# **Elmswell Tavern**

# **Preliminary Roost Assessment and Survey Report**





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# 1. Introduction

## 1.1 Background

Connected Ecology has been commissioned by Peter Dow on behalf of Elmswell Parish Council to undertake a Preliminary Roost Assessment (PRA) and bat activity surveys in support of the extension and renovation of The Railway Tavern Public House (Appendix A: Drawings). The proposal is hereinafter referred to as the proposed Scheme.

The proposal is located at The Railway Tavern Public House, School Road, Elmswell, Suffolk, IP30 9EE. The proposal centres on Ordnance Survey Grid Reference TL 98763 63856 (Appendix B: Figure 1. PEA overview). Its premises are currently used as a food bank, serving the local community.

The proposed Scheme involves the complete renovation of the tavern complex including re-roofing of certain sections. One of the extensions at the rear of the property will be demolished, and will make way for a modern extension to provide kitchen and toilet facilities. The renovated tavern will provide a restaurant area along with a traditional pub area with improved facilities.

On 17 September 2023, a walkover survey was undertaken of the tavern and the wider area to observe, assess, and record any potential roost features and habitats suitable for bats, which could be affected by the proposed Scheme. It was confirmed that overall, the building provided moderate suitability for bats, despite no evidence of bats being recorded during the building inspection.

Two emergence surveys were carried out across September and October 2023, where no evidence of emergences or re-entry of bats was recorded. There were, however, low activity levels of common pipistrelle bat and noctule bat in the vicinity.

There will be a loss of suitable features for roosting bats in the building as a result of the proposed works, which will be compensated through the provision of three bat boxes. These will be installed prior to any demolition works commencing. The bat boxes will be installed in suitable safe locations to provide safe and sheltered places for bats to roost in the future. It is recommended to install an additional integrated bat box upon completion of the southern extension.

There will be a small loss of suitable foraging resources for bats, with the loss of a dense stand of ivy and grassland habitats. These will be compensated through the provision of selective planting of trees around the boundary of the site. Once established, this will provide increased suitable habitat for foraging and commuting bats on site.

The objectives of the bat surveys were these:

- Undertake surveys to confirm habitat suitability for bats within the boundary of the proposed Scheme; and
- Identify if there are any features suitable for roosting bats within the boundary of the proposed Scheme; and
- Undertake detailed checks for any evidence of bats within suitable roosting locations within the boundary of the proposed Scheme; and
- Identify if bats are currently present within the boundary of the proposed Scheme; and
- Where impacts of proposed works cannot be avoided, recommend the level of appropriate mitigation measures to remove or reduce potential impacts and assess the requirement for a Natural England's European Protected Species Licence; and
- Provide clear information to the Local Planning Authority, which will make a determination on potential impacts on bats within the planning application.

This report also identifies opportunities for enhancements, which may be conditions as part of the planning process or for any future licensing requirements.

# 2. Legislation, Licencing and Policy

A summary of the relevant legislation afforded to bats is provided below. If readers want to review the legislation, please refer to the Conservation of Habitats and Species (Amendment) (EU Exit) Regulation 2019<sup>1</sup>, Wildlife and Countryside Act 1981 (as amended)<sup>2</sup> and Natural Environment and Rural Communities Act 2006<sup>3</sup> for the most up to date and comprehensive text.

## 2.1 Legislation

In England and Wales, all bat species receive full protection through the inclusion of Schedule 5 of the Wildlife and Countryside Act 1981. However, the effective protection for bats comes mostly under the European protection through the inclusion in the Conservation of Habitats and Species (Amendment) (EU Exit) Regulation 2019. All species of bats found in the wild in the UK are European Protected Species (EPS). The list below identifies the following offences:

- Deliberately capturing, injuring or killing a bat; and/or
- Possessing or controlling any live or dead bat, or any part or derivative; and/or
- Intentionally or recklessly obstructing access to a roost; and/or
- Deliberately disturbing a bat whilst it is occupying a roost; and/or
- Deliberately disturbing bats in a way that would significantly affect their local distribution or abundance, or affect their ability to survive, breed or rear young; and/or
- Selling, offering for sale, possessing or transporting for the purposes of sale, any live or dead bat, or any part or derivative, or advertising any of these for buying or selling; and/or
- Damage or destroy a bat roost (this is an 'absolute' offence).

A bat roost is any structure or place that a wild bat uses for shelter or protection. Seeing as bats tend to reuse the same roosts, the legal opinion holds that the roost is protected whether or not the bats are present at the time.

Deliberate action, in this context, may be interpreted as that committed by a person, who, although not intending to capture/injure or kill a bat, performed the relevant action, being sufficiently informed and aware of the consequence his/her action will most likely have.

Natural Environment and Rural Communities Act (NERC Act) 2006, requires due consideration to be given to biodiversity and its potential enhancement when considering proposed developments. Seven bat species are listed as species of principal importance, which include Barbastelle, Bechstein's, noctule, soprano pipistrelle, brown long-eared, greater horseshoe and lesser horseshoe bat.

There are defences under the current legislation, which include taking a disabled bat, for the sole purpose of tending to it and releasing it when no longer disabled, or killing a bat if the person can show that the bat was seriously disabled. These acts can only be undertaken when there are no reasonable alternatives and will not be detrimental to the maintenance of the species at a Favourable Conservation Status (FCS) in its natural range.

Actions, which would otherwise be illegal, can be made lawful if licensed by the appropriate Statutory Nature Conservation Organisation (SNCO). In the case of the proposed Scheme, it would be Natural England.

## 2.2 Licencing and Policy

There are two main types of licences relevant to the current legislation, and these are survey licences and European Protected Species (EPS) licences.

#### **Survey licences**

Survey licences are issued to ecologists under the Habitats Regulations, permitting them to enter a bat roost, cause temporary disturbance to bats (including using an endoscope and torching) and, in some circumstances, to capture and handle bats.

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<sup>&</sup>lt;sup>1</sup> GOV, UK. Conservation of Habitats and Species (amendment) (EU Exit) Regulation 2019. <u>The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (legislation.gov.uk)</u> (Accessed on 17 November 2023).

<sup>&</sup>lt;sup>2</sup> GOV, UK. Wildlife and Countryside Act 1981. Wildlife and Countryside Act 1981 (legislation.gov.uk) (Accessed on 17 November 2023).

<sup>&</sup>lt;sup>3</sup> Natural Environment and Rural Communities Act 2006. <u>Natural Environment and Rural Communities Act 2006 (legislation.gov.uk)</u> (Accessed on 17 November 2023).

Surveyors' licences do not cover the damage or destruction of a roost site for development. This would be covered by an EPS Licence, where circumstances allow.

## **Natural England Development Licences**

The EPS licences are issued under the Habitat Regulations, but only after three tests have been satisfied in relation to the proposed action, as follows:

- The proposed action must be for the purpose of preserving health or public safety or other imperative reasons of overriding public interest, which includes those of social or economic nature and beneficial consequences of primary importance for the environment; and for preventing serious damage to property; and
- 2. There is no satisfactory alternative to the proposed action; and
- 3. The action authorised will not be detrimental to the maintenance of the species concerned at a Favourable Conservation Status (FCS) in their natural range.

FCS is defined in the Habitat Directives where:

- The population data on a species concerned indicates that it is maintaining itself on a long-term basis as a viable component of its natural habitats; and
- The natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future; and
- There is and will probably continue to be sufficient habitat to maintain its population on a longterm basis.

For the tests to be correctly applied, it is essential that baseline survey information of a sufficient quantity, quality and standards is supplied. Without this survey information, an EPS Licence may not be granted.

Where the impacts on bats are limited to a small number of bats of low conservation status, it may be possible to undertake works under a Low Impact Class Licence (LICL) by a registered user of the class licence. Like a full EPS licence, this would provide a defence to an otherwise unlawful act, that would cover any disturbance, injury or killing bats or where the works would result in the destruction or obstruction of a bat roost Where the impacts do not meet the threshold of the LICL, then a full EPS licence will be required. Both licence types can only be processed once all relevant permissions our in place, that would make the proposal a lawful operation. i.e. planning permission is in place.

