Elite Ecology

Passionate about Ecology

18 Gypsy Lane,
Irchester

Bat Method Statement

June 2022

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1. Introduction

1.1 Report rationale

This method statement has been prepared at the request of Mr. Terry Hodgkins (Hodkins Boden Associates) in relation to the proposed re-development site located at 18 Gypsy Lane, Irchester, Northamptonshire, NN29 7UF (Central OS Grid Reference: SP 90605 65747). This report is to address condition 5 of the planning approval which states:

No development shall take place (including any demolition, ground works, site clearance) until a method statement for bats has been submitted to and approved in writing by the local planning authority. The content of the method statement shall include the:
a) purpose and objectives for the proposed works;
b) detailed design(s) and/or working method(s) necessary to achieve stated objectives (including, where relevant, type and source of materials to be used);
c) extent and location of proposed works shown on appropriate scale maps and plans;
d) timetable for implementation, demonstrating that works are aligned with the proposed phasing of construction;
e) persons responsible for implementing the works;
f) initial aftercare and long-term maintenance (where relevant);
g) disposal of any wastes arising from works.

1.2 Site description

The site is situated in a suburban area located 1.79km to west of Irchester, Northamptonshire. On site, there is one building, with amenity grasslands, a hardstanding driveway, a hedgerow, and ornamental flowers/shrubs. This report relates to the building on site, a single-storey bungalow, which measures at 79m^2. Therefore, the site is considered to contain potential to support the local bat and bird populations by offering roosting/nesting, commuting and foraging opportunities.

Figure 1: An aerial photograph of the site at 18 Gypsy Lane, Irchester (as shown by the red outline).

Figure 2: An aerial photograph of the site at 18 Gypsy Lane, Irchester (as shown by the Yellow Star) in relation to surrounding habitats.

