 20:25, approximately eighteen minutes after sunset. Activity throughout the survey remained relatively consistent, with the final bat, also a common pipistrelle, heard not seen at 22:45. The activity observed by common pipistrelles during the survey was concentrated towards the treeline and woodland associated with the structure.

Recordings from the chorus recorder present on site during the survey also indicate three passes of soprano pipistrelle (*Pipistrellus pygmaeus*); two at 21:09 and one at 21:35. The chorus further indicated two passes of an unidentified myotis species at 21:00.

No bats were observed emerging from the surveyed structure.



4. CONCLUSIONS AND RECOMMENDATIONS

4.1. CONCLUSIONS

As no bats were observed emerging from the surveyed structure, it can be concluded that no bats are roosting within the structure. Therefore, no further assessment, mitigation or Natural England Bat licencing is required for works to proceed.

4.2. RECOMMENDATIONS

In the unlikely event that a bat is found during works, all works are to cease immediately. Following this, a suitably qualified ecologist should be contacted, and further advice sought from Natural England.

If development proposals should change and B1 and B2 are impacted, then further nocturnal bat surveys will be required on B1 and B2.



5. REFERENCES

- 📍 Collins, J. (2023). Bat Surveys for Professional Ecologists, 4th Edition. Bat Conservation Trust.
- 📍 E3P (2025). Preliminary Ecological Appraisal – Calliards Mill (report reference: 82-591-R1)

END OF REPORT

APPENDIX I

SURVEY FORMS





SURVEY FORMS

27TH AUGUST 2025

Date: 27/08/2025
Sunset: 20:12
Start time: 19:57
End time: 21:42

Weather conditions: Dry, mild, 17°C, 7mph wind speed

Surveyor: Ollie Nicholson (V1)

TIME	SPECIES	ACTIVITY
20:25	Common pipistrelle x2	Commuting
20:26	Common pipistrelle	Foraging
20:27	Common pipistrelle	Commuting
20:28	Common pipistrelle	Foraging
20:29	Common pipistrelle	Foraging
20:31	Common pipistrelle x2	Continuous foraging
20:35	Common pipistrelle	Commuting
20:35	Common pipistrelle x2	Continuous foraging
20:36	Common pipistrelle	Heard not seen
20:37	Common pipistrelle	Commuting
20:38	Common pipistrelle x3	Commuting
20:40	Common pipistrelle x2	Commuting
20:43	Common pipistrelle	Foraging
20:44	Common pipistrelle	Commuting
20:46	Common pipistrelle	Heard not seen
20:46	Common pipistrelle	Commuting
20:51	Common pipistrelle	Foraging
20:53	Common pipistrelle	Heard not seen
20:54	Common pipistrelle	Commuting
20:56	Common pipistrelle	Heard not seen
20:57	Common pipistrelle	Foraging
20:59	Common pipistrelle	Heard not seen
21:02	Common pipistrelle	Heard not seen
21:03	Common pipistrelle	Heard not seen
21:05	Common pipistrelle	Heard not seen
21:06	Common pipistrelle	Heard not seen
21:08	Common pipistrelle	Heard not seen
21:09	Common pipistrelle	Commuting
21:10	Common pipistrelle	Foraging
21:11	Common pipistrelle	Heard not seen
21:14	Common pipistrelle	Heard not seen
21:15	Common pipistrelle	Heard not seen
21:17	Common pipistrelle	Heard not seen
21:19	Common pipistrelle	Heard not seen
21:20	Common pipistrelle	Heard not seen
21:21	Common pipistrelle	Heard not seen
21:24	Common pipistrelle	Heard not seen
21:25	Soprano pipistrelle	Heard not seen
21:27	Common pipistrelle	Heard not seen
21:28	Common pipistrelle	Heard not seen