# 3. Methodology

#### 3.1 Zone of influence

The Zone of Influence (ZoI) is defined by the CIEEM Guidelines for Ecological Impact Assessment<sup>4</sup> as: "area(s) over which ecological features may be affected by the biophysical changes caused by the proposed project and associated activities". The ZoI of the proposed activities may be different from the site boundary.

# 3.2 Desk Study

Initial scoping was carried out to assess the building and habitats within the ZoI for their potential to support bats and to identify likely impacts. The exercise was conducted using a combination of aerial imagery, Ordnance Survey (OS) maps and Geographical Information Systems (GIS) to identify suitable features for bats.

A desktop study was carried out for European statutory designations for bats within 2km of the proposed Scheme, using Defra Magic Map Application<sup>5</sup>.

A review of the Defra Magic Map Application was also completed to identify Natural England European Protected Species (EPS) Licences issued for bats within 2km of the proposed Scheme.

## 3.3 Surveyors Experience

Lee Rudd of Connected Ecology is a principal ecologist with over 14 years of professional bat experience. He is a member of the Chartered Institute of Ecology and Environmental Management (MCIEEM) and is working under the current Natural England licences 2023-11646-CL17-BAT and 2023-65470-SCI-SCI. Lee also holds a barn owl disturbance licence (2023-11488-CL29-OWL).

Gintare Daunoraviciute is a trainee surveyor with two years of experience.

# 3.4 Field Surveys

A walkover survey of the proposed Scheme was carried out by Lee Rudd on 17 September 2023 to observe, assess and record any habitats suitable for bats to roost, commute, and forage on site and in the surrounding area (i.e., Zol). Connectivity of habitats and how the proposed Scheme would affect them was also recorded. This preliminary ecological appraisal for bats was carried out following the latest professional guidance as shown in Table 1. All potential roosting habitats within the boundary of the proposed Scheme were assessed and investigated.

A review of the Defra Magic Map Application was also completed to identify any other previously issued Natural England European Protected Species (EPS) Licences and priority habitats within 2km of the proposed Scheme.

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<sup>4</sup> CIEEM Guidelines for Ecological Impact Assessment in the UK and Ireland. <a href="https://cieem.net/resource/guidelines-for-ecological-impact-assessment-ecia/">https://cieem.net/resource/guidelines-for-ecological-impact-assessment-ecia/</a> (Accessed on 17 November 2023).

<sup>&</sup>lt;sup>5</sup> Defra Magic Map Application: <a href="https://magic.defra.gov.uk/MagicMap.aspx">https://magic.defra.gov.uk/MagicMap.aspx</a>. (Accessed on 17 November 2023).

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Table 1. Guidelines for assessing habitat suitability for commuting and foraging bats. Extracted and adapted from 'Bat surveys for professional ecologists' <sup>6</sup>.

Suitability	Commuting and foraging habitats
Negligible	Negligible habitat features on site that are likely to be used by commuting or foraging bats.
Low	Habitat that could be used by a small number of commuting bats such as a gappy hedgerow or unvegetated stream, but isolated, i.e., not very well connected to the surrounding landscape by other habitats.
	Suitable, but isolated habitat that could be used by a small number of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.
Moderate	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	Continuous, high-quality habitat that is well connected to the wider landscape, which is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees and woodland edge.
	Continuous, high-quality habitat that is well connected to the wider landscape, which is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses, and grazed parkland.
	Site is close to and connected to known roosts.

Lee Rudd undertook the preliminary roost assessment on the 17 September 2023, which involved a detailed inspection of the exterior and interiors of the building within the footprint of the proposed Scheme. Checks were carried out for any potential entry/exit points of features that could accommodate roosting bats. The roost suitability assessment was undertaken in line with the guidance provided in Table 2. The level of suitability dictates what further survey effort is required. Negligible or low suitability features may require no further survey effort, whilst moderate to high will require further checks. The required level of survey effort is shown in Table 3 and follows the professional guidance to give confidence in a negative result.

Search for signs of bats was carried out concurrently with the assessment. Evidence of bats' presence includes droppings, moth wings, entrance scratches/markings, staining and/or odour. Searching for evidence of bats can involve using specialist equipment, which is listed within the Section 3.4.1.

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<sup>&</sup>lt;sup>6</sup> Collins. Bat Surveys for Professional Ecologists: Good Practice Guidelines 3<sup>rd</sup> Edition. <u>Bat Surveys for Professional Ecologists: Good Practice Guidelines 3rd edition - Guidance for professionals - Bat Conservation Trust</u> (Accessed on 17 November 2023).

Table 2. Guidelines for assessing roosting habitats within structures taken from Collins, 2016. Extracted and adapted from 'Bat surveys for professional ecologists' 6.

Suitability	Roosting habitats
Negligible	Negligible habitat features on site likely to be used by roosting bats.
Low	Contains 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 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).
Moderate	Contains one or more potential roost sites that could be used by bats due to their size, shelter, protection, condition and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only – the assessment in this table is made irrespective of the species conservation status, which is established once presence is confirmed).
High	Contains one of more potential roost sites that are obviously suitable for use by larger numbers of bats on a regular basis and potentially for longer periods of time due to their size, shelter, protection, condition and surrounding habitat.

Table 3. Guidelines for a minimum number of survey visits for presence/absence surveys. Extracted and adapted from 'Bat surveys for professional ecologists' and Bat Conservation Trust Interim Guidance Note.

Low Roost suitability	Moderate roost suitability	High roost suitability
One visit.	Two separate survey visits.	Three separate survey visits.
One dusk emergence.	One dusk emergence and a further dusk or dawn re-entry survey.	Two dusk emergence and a further dusk or dawn re-entry survey.

### 3.4.1 Equipment and Data Analysis

#### **Preliminary roost assessment**

Ecologist Lee Rudd carried out the checks for bats using several types of equipment, which included a powerful torch (with red filter), head torch (with interchangeable red filter), extendable mirror, close-focus binoculars and an endoscope. A ladder was used to gain access to potential features higher up to confirm their suitability and to check for signs of bats. A measuring device was used to determine the size and position of any potential access points and feature dimensions.

## Bat roost emergence survey

Each surveyor had a hand-held bat detector (Surveyor A had an Anabat Walkabout and Surveyor B had a EM2 pro), hand-held portable transceiver and a head torch. In addition, a temperature logger was used.

Supplementary equipment included:

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<sup>&</sup>lt;sup>7</sup> Bat Conservation Trust. Interim Guidance Note May 2022: Use of night vision aids for bat emergence surveys and further comment on dawn surveys (*Accessed on 17 November 2023*).

- Sony 4k AX53 night vision camera with additional lighting, including a pair of supporting 12W infrared floodlights and a Nightfox 5W spotlight (x4)
- Set of Nightfox Whisker night vision binoculars and a Nightfox 5W spotlight (x1)
- Nightfox red HD infrared night vision googles (x1)

#### Data analysis

Sound recordings made during surveys were analysed using AnalookW and Kaleidoscope software and standard parameters for species identification<sup>8</sup>. Video footage was reviewed in real time.

## 3.5 Survey Timing

The preliminary roost assessment was carried out on 17 September 2023 by Lee Rudd and Gintare Daunoraviciute.

Two roost emergence surveys (dusk) were undertaken by surveyors Lee Rudd and Gintare Daunoraviciute during September and October 2023. Both visits were carried out during suitable weather conditions and appropriate time of the day, as detailed in Table 4 below.

Table 4. Survey timings and weather conditions

Date	Sunset	Start/Finish	Weather conditions
22 September 2023	18:56	18:41 – 20:26	Light rain recorded within 24 hours of survey.  Start temperature 12 °C, gentle breeze. 35% cloud cover. No rain recorded during or immediately prior to survey.  End temperature 11 °C. 0 % cloud cover.
7 October 2023	18:21	18:06 – 19:51	Start temperature 21 °C, gentle breeze. 90% cloud cover. No rain recorded during or immediately prior to survey.  End temperature 19 °C. 100 % cloud cover.