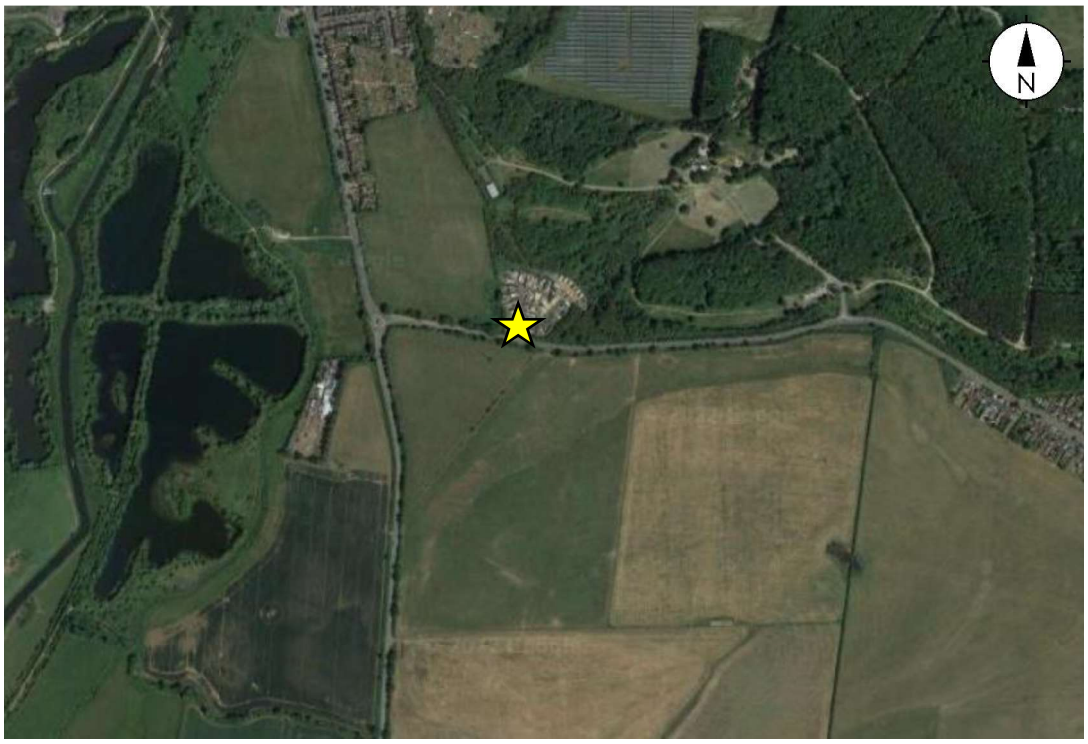
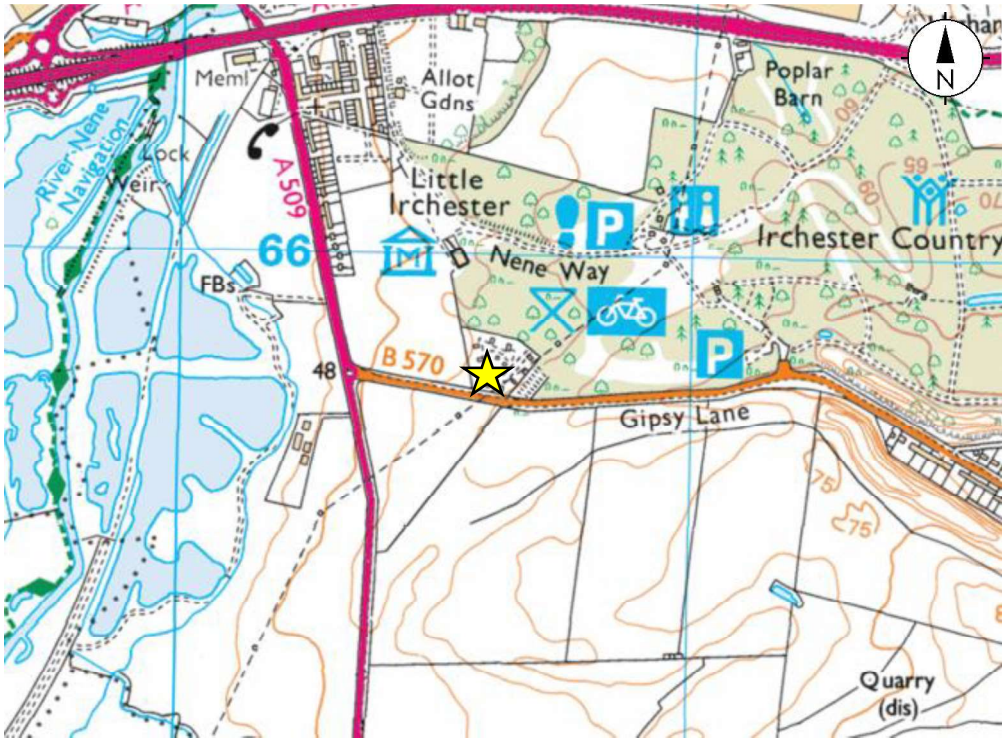


Figure 3: An OS map obtained from bing of the site at 18 Gypsy Lane, Irchester (as shown by the Yellow Star) in relation to surrounding habitats.



1.3 Proposed works

The current scheme of works will see the current bungalow demolished and a new dwelling build in its place.

2. Impact Assessment

2.1 Constraints

Constraints on:	Survey Information	Equipment Used
Constraint (Yes or No):	Yes	No
Explanation of Constraints:	No field survey to assess the structure for its bat potential. No subsequent surveys have been undertaken to assess bat population, species, and roost type	N/A

2.2 Potential Impacts of the re-development

The current scheme of works will see the current bungalow demolished and a new dwelling build in its place. This could lead to the potential loss of bat roosts that may be within the dwelling.

2.2.1 Designated sites

As the proposed works are due to remain within the site boundary, the presence of any designated sites nearby is not applicable to this project. therefore, any building works would be of no detriment to the surrounding habitats and landscape.

