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Dusk Survey Results

January 2025

Project Reference: PR-0248-24

The Rose and Crown Public House
Cop Hill Side
Slaithwaite
Huddersfield
HD7 5XA

National Grid Reference: SE06001386

Document Title	Dusk Survey Results
Project reference	PR-0248-24
Prepared for	Holme Planning Partnership
Prepared by	Tyrer Ecological Consultants Ltd

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Survey Date	Dusk: 20/08/2024	Dusk: 12/09/2024
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Review date	13/01/2025	
Approved by	Mrs K. Wilding ACIEEM	
Date of Issue	13/01/2025	

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Executive Summary

As part of a proposed planning application with Kirklees Council concerning the Rose and Crown in Slaithwaite, Tyrer Ecological Consultants Ltd carried out a Preliminary Ecological Appraisal (PEA) in July 2024, followed by two dusk emergence surveys conducted in August and September 2024.

Bats:

The site, The Rose and Crown, was categorised as pertaining to '**Moderate'** bat roost suitability in line with current Bat Conservation Trust Guidelines (2023), and therefore two dusk emergence surveys were undertaken at the site in August and September 2024.

From the dusk survey results, it can be concluded that whilst using best practice survey methodology, ***emergence of bats was absent at The Rose and Crown*** *and activity was limited to commuting by one common pipistrelle and one noctule.*

Survey Validity:

Bat emergence/re-entry surveys are typically **valid for a period of 12-18 months**; Ideally, the survey data should be from the most recent optimal survey season before a planning or licence application is submitted, however this is at the discretion of the Local Planning Authority and/or Natural England. Should your planning application not achieve consent, or a licence application (where required) not be applied for within this time period, updated surveys may be required.

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External Appendix: *PR-0241-24 The Rose and Crown Public House – Preliminary Ecological Appraisal (Tyrer Ecological Consultants Ltd, January 2025)*

1.0 Background and Introduction

1.1 As part of a proposed planning application at The Rose and Crown Public House in Slaithwaite, Tyrer Ecological Consultants Ltd conducted a Preliminary Ecological Appraisal (PEA) in July 2024. As part of this survey a Preliminary Roost Assessment (PRA) was carried out, which concluded the following:

> *"Based upon the findings of the DBW and associated GLTA, covered through sections 5.0 – 6.0 of the report and supported by **Appendix I** the Rose and Crown is duly categorised as pertaining to a bat roost suitability of '**Moderate**', in accordance with Bat Conservation Trust – Bat Surveys for Professional Ecologists: Good Practice Guidelines, 4th ed. (2023), triggering the requirement for further surveys.*
>
> *It is recommended that **two dusk emergence surveys** are conducted at the site within the active season of bats (May – August, extending into September in some cases), in order to establish if / how the building is being used by bats, and if so, identify the species present, abundance, roost locations and flight lines around the site following emergence. A total of **four surveyors** would be required to cover the potential roosting features as described for each survey, and the surveys must be spaced a minimum of three weeks apart in accordance with current BCT guidance."*

1.2 The scope of proposals is understood to involve the redevelopment of the existing building and extension within the hardstanding area for residential purposes.

1.3 Tyrer Ecological Consultants Ltd were therefore re-commissioned by Holme Planning Partnership Architects to undertake the further bat surveys recommended in the PEA; the two dusk emergence surveys were carried out in August and September 2024 in accordance with current Bat Conservation Trust (BCT) Guidelines during the active season of bats (see **Figure 1.1**).

Table 7.2. Recommended minimum number of survey visits for presence/absence surveys to give confidence in a negative result for structures (also recommended for trees but unlikely to give confidence in a negative result).

Low roost suitability or PRF-I	Moderate roost suitability	High roost suitability or PRF-M
One survey visit. One dusk emergence survey[a] (structures). No further surveys required (trees).	Two separate dusk emergence survey visits[b].	Three separate dusk emergence survey visits[b].