#### 3.6 Deviations, Constraints and Limitations

Surveys were carried out in line with the professional guidance provided in the Bat Surveys for Professional Ecologists<sup>6</sup>. There was good access across the site including the building.

The exception to the above was restricted access in the room pace of building 2 and no access to the roof space of building 5.

In addition, the bat survey window runs between May – September inclusive. Any survey visits outside of this window may not reflect the true levels of bat activity in the area. However, September and October 2023 saw unusually warm weather conditions, and therefore the timing of the second survey visit is not considered to be a limiting factor in determining the likely absence of roosting bats in the building. This is further substantiated by the lack of evidence of bats identified during the building inspection.

It is therefore considered there are no limitations or constraints with the data collected.

<sup>&</sup>lt;sup>8</sup> Russ (2012). British Bat Calls: A Guide to Species Identification (Bat Biology and Conservation). Pelagic Publishing.

# 4. Results

### 4.1 Local Context

The survey covered the complex of the building that make up Elmswell Tavern, which is proposed to be renovated and extended (Appendix A: Drawings). The Elmswell Tavern is currently used as a food bank that serves the local community.

The walkover survey extended beyond the barn complex in line within Preliminary Ecological Appraisal walkover within the boundary of the land ownership (see Appendix B: Figure 1-3). Photographs are provided within Appendix C.

## 4.2 Desktop Survey Results

#### 4.2.1 Protected Sites

There are no statutory designated sites of ecological interest within 1km of the proposed Scheme. There is one designated site approximately 1.4km to the west of the proposed Scheme Error! Bookmark not defined.

The designated site is Norton Wood a Site of Special Scientific Interest (SSSI). It is approximately 24 hectares in extent and comprises of ancient woodland. The structure of the woodland is predominantly coppice-with-standards with a large proportion of the wood containing semi-natural stands.

The woodland is primarily acid pedunculate oak (*Quercus robur*), hazel (*Corylus avellana*), common ash (Fraxinus excelsior) woodland with abundant birch (*Betula pendula*). There are also areas of wet woodland which include common ash, maple (*Acer campestre*) pedunculate oak and hornbeam (*Carpinus betulus*).

The ground flora is rich and includes Ramsons (*Allium ursinum*), Herb Paris (*Paris quadrifolia*) and Nettle-leaved Bellflower (*Campanula trachelium*). Oxlip (*Primula elatior*), a scarce species at the edge of its range, is locally abundant. The rides have recently been widened and the waterlogged soils provide suitable conditions for a number of wetland plants including Devil's-bit Scabious (*Succisa pratensis*), Skullcap (*Scutellaria galericulata*), Meadowsweet *Filipendula ulmaria* and Marsh Thistle (*Cirsium palustre*).

The majority of the woodland was assessed by Natural England in 2010 to be in a favourable condition, but high threat risk of decline.

Due to the location of the site and its designation, it is not considered that the proposed Scheme would influence the condition of the SSSI. Therefore, the proposed Scheme will not influence any designated sites, and will not be considered any further within this report.

#### 4.2.2 Bat Records

There are no records of European Protected Species (EPS) licences covering bats within 2km of the proposed Scheme within the past ten years.

#### 4.3 Field Results

The different sections of the building that make up Elmswell Tavern is the only building identified within the walkover survey. Amongst identified primary habitats are areas of grassland and scattered trees.

#### 4.3.1 Elmswell Tavern

The tavern has been extended multiple times over the years. The tavern complex has been divided into five main sections for the purpose of referencing and accounting for the ecological value of each section within this report (see Table 5 & Appendix B: Figure 2 & 3).

Table 5. Elmswell Tavern building references, descriptions, comments and bat features

Building #	Description	Comments	Bats
B1	A single storey brick built building with a pitched roof which is covered with clay pantiles. There is felt underlay.	Modern timber work. The roof space is in good condition, with no sagging underlay. The soffit/fascia are in a state of decay. Lifted lead flashing.	Suitable access points under lifted lead flashing and where the soffit/fascia is damaged on south aspect providing access to roof space. No signs of use due to cobwebs and debris. Very little gaps under pantiles, due to being infilled with cement.
B2	Two storey brick built building with a pitched roof covered with clay pantiles (ref B2A). To the east there is a single storey extension, with is covered in slate tile (ref B2B). There is felt underlay in both sections.	B2A: There are slipped pantiles and lifted lead flashing. The soffit/fascia are in a state of decay. Areas of damaged underlay. Evidence of squirrel/rat damage.  B2B: Roof is in good condition. The roof space is very cluttered with timber work and stored belongings. The ceiling has been lowered in recent years.	B2A: Suitable access points under lifted lead flashing and where the soffit/fascia is damaged on south aspect providing access to roof space.  B2B: Suitable access points where soffit is not fitted tight to wall, although mostly cobwebbed. Roof space is very cluttered. Where it was possible to see to rafters, there was a significant build up of cobwebs.
B3	Two storey brick built building with a pitched roof covered in clay pantiles (B3A). There is a sarking under the pan tiles. There is a single storey extension with a flat roof, covered in bitumen felt (ref B3B). There is a cellar in the basement, where there is current access to the west from the carpark.	B3A: There are slipped pantiles and lifted  lead flashing. The soffit/fascia are in a state of decay. Evidence of squirrel/rat damage  B3B: Appears in good order. Tight fitting bitumen to roof and tied into adjoining sections B3A and B5.	B3A: Suitable access points under lifted lead flashing and where the soffit/fascia is damaged on south aspect providing access to roof space. No signs of use due to presence of cobwebs and debris. Very little gaps under pantiles due to being infilled with cement. Missing mortar in brickwork above entrance on west aspect. Gaps under barge board on south gable.  B3B: No suitable access points. Limited void due to roof design.
B4	A single storey brick built building with a corrugated cement roof. Possible low grade asbestos. There is no felt underlay.	Timber cladding on south and west face of building. Very dense ivy growth on majority of building. Ivy has also taken over the roof space.	Suitable access points under lifted lead flashing, corrugated ridge and between brick wall and corrugated roofing. Various gaps in damaged timber including damaged barge board on north gable.
B5	A single storey brick building with a pitched roof, covered in clay pan tiles. There is timber cladding on the southern aspect of the building.	Slipped pan tiles and damaged ridge tile.	Suitable access points under lifted timber cladding on north gable. Also under lifted lead flashing on chimney and damaged pantile. Gap through damaged barge board free of cobwebs. Gaps between rafter and tiles on north gable.

#### 4.3.2 Bat Evidence and Suitability

There was no evidence of bats recorded in any section of the building within the footprint of the proposed Scheme. There was evidence of rat and squirrel within building 3. The suitability of each section of building is provided below in table 6, along with any access constraints and incidental records.

Table 6. Summary of suitability for roosting bats

Building #	Suitability <sup>6</sup>	Evidence of Bats	Surveyor Access Constraints & Incidental Records
B1	Low	None	None.
B2A	Moderate	None	Could not access north section of roof space beyond chimney due to health and safety reasons. Rotten timbers and restricted access.
B2B	Low	None	Not able to access roof space. Could see the old ceiling once through loft hatch, preventing access to rest of roof space. The void between the "ceilings" is used for storage.
ВЗА	Moderate	None	No constraints. Evidence of squirrel feeding remains and rat damage. Squirrel seen accessing roof during survey visit.
ВЗВ	Negligible	None	None.
B4	Low	None	None.
B5	Moderate	None	No access to roof space.

Overall, the tavern provides a number of potential roost sites that could be used by bats.