2.2.2 Bat Roosts

Impact	Short-term Impacts: Disturbance	Long-term Impacts: Roost Modification	Long-term Impacts: Roost Loss
Classification:	Unknown	Unknown	Unknown
Justification:	No field survey to assess the structure for its bat potential. No subsequent surveys have been undertaken to assess bat population, species, and roost type	No field survey to assess the structure for its bat potential. No subsequent surveys have been undertaken to assess bat population, species, and roost type	No field survey to assess the structure for its bat potential. No subsequent surveys have been undertaken to assess bat population, species, and roost type

2.2.3 Foraging and commuting habitat

It is considered that the re-development of the site would have a **negligible** effect on potential foraging and commuting habitat. This is due to the fact that nearby trees and hedgerows will not be affected by the proposals.

3. Method Statement

3.1 Timings of the Works

Works on the structure and trees should only take place in conditions that are deemed suitable for bat activity (temperature above 7°C and avoiding heavy rain). This will reduce any impacts on bats should they be found during the work.

3.2 Avoidance Measures

At the start of the proposed works, a licenced bat ecologist is required to be on site to conduct a toolbox talk prior to works commencing. On the morning prior to the commencement of the works, one 2F Schwegler Bat Box is required to be installed on a nearby tree facing north for emergency purposes.

The building will then be thoroughly inspected by a licenced bat ecologist (both externally and internally), including through the use of an endoscope to check for any anecdotal presence of bats. This will check all cracks/crevices around the affected areas.

If bats or evidence of bats are found during the site visit, works must cease and a European Protected Species Mitigation Licence will be required from Natural England.

If any bats are harmed or injured during the works, the local bat group will be contacted.

3.3 Enhancements

For the proposed scheme of works, two Eco Bat Boxes or Integrated Eco Bat Boxes will be installed on the new structures. The locations of these can be found in **Figure 4**. These boxes should be placed high up on these elevations, either at the gable end or just below the fascia. These features should avoid any artificial lighting

Figure 4: Site Location Plan showing the locations of the bat boxes on site (as shown by the red stars). **Please note:** this image is not to scale.