Figure 1.1 - Extract from *Bat Conservation Trust – Bat Surveys for Professional Ecologists: Good Practice Guidelines, 4th ed. (2023)*

1.4 The results, conclusions and recommendations following the survey, including any indicative mitigation to inform an application to Natural England for a European protected species mitigation licence (EPSML), where necessary, will be supplied within this report.

1.5 This report should be read, understood and presented to the local authority as an additional document to **External Appendix** (see Contents page).

2.0 Bats - Legislation & Policy

2.1 All British bats and their **roosts[1] are afforded protection under Schedule 5 of the Wildlife & Countryside Act (1981) (as amended) and are listed in Schedule 2 of The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (SI 2019/579). When dealing with cases where a European Protected Species (EPS) (all UK bats) may be affected, a planning authority is a competent authority within the meaning of the Regulation 7 of the Regulations, that has a statutory duty as the local authority to have due regard to the provisions of the Regulations in the exercise of its functions.

2.2 Use of Buildings by Bats

a) Summer breeding roost (May-August)
b) Hibernation roost (October-March)
c) Transitional or temporary roost (Mainly spring/summer months)

Roost selection is often closely correlated to suitable foraging habitat within a reasonable commuting distance from the roost and different sites are used depending upon insect densities and abundance, climatic conditions can also affect their ability to successfully forage. All British bats are insectivorous.

2.3 Up to ten bat species have been recorded in West Yorkshire, most of which use built structures, notably occupied residential properties, for roosting. The most frequently encountered bat species is the common pipistrelle (*Pipistrellus pipistrellus*) which will roost in building crevices, and its abundant status in Yorkshire is reflected throughout the UK.

Policy

2.4 Paragraph 193 of the National Policy Planning Framework (as revised in December 2024) states:

"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 a Site 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 features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;

[1] **The term roost is generically referred to as a place that bat/s use for the any of the above reasons, however it should be noted that under the Conservation of Habitats and Species Regulations (2019) (EU Exit) (Regulation 43 (d) the term roost is not used but refers to "*a breeding site or resting place of such an animal"* and is afforded legal protection. The roost, breeding site or resting place of bats, which ever terminology is used is legally protected whether or not bats are in occupation.

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[2] 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 developments 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."

2.5 Policy LP30 of the Kirklees Council Local Plan (2019) entitled 'Biodiversity and Geodiversity' echoes this national focus on preserving and enhancing biodiversity for the benefit of protected species, and says:

"Development proposals will be required to:-

- *(i) result in no significant loss or harm to biodiversity in Kirklees through avoidance, adequate mitigation or, as a last resort, compensatory measures secured through the establishment of a legally binding agreement;*
- *(ii) minimise impact on biodiversity and provide net biodiversity gains through good design by incorporating biodiversity enhancements and habitat creation where opportunities exist;*
- *(iii) safeguard and enhance the function and connectivity of the Kirklees Wildlife Habitat Network at a local and wider landscape-scale unless the loss of the site and its functional role within the network can be fully maintained or compensated for in the long term;*
- *(iv) establish additional ecological links to the Kirklees Wildlife Habitat Network where opportunities exist; and*
- *(v) incorporate biodiversity enhancement measures to reflect the priority habitats and species identified for the relevant Kirklees Biodiversity Opportunity Zone"*

[2] For example, infrastructure projects (including nationally significant infrastructure projects, orders under the Transport and Works Act and hybrid bills), where the public benefit would clearly outweigh the loss or deterioration of habitat

3.0 Survey Methods

3.1 Bat Conservation Trust - Bat Surveys for Professional Ecologists: Good Practice Guidelines, 4th ed. (2023) edition states:-

"*The guidelines do not aim to either override or replace knowledge and experience. It is accepted that departures from the guidelines (e.g. either decreasing or increasing the number of surveys carried out or using alternative methods) are often appropriate… The guidance should be interpreted and adapted on a case-by-case basis according to site-specific factors and the professional judgement of an experienced ecologist. Where examples are used in the guidelines, they are descriptive rather than prescriptive."*

3.2 Relative to the above the survey protocol has been determined using the collective and long standing experience of Tyrer Ecological Consultants Ltd and knowledge of the specific nature of the site.