#### 4.3.3 Commuting and Foraging Habitats

The walkover survey identified suitable habitats for both commuting and foraging bats (see Figure 2 & 3). Suitable commuting habitats included boundary features such as trees and linear features (brick walls and fences), which will not be affected by the proposed Scheme. The stand of dense ivy (ref TN2), trees (ref T1 & T2) and areas of grassland provide suitable foraging resources for bats. The grassland areas provide limited value for foraging bats due to its current management regime, which will affect the amount of foraging resources it supports (i.e. insects). Overall, the site provides low suitability for commuting and foraging bats.

Optimal habitat for foraging bats was identified to the south of the proposed Scheme in the form of grassland, scrub and trees.

Along with the removal of the dense ivy (TN2) there will also be approximately 450m<sup>2</sup> of grassland (ref G1 & G2) lost as a result of the proposed Scheme to make way for additional parking and building works.

Without mitigation measures in place, there will be a small loss of suitable foraging resources on site.

#### 4.3.4 Dusk Emergence Surveys

The results for each survey visit and surveyor is provided below, with illustrated information provided within Appendix B: Figure 3.

No bats were observed to emerge from any section of the building by either surveyor or camera.

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### 22 September 2023

### Surveyor A

The first bat of the evening was a single common pipistrelle bat (*Pipistrellus* pipistrellus) which was recorded foraging by the oak tree (ref T3) by School Road at 19:34. This was at approximately 40 minutes after sunset. It then continued to fly along the eastern boundary of the site, and headed south towards the area of scrubland and tree cover, to the south of the proposed Scheme.

A common pipistrelle was heard again, but not seen at 19:48.

#### Surveyor B

A single common pipistrelle bat was recorded at 19:35. It was seen flying from the north and headed south, towards the area of scrubland and tree cover to the south of the proposed Scheme.

A noctule (Nyctalus noctula) bat was heard, but not seen at 19:56.

#### Summary

There was a total of two common pipistrelle passes on or immediately adjacent to the site boundary during the entire survey. There was also a brief pass by a single noctule. No bats were seen to emerge from any features on site, and all bat activity was recorded after the typical time of emergence for the species recorded. No other bats were seen or heard during the survey by either surveyor.

#### 7 October 2023

### Surveyor A

A faint call of a common pipistrelle was heard briefly, but not seen at 19:04. This was approximately 43 minutes after sunset. It was likely to the south of the proposed Scheme.

At 19:07 and 19:21 there was a faint and brief pass of a noctule bat. It was not seen on either occasion.

#### Surveyor B

The first bat of the evening was a single common pipistrelle bat at 18:56, which was heard not but seen. It was likely to the south of the proposed Scheme. A further faint and brief call of a common pipistrelle bat was recorded at 19:04.

A single noctule bat call was recorded at 19:21. It was not seen.

At 19:26, a common pipistrelle bat was seen flying along School Road then flew south, to the west of the proposed Scheme across the residential gardens. A faint and brief call of a common pipistrelle was recorded at 19:36. It was not seen and was likely to the south of the proposed Scheme.

#### Summary

There was a single common pipistrelle pass immediately adjacent to the site across the entire survey along with three distant calls. There was also a brief pass by a single noctule. No bats were seen to emerge from any features on site, and all bat activity was recorded after the typical time of emergence for the species recorded. No other bats were seen or heard during the survey by either surveyor.

# 5. Discussions

An internal and external inspection of the tavern was carried out on 17 September 2023. There were no trees with suitable features for roosting bats identified during the walkover. There were suitable features for bats across the tavern, but there was no evidence of bats recorded. It was not possible to fully explore the roof space of B2 and there was no access into the roof space of building B5. Otherwise, access was good.

There are multiple locations across the tavern where bats could roost and overall the tavern is assessed as having moderate suitability for roosting bats. Therefore, two emergence surveys were recommended and subsequently carried out, to confirm presence or likely absence of bats. There was very little bat activity recorded on or immediately adjacent to site, despite suitable condition during the survey visits. It is considered bats were likely absent at that time. However, because of the building's suitability and the presence of a low number of bats in the area, the building could be used by a low number of bats in the future.

Mitigation is required to compensate for the losses due to the proposed works and to account for any bats that may choose to use the tavern prior to works being carried out. It may, if unmitigated, lead to the disturbance, injury and/or killing of a bat. Therefore, works will be carried out under a Precautionary Bat Method Statement, which is provided in Section 6.

Without mitigation measures in place, there would also be a small loss of suitable habitats for bats, namely, the stand of dense ivy and areas of grassland (approximately 450m²). The planting of selective trees along the boundaries of the site would both compensate and further enhance the site for bats, by providing overall more foraging habitat and improved cover for commuting bats.

Consideration of foraging and commuting bats in the local vicinity is also required. Light pollution can significantly affect the way bats use the space. All lighting should be installed in accordance with Bats and Lighting in the UK, Bats and the Built Environment Series<sup>9</sup>. Temporary lighting associated with construction works should be sensitively designed. Lighting should be of the lowest luminosity necessary for safe delivery of works and on-site security. It should be designed, positioned, and directed to reduce the intrusion into adjacent habitats. As a minimum, any external security lighting should be set on motion-sensors and short (1min) timers. The inclusion of baffles, hoods or louvres should be used to reduce light spill and direct it only to where it is needed.

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<sup>&</sup>lt;sup>9</sup> Bat Conservation Trust. Guidance Note. Bats and Artificial Lighting in the UK. Bats and the Built Environment Series. <u>Guidance Note 8 Bats and Artificial Lighting | Institution of Lighting Professionals (theilp.org.uk)</u> (Accessed on 17 November 2023).

# 6. Mitigation Methods

Precautionary Bat Method Statement

As a result of the proposed Scheme, there will likely be a loss of roosting features for bats. Therefore, three bat boxes are recommended to compensate for the losses. Compensation bat boxes must be installed prior to the commencement of construction works as required by the UK Bat Mitigation Guidelines¹0. Bat boxes should be wall mounted and of a type that does not encourage access by birds. Access apertures should be ≤17mm. Boxes should be installed at least 3m above the ground, ideally 4m above ground. An example box would be Beaumaris Woodstone Bat Box¹¹, which is ideal for crevice dwelling bats, such as pipistrelle bat species, which are the species most likely to use the tavern. Where it is not possible to install them onto the building, bat boxes can be installed on trees. An example box would be 2F Schwegler Bat Box¹².

Boxes should be installed on a south-easterly to south-westerly aspect and away from any artificial light sources<sup>13</sup>. The ideal location would be on the south gable of building 2.

A further bat box should also be integrated into the southern extension, towards the apex of the southern gable end. Integrated boxes that are built into the wall of the building have the advantage of offering a secure permanent space for bats, with little need for maintenance14. An example box could be the lbstock Enclosed bat box provided by NHBS15.

Once the contractor has been appointed and the working methods agreed, this will have to be provided in writing to the local planning authority. As a minimum, all suitable features for bats must be soft stripped under the supervision of a licenced bat ecologist before they are disturbed by construction works.

Prior to undertaking any construction works, a pre-construction check is required to ensure that no evidence of bats is present. Any suitable roost features must be inspected with an endoscope and torch (with red filter) by a licenced bat ecologist. The check also includes looking for any evidence of a bat roosting within the building (i.e. droppings are present). The check must be done within 48 hours of any construction works commencing.

Prior to undertaking any construction works, a toolbox talk has to be provided to the construction team. The subjects covered will include the building being suitable for bats and that prior to any construction works, an inspection by a licenced bat ecologist is required to confirm that no bats are present. A toolbox talk poster will also be provided, which will include photographs of bats, with scale. Legislation covering bats will be discussed in brief, so that the construction team understand that bats are protected and it is against the law to cause disturbance, injury or killing of bats. It will also provide instructions on what to do if a bat is discovered. The licenced bat ecologist's contact details will be added on the poster. Following the toolbox talk and issuing the site poster, all workers will have to sign the record of attendance document (see Section 8: record of attendance). At this time, the key contact information will also be collected and shared with the wider team. Key contact details will be collected from the following: Project Manager, Site Foreman and Licenced Bat Ecologist.