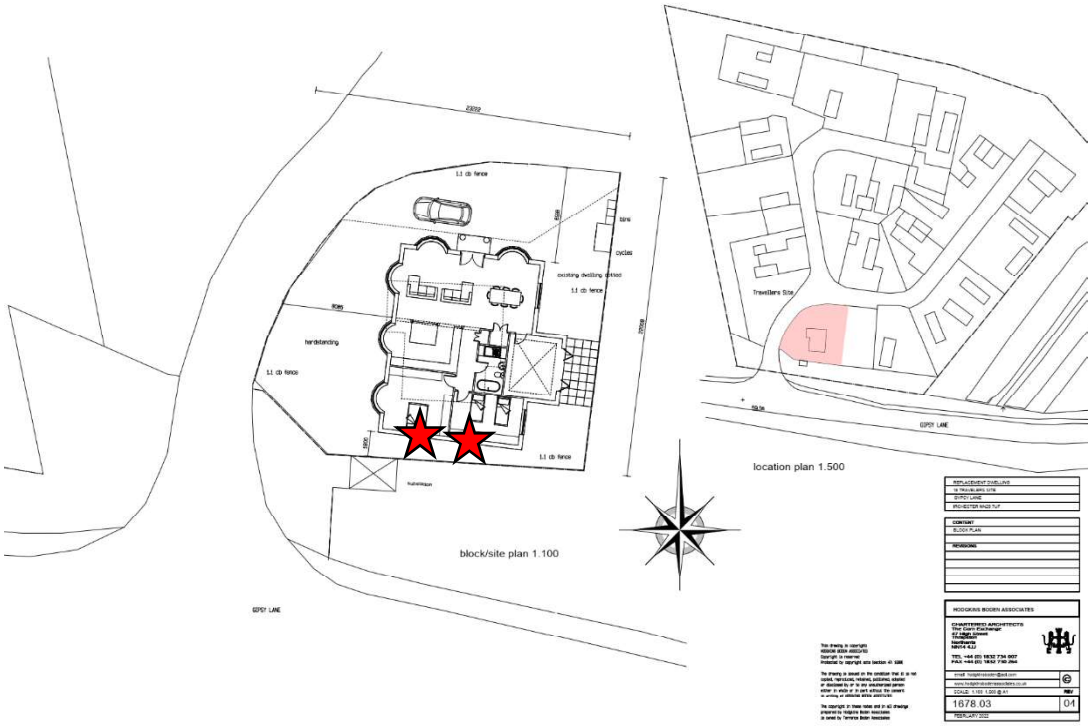
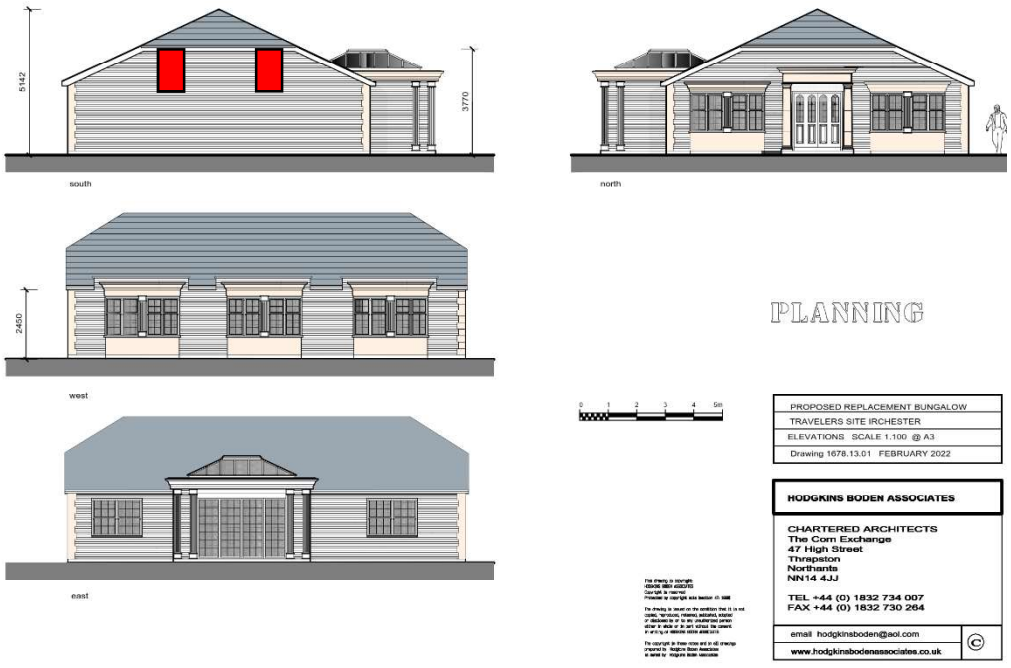


Figure 5: Site Elevation Plan showing the locations of the bat boxes on site (as shown by the red shapes). **Please note:** this image is not to scale.