Survey Protocol

3.3 The timing of the surveys took place in August and September, thus one survey was within the main active period of bats, at a time when maternity colonies have formed / returned to summer roosts and bats are in a highly active and social stage, and the second was conducted when young are beginning to fly, and roosts are beginning to disperse.

3.4 In accordance with Bat Conservation Trust - Bat Surveys for Professional Ecologists: Good Practice Guidelines, 4th ed. (2023), it is specified that:

3.5 "*The bat active period is generally considered to be between April and October inclusive*", though the period of May - August is considered the most optimal owing to the likelihood of detecting a greater range of roost types namely Maternity and Summer roosts; typically only surveys within this period are accepted by licensing authorise as the results of these surveys are used to inform an EPS licence application or a non-licensable Precautionary Working Method Statement (PWMS).

3.6 In this case the bat roost potential that exists at The Rose and Crown presents no problems for dusk observations; if a building is complex, or observations were restricted, or species that are difficult to detect at dusk are suspected then dawn surveys would be conducted where appropriate. At The Rose and Crown there are no visual constraints and to date there is no evidence to suggest the presence of such species.

3.7 Bat Conservation Trust - Bat Surveys for Professional Ecologists: Good Practice Guidelines, 4th ed. (2023), it is specified that:

"Roost re-entry visits prior to dawn are no longer routinely recommended for presence/absence surveys due to the risk of bats returning early and being missed … As return times appear to be far more variable (Andrews & Pearson, 2022)."

3.8 Survey protocol should not be determined by parties who are 1) not familiar with the site 2) do not have a sufficient level or experience in relation to the undertaking of dusk/dawn bat surveys.

3.9 The number of surveys and surveyors was adequate relative to the roost potential that was identified on attendance of the site i.e. 'Moderate' and requiring four surveyors to accurately monitor potential roost features (PRF's) on the buildings at any one time.

3.10 Surveyors were strategically positioned so that all elevations with bat roost potential, as described in the daytime report, could be observed without limitation. The surveyors were aided with Anabat SD2, Batlogger M & M2, Echometer EM2, Peersonic RPA3, or equivalent electronic bat detectors that enable the locating and recording of the high frequency calls that are emitted by bats; echolocation calls were analysed the next day using Analook, Kaleidoscope, BatExplorer or equivalent computer software to verify field observations. Where deemed appropriate by the attending ecologists, elevations were also surveyed via the use of a Night Visual Aid (NVA) Camera (Panasonic HC-VXF990) or Nightfox Whisker Night Vision Binoculars – recordings would be subject to review the following day to identify emergences / flight lines and species / abundance.

4.0 Results

4.1 Two dusk emergence surveys were undertaken on 20th August 2024 and the 12th of September 2024 by four surveyors at a time. See **Table 4.1** below for surveyor credentials. **Tables 4.2 – 4.3** for detailed survey results and **Figures 4.1 – 4.2** for a visual aid to further assist in the understanding of survey results.