Where there are delays between construction works of more than a week, a further pre-construction check is required. This is to ensure that during the period of no disturbance, bats have not moved in.

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<sup>&</sup>lt;sup>10</sup> UK Bat Mitigation Guidelines: <u>Bat-Mitigation-Guidelines-2023.pdf (cieem.net)</u> (Accessed on 17 November 2023).

<sup>11</sup> Beaumaris Woodstone Bat Box: <u>Bat Boxes | Practical Conservation Equipment | NHBS</u> (Accessed 17 November 2023).

<sup>&</sup>lt;sup>12</sup> 2F Schwegler Bat Box: <u>2F Schwegler Bat Box - Bat Boxes | Green-tech</u> (Accessed 17 November 2023).

<sup>&</sup>lt;sup>13</sup> Bat Box Information Pack: <u>Bat Box Information Pack May 2018[1] (bats.org.uk)</u> (Accessed 20 November 2023).

<sup>14</sup> Bat Boxes: External ready-made & integrated bat boxes - Bat Boxes - Bat Conservation Trust (bats.org.uk) (Accessed on 20 November 2023).

<sup>&</sup>lt;sup>15</sup> Integrated bat boxes. Integrated Bat Boxes | NHBS Practical Conservation Equipment (Accessed on 20 November).

Elmswell Tavern. Preliminary Bat Roost Assessment and Survey Report.

If a bat is discovered during the pre-construction check, all works must cease until otherwise covered by a Natural England licence (see Appendix D: Bat Legislation).

Any bats that are encountered during the construction works, where they cannot be left in situ, have to be captured by the licensed bat ecologist and either cared for appropriately in a ventilated box or transferred to a bat box located on site.

# 7. Bat Risk Assessment

Each of the offences will be detailed in Table 7, below, along with the risk of that offence occurring with and without mitigation measures in place. The risk of the offence taking place will be rated as either highly unlikely, unlikely, possible, likely or highly likely.

As the features can be fully explored, it is not considered there should be any seasonal constraints imposed on the pre-work check as the check can confidently confirm if bats are absent or not.

Table 7. Bat Site Specific Risk Assessment.

Offence	Site Specific Risk (i.e., hazards)	Risk (without mitigation)	Mitigation control measures	Residual risk (with mitigation)			
Destruction of a roost (absolute)	There are multiple access points for bats to enter the tavern.  There is an overall suitability of moderate to support roosting bats.	Unlikely	A pre-work check is required to confirm the absence of a bat roost immediately prior to any works associated with the proposed Scheme being carried out.  Supervision by a licensed ecologist to block or modify all suitable features for bats following confirming there is no additional evidence of bat presence.  Toolbox talk provided by licensed bat ecologist to contractors onsite.  If any additional evidence of a bat or bat roost is recorded during the pre-work check, then all works will cease and the appropriate licence applied for.	required to confirm the absence of a bat roost immediately prior to any works	required to confirm the absence of a bat roost immediately prior to any works	required to confirm the absence of a bat roost immediately prior to any works	Highly unlikely
Injure or kill a bat	No roost were identified in September or October 2023 during the internal inspection or emergence surveys. However, the tavern could support a low conservation status roost in the future.	Unlikely		Highly unlikely			
Intentionally or recklessly disturb a bat at a roost	If works are not carried out within 12 months of the last bat survey (7 October 2023) then a further emergence survey is required, to confirm the bat status of the	Unlikely		Highly unlikely			
Intentionally obstructing access to a roost	building has not changed. This is because bats are a highly mobile species, that are present in the local vicinity.	Unlikely		Highly unlikely			
Possess, control, transport, sell or exchange or offer for sale.		Unlikely		Highly unlikely			

# 8. Responsible Persons and Auditing

There must be accountability and traceability to ensure that no offence is committed. Therefore, all responsible persons delivering the proposed Scheme must be identified and signed up to the Precautionary Bat Method Statement. Table 8, below, should be updated once their details are known.

Table 8. Contact Information.

Position	Full Name	Email	Phone
Project Manager	TBC	TBC	TBC
Licensed Bat Ecologist	TBC	TBC	ТВС
Site Foreman	TBC	TBC	ТВС

Table 9, to be signed off by all staff to confirm they have read the Precautionary Bat Mitigation Method Statement and that they have received the toolbox talk.

Table 9. Record of Attendance.

Full Name	Position	Date	Signature

# 9. Conclusions

The proposed Scheme will not affect any statutory designated sites.

A pre-work check is required to confirm the absence of a bat roost immediately prior to any works associated with the proposed Scheme being carried out. Supervision by a licensed ecologist to block or modify all suitable features for bats following confirming there is no additional evidence of bat presence. Toolbox talk provided by licensed bat ecologist to contractors onsite.

The loss of suitable features for roosting bats in the tavern will be compensated through the provision of three bat boxes. These will be installed prior to any construction works commencing. The bat boxes will be installed in suitable safe locations to provide safe and sheltered places for bats to roost in the future

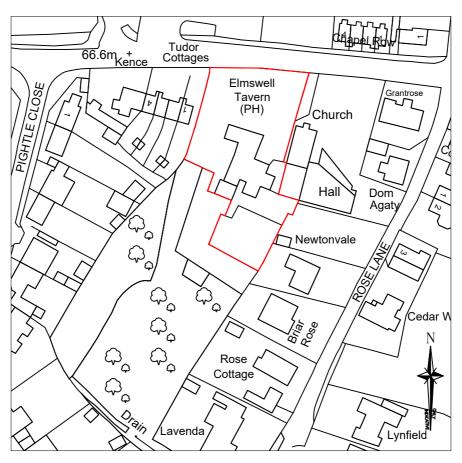
In addition to providing the compensation boxes, it is recommended that an integrated box is installed upon completion of the southern extension. This will provide a secure maintenance free box. With the addition of planting of trees along the boundary of the site, there will be an overall conservation gain for bats, with the increased provision of foraging and commuting habitats on site.

If recommendations within this report are followed, the proposed Scheme will provide a conservation gain for bats.

It is considered that bats are likely absent at present and that it would be limited to a low number of bats who may choose to opportunistically use it in the future. If evidence of roosting bats is recorded during the pre-works check, then works must stop, until otherwise carried out under a European Protected Species (EPS) Licence or a Low Impact Class Licence (LICL).

Squirrels (*Sciurus carolinensis*) were confirmed to use the building during the internal inspection and the emergence surveys. During the pre-construction check for bats, a check will also be made for squirrels, in case of a squirrel present within the building, it will be encouraged to leave unless with dependent young, where works will not progress in that particular section until the squirrel and young have left on their own accord.

# Appendix A. Drawings



Site Location Plan (1:1250)