TIME	SPECIES	ACTIVITY
21:29	Common pipistrelle	Heard not seen
21:35	Common pipistrelle	Heard not seen
21:36	Common pipistrelle	Heard not seen
21:37	Common pipistrelle	Heard not seen
21:38	Common pipistrelle	Heard not seen
21:39	Common pipistrelle	Heard not seen
21:40	Common pipistrelle	Heard not seen
21:41	Common pipistrelle	Heard not seen
21:42	Common pipistrelle	Heard not seen

Surveyor: Hannah Brodie (V2)

TIME	SPECIES	ACTIVITY
20:25	Common pipistrelle	Commuting southeast over tree canopy
20:26	Common pipistrelle x2	Foraging in circles above the tree canopy
20:28	Common pipistrelle	Foraging in circles above the tree canopy
20:29	Common pipistrelle	Foraging below treeline around V1 and V2 – no interaction with structure
20:31	Common pipistrelle	Foraging clockwise above vantage points and then west to east through the trees
20:33	Common pipistrelle	Foraging southeast to northwest and back above vantage points and through the trees
20:35 – 20:36	Common pipistrelle x4	Continuous foraging above vantage points in circles, commuting along the edges of the trees
20:37 – 20:38	Common pipistrelle	Continuous foraging north to south away from woodland and towards river
20:40	Common pipistrelle	Commuting southeast along the edge of the trees, then anticlockwise and headed northwest
20:41	Common pipistrelle	Foraging
20:43	Common pipistrelle	Continuous foraging heading southeast and then northwest
20:44	Common pipistrelle	Continuous foraging heading southeast and then northwest
20:46	Common pipistrelle	Heard not seen
20:46	Common pipistrelle	Foraging southwest towards building
20:51	Common pipistrelle	Continuous foraging northwest to southeast
20:52	Common pipistrelle x2	Heard not seen
20:56	Common pipistrelle	Foraging west to northeast along woodland canopy
20:57	Common pipistrelle	Heard not seen
20:58	Common pipistrelle	Continuous foraging
21:00	Common pipistrelle	Heard not seen
21:01	Common pipistrelle	Foraging along upper treeline headed west
21:02	Common pipistrelle	Heard not seen
21:03	Common pipistrelle	Commuting northeast towards woodland, then heard not seen
21:04	Common pipistrelle	Commuting southwest towards river
21:05	Common pipistrelle	Heard not seen
21:06	Common pipistrelle	Commuting southwest towards river, then heard not seen
21:06	Common pipistrelle	Commuting southeast further into site
21:08	Common pipistrelle	Heard not seen
21:09	Common pipistrelle	Commuting from southeast up treeline towards woodland
21:09	Common pipistrelle	Continuous foraging along tree canopy



TIME	SPECIES	ACTIVITY
21:11	Common pipistrelle	Heard not seen
21:12	Common pipistrelle	Commuting west along treeline
21:13	Common pipistrelle	Heard not seen
21:14	Common pipistrelle	Heard not seen
21:15	Common pipistrelle	Continuous foraging along trees
21:17	Common pipistrelle	Commuting northeast further into site
21:19	Common pipistrelle	Heard not seen
21:20	Common pipistrelle	Heard not seen
21:21	Common pipistrelle	Heard not seen
21:24	Common pipistrelle	Heard not seen
21:25	Common pipistrelle	Heard not seen
21:27	Common pipistrelle	Heard not seen
21:28	Common pipistrelle	Heard not seen
21:30	Common pipistrelle	Heard not seen
21:35	Common pipistrelle	Heard not seen
21:35	Common pipistrelle	Heard not seen
21:36	Common pipistrelle	Heard not seen
21:38	Common pipistrelle	Heard not seen
21:39	Common pipistrelle	Heard not seen
21:40	Common pipistrelle	Heard not seen
21:41	Common pipistrelle	Heard not seen
21:42	Common pipistrelle	Heard not seen

APPENDIX II VANTAGE POINT LOCATIONS





Figure 3: Showing V1 on 27th August 2025



Figure 4: Showing V2 on 27th August 2025