Table 4.1 - Surveyor Credentials

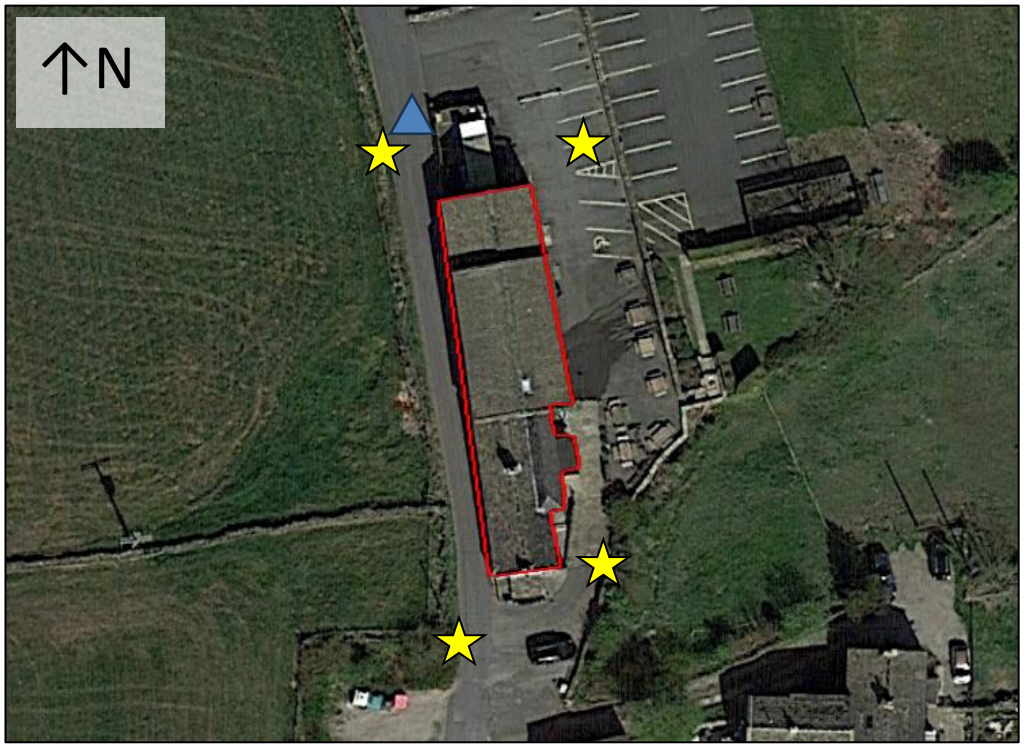
Surveyor(s)	Experience	Surveyor Credentials
Mr. H. Green	30+ years	Highly experienced Bat Specialist and carer whom has professional surveying experience over decades with Tyrer Ecological Consultants Ltd - Class 2 Natural England Bat Licence (CLS-03290)
Ms. H. Taylor-Boyd	8 years	A highly experienced bat surveyor with several years' experience with Tyrer Ecological Consultants Ltd
Mr. D. Boyd	8 years	A highly experienced bat surveyor with several years' experience with Tyrer Ecological Consultants Ltd
Mr. M. Smith	7 years	An experienced seasonal bat surveyor with Tyrer Ecological Consultants Ltd
Mr. J. Wright	1 year	A seasonal surveyor with experience of undertaking professional bat surveys and additionally holds a BSc in Biology and MSc in Zoology. Current PhD candidate at Manchester Metropolitan University.
Mr. J. Russell	1 year	A seasonal surveyor with experience of undertaking professional bat surveys.
Mr. D. Morrison	1 year	A seasonal surveyor with experience of undertaking professional bat surveys.

Table 4.2 – Survey date, times and weather conditions

Times of Survey	Date	Weather Conditions
Dusk survey 1 2004 - 2124	20th August 2024	**Sunset: 2024**: Dry, strong breeze, 10% cloud cover Start temp: 16ºC End temp: 10ºC
Dusk survey 2 1912 - 2032	12th September 2024	**Sunset: 1932:** Dry, calm, 10% cloud cover Start temp: 8.5ºC End temp: 5.8ºC