CLIENT

# Elmswell Parish Council

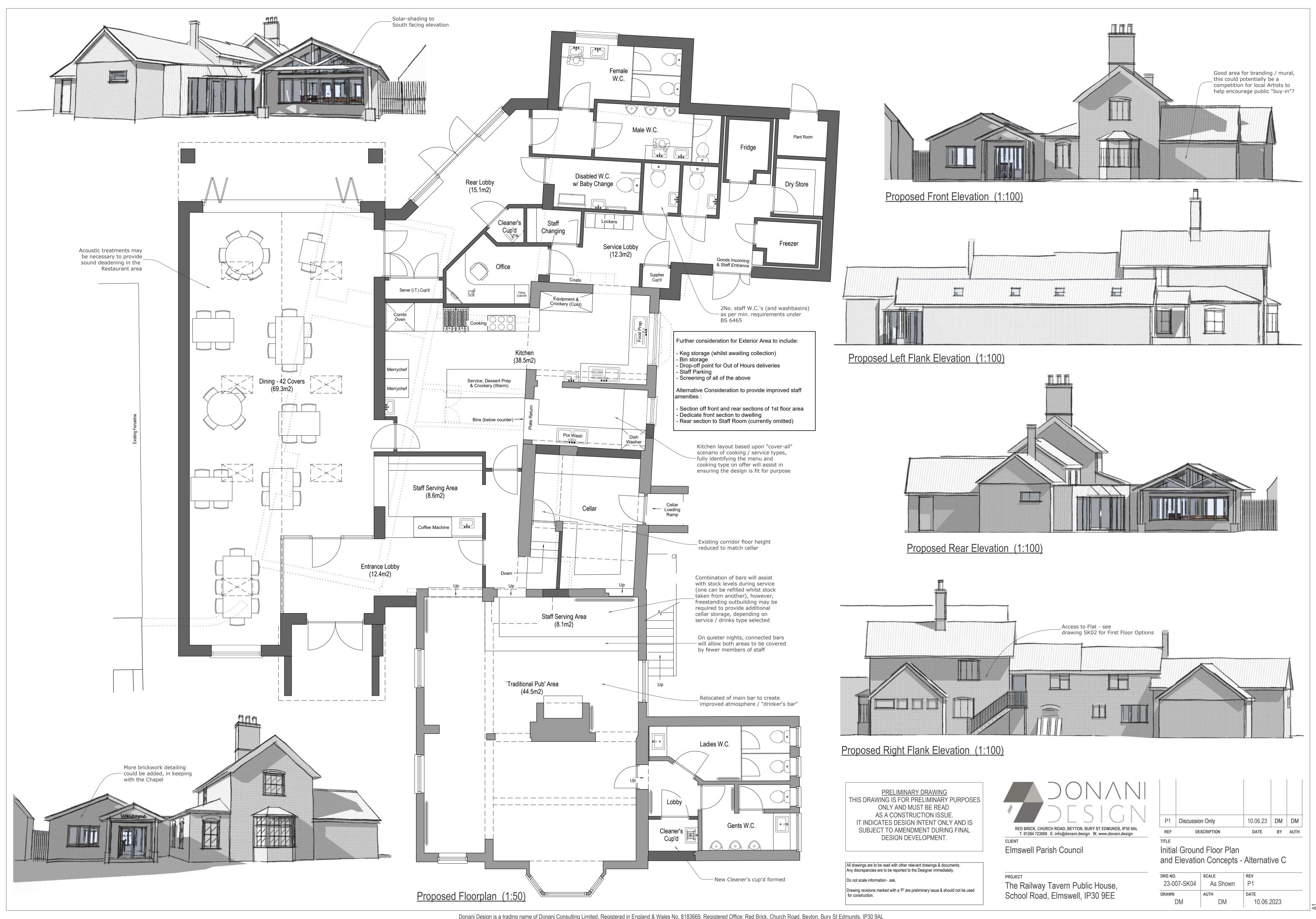
The Tavern Public House, School Road, Elmswell, IP30 9EE

REF	DESCRIPTION	DATE	BY	AUTH
_	-	_	-	-

TITLE

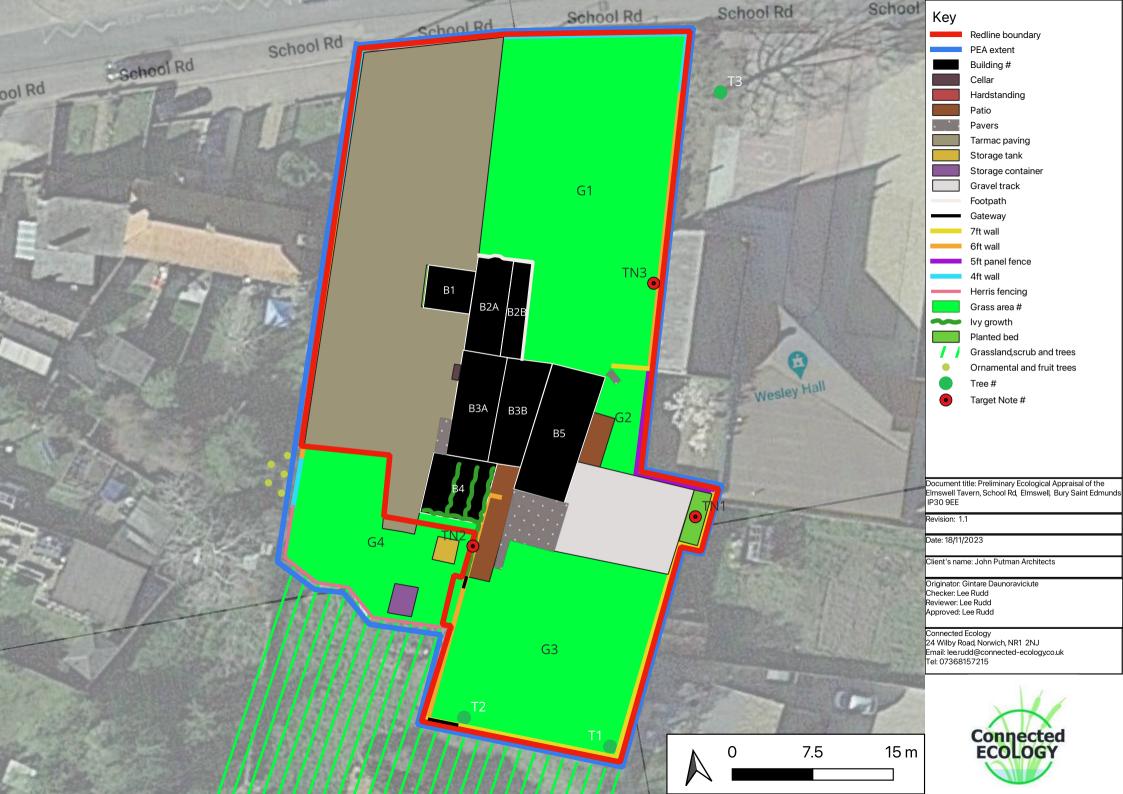
# Site Location Plan

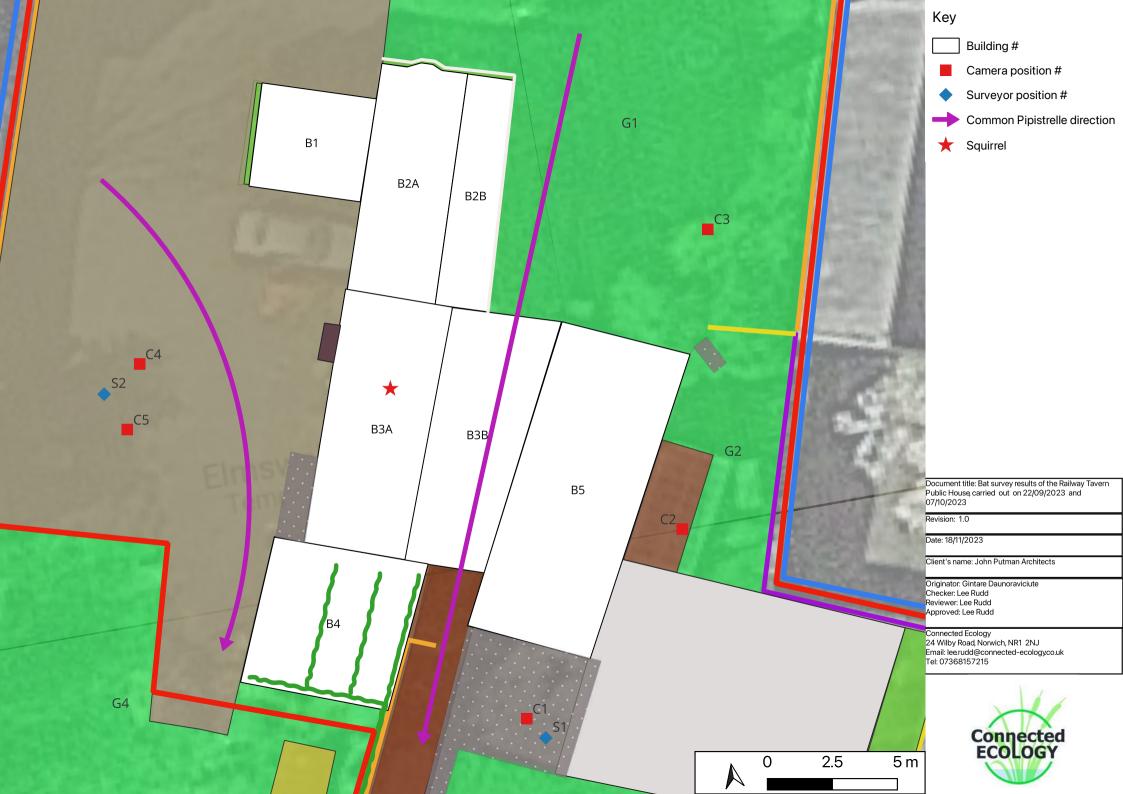
DRG NO. 23-007-Plans	SCALE As Shown	REV P1	RED BRICK CHURCH ROAD, BEYTON BURY ST EDMUNDS IP30 9AL T. 01284 723000 E. info@donani.design W. www.donani.design	
DRAWN DM	AUTH DM	04.07.2023		



# Appendix B. Figures







# Appendix C. Photographs



Photo 1. Building 1 as outlined in red. North east aspect.