Table 4.3 – Dusk Survey Results

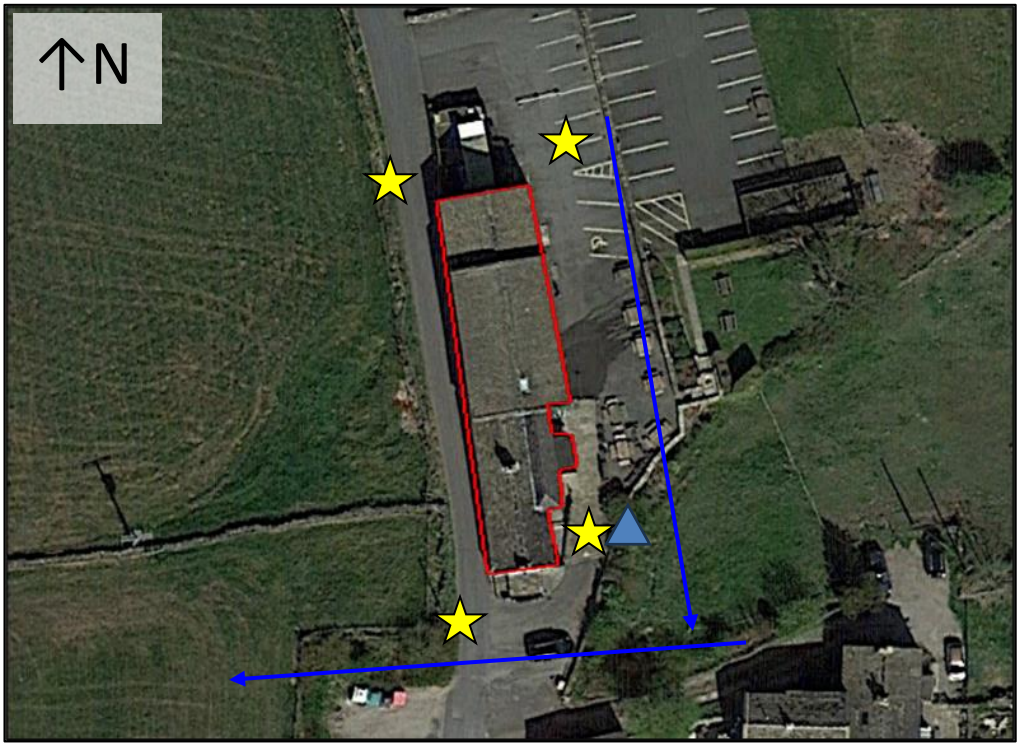
Dusk Survey	Time	Activity
20/08/2024	2004 - 2124	**Summary: No bat emergence for the duration of the survey.** 2103 hrs: Common pipistrelle (CP) commuting, heard not seen. **Activity summary:** Activity comprised commuting activity of a single CP.
12/09/2024	1912 - 2032	**Summary: No bat emergence for the duration of the survey.** 1955 hrs: CP commuting north to south on the eastern side of the building. 2001 hrs: Noctule commuting, heard not seen. 2010 hrs: CP commuting east to west at the south of the building. **Activity summary:** Activity comprised commuting by a single CP and a single Noctule.



Dusk Survey – 20/08/2024

Key			
	Site Boundary		Foraging activity
	Surveyor Positions		Commuting activity
N	Directional compass		NVA

Figure 4.1 - *Visual Aid - Dusk Survey Results with Key*



Dusk survey – 12/09/2024

Key			
	Site Boundary		Foraging activity
	Surveyor Positions		Commuting activity
N	Directional compass		NVA

Figure 4.2 – *Visual aid – Dusk survey results with key.*

5.0 Survey Conclusions & Recommendations

5.1 From the dusk survey results, it can be concluded that whilst using best practice survey methodology, emergence of bats was absent at The Rose and Crown Public House and activity was limited to commuting by one common pipistrelle and one noctule.

5.2 As bats are highly transient species and can use buildings that offer potential roost features at any time of the year, it should be stated that if bats, or evidence of bats (see **Figure 5.1**), is found at any stage during the works then as a legal requirement the work at the site should immediately cease and a bat ecologist contacted for further advice.

Figure 5.1 - *Bat droppings (left) and pipistrelle bat (right)*

5.3 If bat(s) or their roost will be affected then a Natural England Mitigation licence will be required to legally continue with the work. Notwithstanding the granting of a licence works that would affect a roost cannot take place if a maternity colony is in occupation.

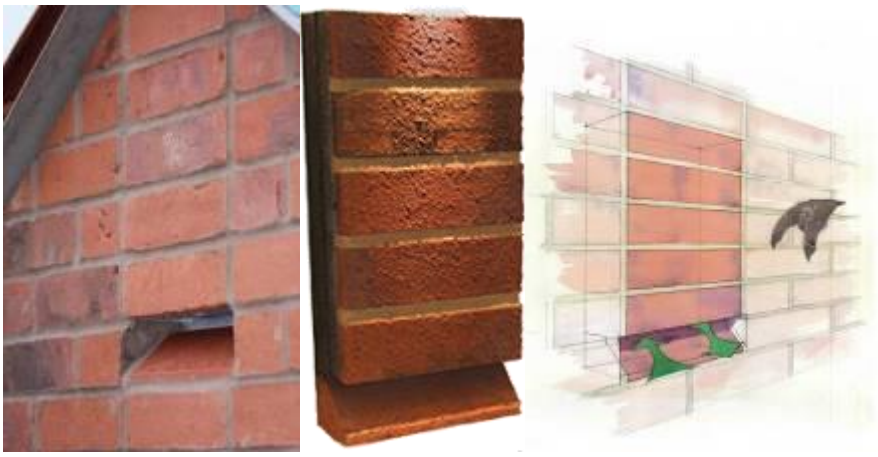
5.4 Notwithstanding absence of roost behaviour observed, the proposed development scheme might consider enhancement for bats as part of its biodiversity net-gain goals, in accordance with local and national planning policy.

5.5 See Figures overleaf for indicative ideas which could be integrated during the proposed new development at The Rose and Crown Public House. A bespoke enhancement plan can be provided by Tyrer Ecological Consultants at the client's request whereby types of provision and locations can be annotated on site plans / elevation drawings.

Enhancing a development site for Bats

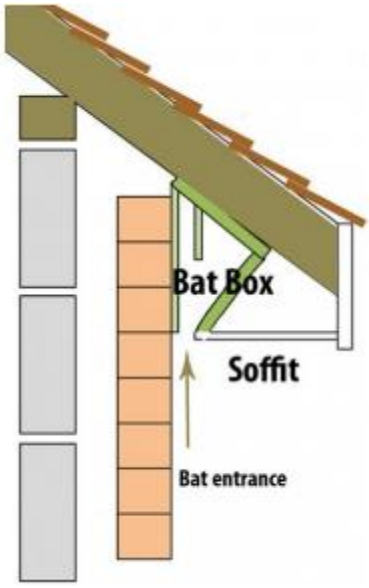
Integrated bat box

The Habibat Bat Box is a solid box made of insulating concrete with internal roosting space. The box blends seamlessly into brick-built properties and may be incorporated into the fabric of buildings, being best placed on gable elevations.



Soffit access

Where soffits are instated at gable elevations, roost provision may be instated in the form of a soffit bat box with internal roosting space.



Externally fitted boxes

A large number of externally fitted box models for bats exist for buildings and trees. Suitable models for both buildings and trees may include the Eco Kent Bat Box.

Ridge access

Where appropriated, ridge tile access should be made with the incorporation of traditional Bitumen 1F underfelt immediately beneath ridge tiles. Breathable BRM membrane can cause significant problems where bats are in contact with it, whereby their fine claws become entangled within the fibres of the membrane, entrapping and killing bats.