Photo 2. Building section 1. Rear of building, adjoining to building section 2 (ref B2A).



Photo 3. Interface between building section 1 and building section 2. Gap under lead flashing. Shows most of gaps under pantiles as being infilled with mortar. All gaps here, were cobwebbed.



Photo 4. Interface between building section 1 and building section 2. Gap under lead flashing and damaged soffit/fascia. Evidence that this section of the building was recently covered in a climbing plant.

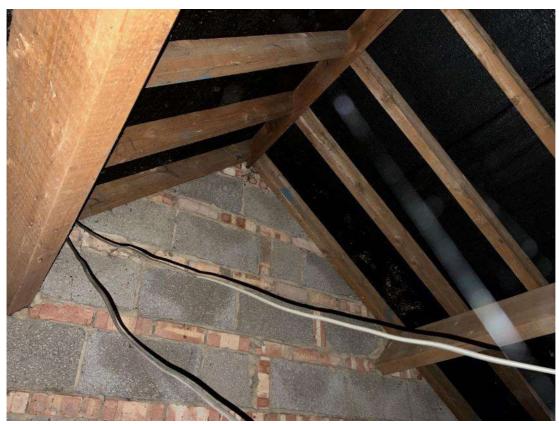


Photo 5. Building section 1. Shows modern timber work, block work and roof lined with felt. North end of roof space.



Photo 6. Building section 1. South end of roof space. No access points between building section 1 and section 2.



Photo 7. Building section 2 (ref B2A). Shows some slipped pan tiles as outlined in red. Evidence that this part of the building was covered with a climbing plant. This has caused damage to the fascia, soffit and under felt.



Photo 8. Building section 2 (ref B2A). Close up of roof as shown in photo 7. Shows missing mortar under ridge tiles as shown in red.



Photo 9. Building section 2 (ref B2A and B2B). Shows evidence of climbing plant on side of section B2A. Section B2B is identified by the red outline.



Photo 10. Building section 2 (ref B2A and B2B). Section B2A is outlined in red.



Photo 11. Building section 2 (ref B2A). Interval view of roof space. Shows damaged under felt and fire wall between section B2A and B3A. Taken from loft hatch.



Photo 12. Building section 2 (ref B2A). Shows north end of roof space behind chimney stack.



Photo 13. Building section 2 (ref B2A). Likely evidence of squirrel damage. A squirrel has been seen to enter the roof space of section 3 on multiple occasions during the survey visits.



Photo 14. Building section 3 (ref B3A). East aspect of building.



Photo 15. Building section 3 (ref B3A). West aspect of building. Extent of section 3 is outline in red. Cellar hatch and loading ramp is identified in blue.



Photo 16. Building section 3 (ref B3A). Shows gap under lead flashing where section B3A adjoins section B2A as identified by red circle. Most of the gaps beneath the pan tiles are all mortar filled. West aspect.



Photo 17. Building section 3 (ref B3A) adjoining section B2A. East aspect. Recommended location of bat boxes as outlined in red.



Photo 18. Building section 3 (ref B3A). Roof space. Shows old timber work and sarking underlay.

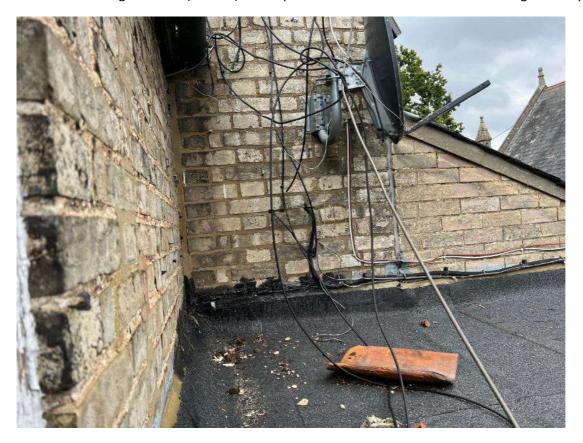


Photo 19. Building section 3 (ref B3B). Shows flat roof of section B3B adjoining eastern aspect of section B3A.



Photo 20. Building section 3 (ref B3B). Shows flat roof of section B3B adjoining section 5 (ref B5).



Photo 21. Building section 4 (ref B4). Outline of building shown in red. Shows western access point and timber cladding. There is a corrugated cement roof.



Photo 22. Building section 4 (ref B4). Shows section 4 adjoining section B3A. Most of the roof is covered in dense ivy growth (ref TN2).

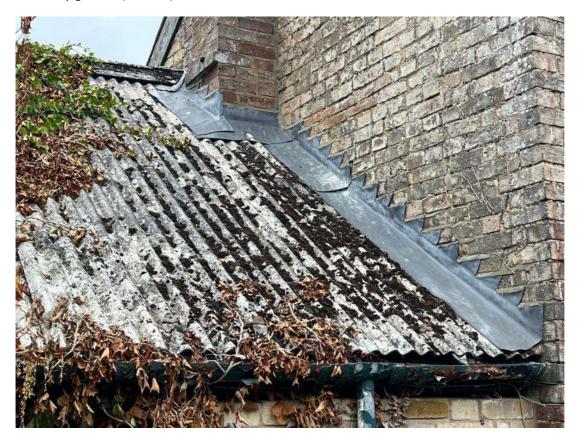


Photo 23. Building section 4 (ref B4). Shows gaps between roofing material and brick work. There are also gaps under corrugated ridge.

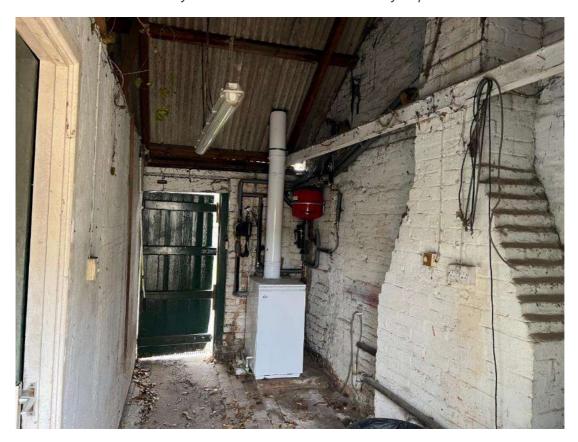


Photo 24. Building section 4 (ref B4). Internal view, looking towards western access point. Shows no underlay material.



Photo 25. Building section 4 (ref B4). Internal view, looking towards southern gable. Shows dense ivy growth within roof space and exposed corrugated sheeted roof.

Photo 25. Building 5. Shows eastern and southern aspect of building. Taken from within gravelled and seating area.



Photo 25. Building section 5. Shows eastern and southern aspect of building. Taken from within gravelled and seating area.



Photo 26. Building section 5. Shows eastern aspect of building along with pergola and patio area. Red circle outlines damaged ridge tile.



Photo 27. Building section 5. Shows close up of damaged ridge tile identified in photo 26.