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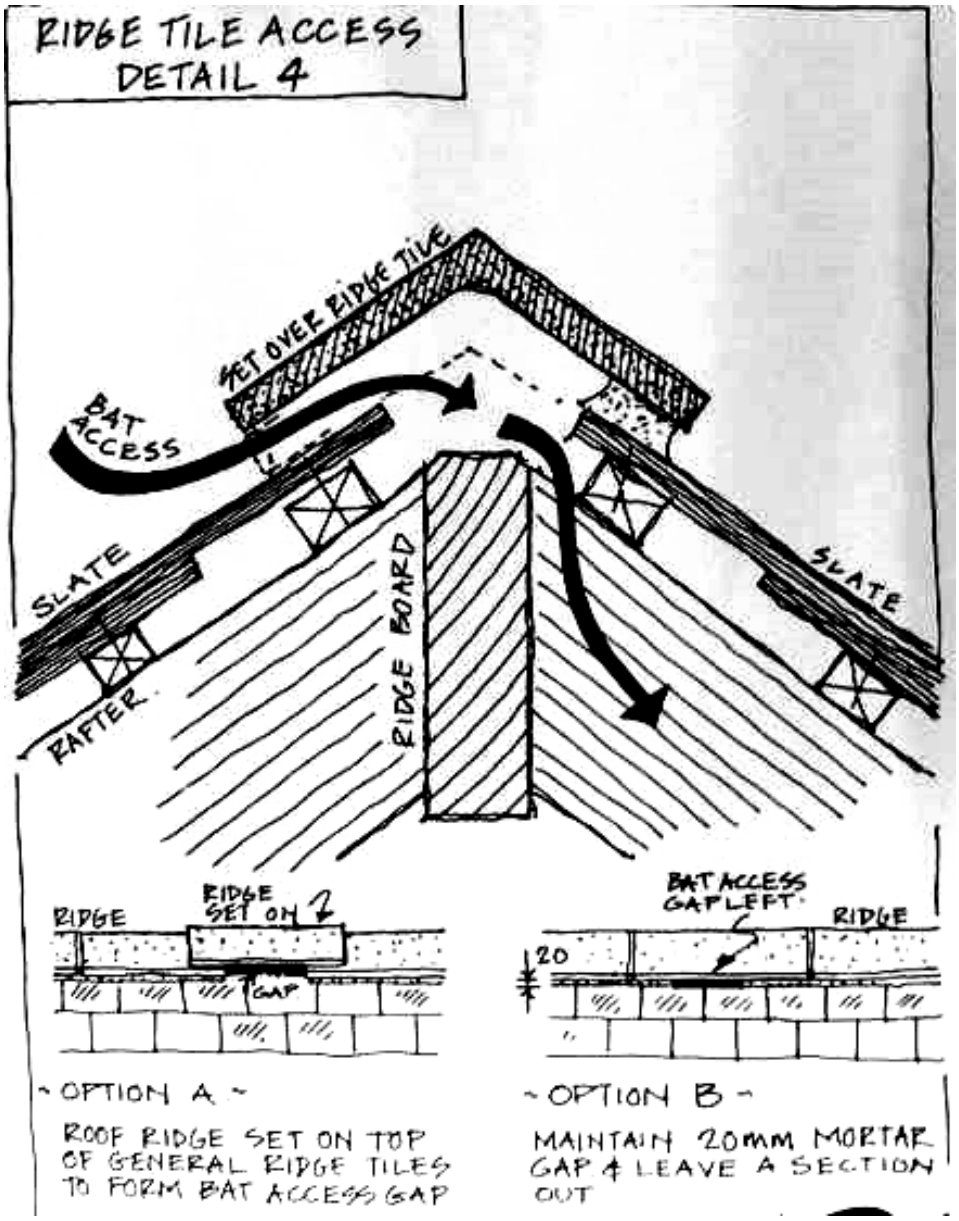
RIDGE TILE ACCESS DETAIL 4
SET OVER RIDGE TILE
BAT ACCESS
SLATE
SLATE
RAFTER
RIDGE BOARD
RIDGE
RIDGE SET ON
GAP
BAT ACCESS GAP LEFT
RIDGE
20
~ OPTION A ~
ROOF RIDGE SET ON TOP OF GENERAL RIDGE TILES TO FORM BAT ACCESS GAP
~ OPTION B ~
MAINTAIN 20mm MORTAR GAP & LEAVE A SECTION OUT

6.0 References

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External Appendix: *PR-0241-24 The Rose and Crown Public House – Preliminary Ecological Appraisal (Tyrer Ecological Consultants Ltd, January 2025)*