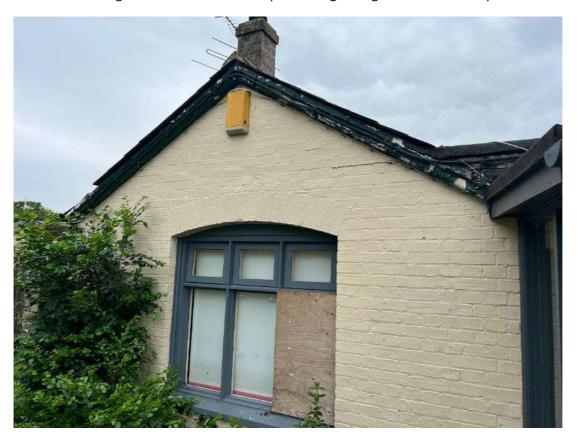


Photo 28. Building section 5. Shows northern gable end.



Photo 29. Building section 3 and section 5. Shows section 5 slated roof as outlined in red.



Photo 30. Cellar at base of section 3. Looking north.

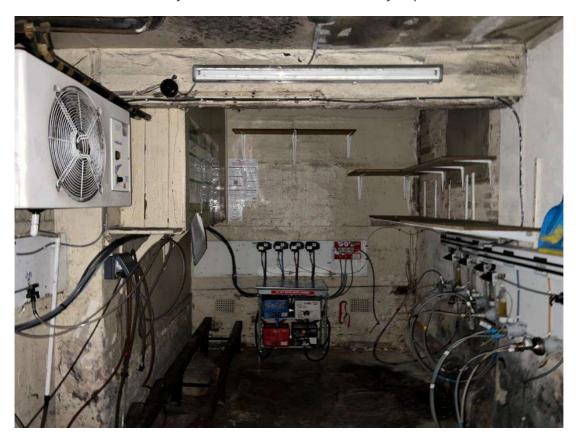


Photo 31. Cellar at base of building 3. Looking south.



Photo 32. Pergola and patio area adjacent to section 5. Also shows 6ft fence alongside grassland area 2 (ref G2).



Photo 33. Shows gravelled area with benches to the rear of the site. Grassland area 3 (ref G3), hazel stools (T1 & T2) along southern brick wall and eastern brick wall are also shown.



Photo 34. Shows concrete pathway along the front of the tavern (ref B2A), alongside grassland area 1 (ref G1).



Photo 35. Shows grassland area (ref G4) in foreground, with extensive area of tarmac providing vehicle access and parking for the tavern. Looking north.



Photo 36. Taken from the road, looking at extensive area of tarmac, providing access and parking for the tarvern. Grassland area 1 along with metal railings are also shown. Section 1 is shown in red, section B2A is shown in blue and section B2B is shown in purple.



Photo 37. Shows brick wall alongside road and grassland area 1. The oak tree (T3) on the adjacent land is also shown.



Photo 38. As per photo 37. Shows oak tree (T3) and evidence the play area is well used.



Photo 39. Shows south eastern corner, where ancient hazel stool (ref T1) exists alongside brick wall boundary. Also shows short grass sward in grassland area 3.



Photo 40. Taken alongside internal brick wall boundary to south of garden. Shows dense ivy growth at rear of section 4 (ref TN2).



Photo 41. Shows grassland area 4 along with storage containers, brick walls and corner of section 4.



Photo 42. Camera set up 1 at north of tavern.



Photo 43. Camera set up 5 to west of tavern.



Photo 44. Camera set up 4 to west of tavern.

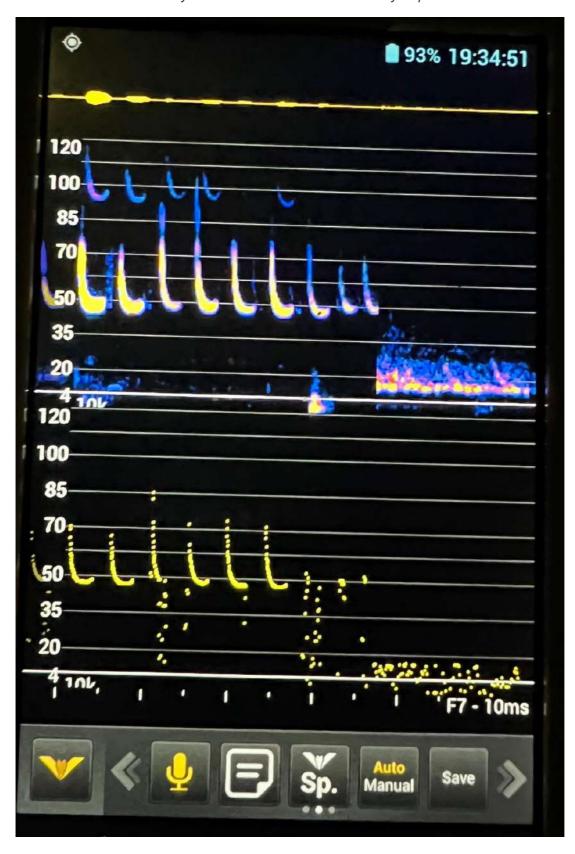


Photo 45. Example screenshot of walkabout display showing songram of common pipistrel bat.



## Appendix D. Legislation

## Statutory designated sites

Special Areas of Conservation (SACs) are protected areas in the UK, designated under:

- the Conservation of Habitats and Species Regulations 2017 (as amended) in England and Wales (including the adjacent territorial sea), and
- the Conservation of Offshore Marine Habitats and Species Regulations 2017 in the UK offshore area.

Under these Regulations, the UK Government and devolved administrations are required to establish a network of important high-quality conservation sites that will make a significant contribution to conserving the habitats and species identified in Annexes I and II, respectively, of European Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora, known as the Habitats Directive. The listed habitat types and species are those considered to be most in need of conservation at a European level (excluding birds). Of the Annex I habitat types, 78 are believed to occur in the UK. Of the Annex II species, 43 are native to, and normally resident in, the UK.

Special Protection Areas (SPAs) are protected areas for birds in the UK. They are protected through the same regulations as SACs as detailed above.

Ramsar Sites are wetlands of international importance designated under the Ramsar Convention. Sites proposed for selection are advised by the relevant statutory nature conservation body (or bodies) within the UK. The designation of UK Ramsar Sites has generally been underpinned through prior notification of these areas as Sites of Special Scientific Interest (SSSIs). Accordingly, these receive statutory protection under the Wildlife & Countryside Act 1981 (as amended). Government have also issued policy statements relating to Ramsar Sites which extend to them the same protection at a policy level as Special Areas of Conservation and Special Protection Areas.

## **Protected species**

In Britain, all bat species and their roosts are legally protected by both domestic and international legislation. They are protected under both Wildlife and Countryside Act (1981) (as amended) and the Conservation of Habitats and Species Regulations (2017) (as amended).

The Wildlife & Countryside Act 1981 (as amended) provides protection for **Barn Owls** and most other wild bird species in England. The eggs and nests of most bird species are also protected. In addition, wild barn owls and other schedule 1 species are also protected under the Wildlife and Countryside Act 1981 (as amended) whilst they are nesting.

The Animal Welfare Act 2006 is the principal law relating to animal welfare. Animal cruelty includes causing unnecessary suffering to an animal and poisoning an animal. The 2006 Act applies to all vertebrate animals, including grey squirrel, badgers, bats, foxes and rabbits (this is not an exhaustive list).

National Planning Policy - National Planning Policy Framework (NPPF). Section 15 of the National Planning Policy Framework. Planning policies and decisions should contribute to and enhance the natural and local environment by "... minimising impacts on and providing net gains for biodiversity... 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."

**Natural England Licensing - EPS Mitigation Licensing -** Licences can be obtained from the Wildlife Management and Licensing Service at Natural England to allow certain activities that would otherwise constitute an offence for the purposes of development (e.g. destruction of a bat roost, loss of great crested newt aquatic and terrestrial habitat, etc).