4. Appendices

Appendix A: Site Plans

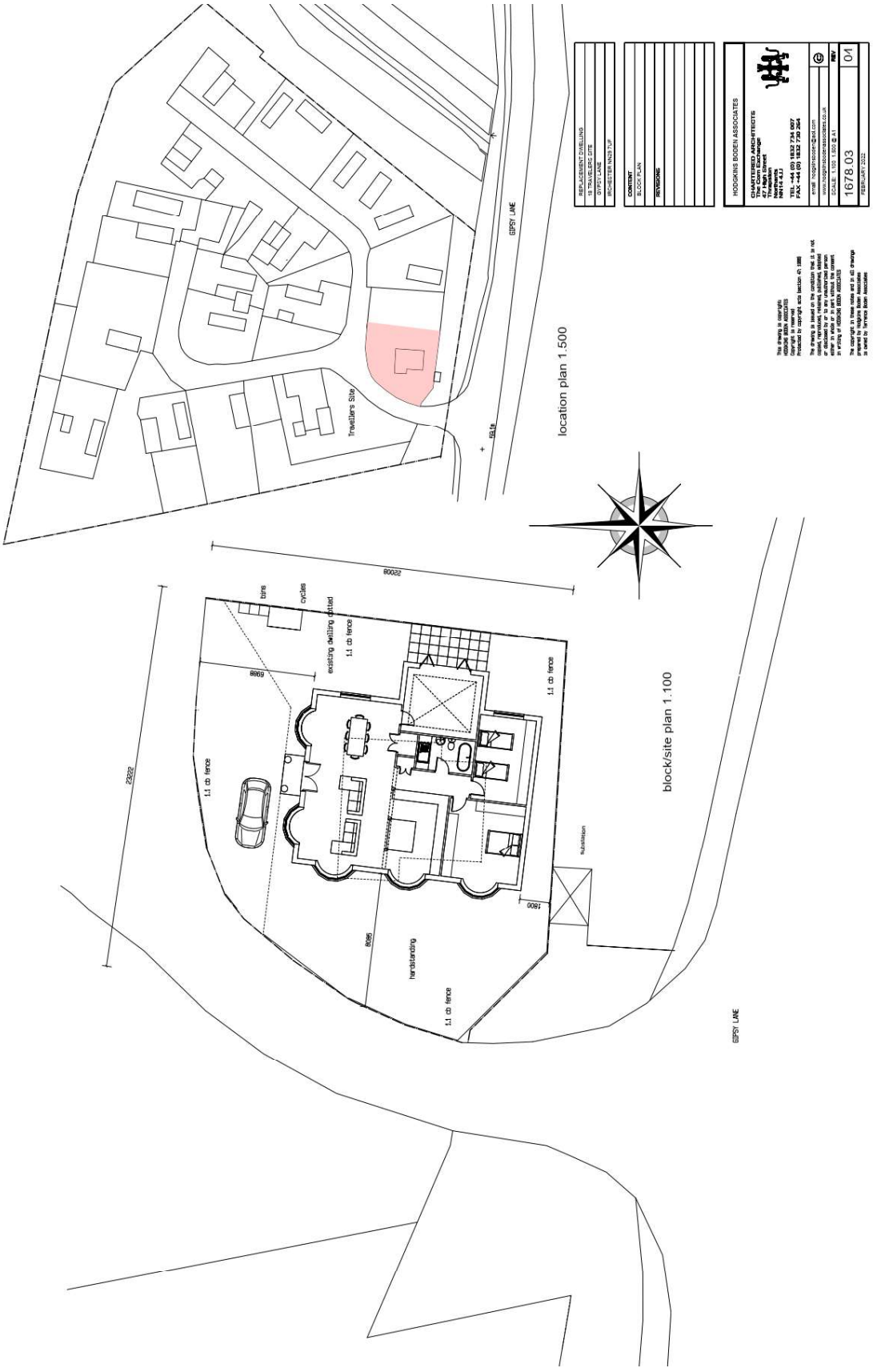
Appendix B: Artificial Light and Bats

Appendix C: Photographic Records

Appendix D: The Annual Bat Year (BCT)

Appendix E: Legislation

Appendix A: Site Plans



Appendix B: Artificial Lighting and Bats

Artificial lighting is known to affect bat's roosting and foraging behaviour, with lighting resulting in a range of impacts that includes roost desertion (BCT, 2009), delayed emergence of roosting bats (Downs et al., 2003), increased activity of some bat species and decreased activity by others (Stone et al., 2012).

An experimental approach using LED units, demonstrated that relatively fast-flying bat species, including the common pipistrelle, showed no significant impacts as a result of new artificial lighting, even when lighting was set at relatively high levels close to 50 lux.

In contrast, slow flying bats such as the myotid bats (Myotis spp.) showed sharp reductions in presence, even at low light levels of 3.6 lux (Stone et al., 2012).

Current recommendations for all bat species specify that no bat roost should be directly illuminated.

Due to the impacts of lighting, mitigation and sensitive lighting design schemes are required for projects where bats are present. These should include bat friendly lighting plans that should aim to avoid lighting wherever possible. If this is not possible, then the minimisation of any lighting impacts is required by adopting the following measures:

- To introduce lighting curfews or use of PIR sensors.

  Lighting curfews can be an effective way of avoiding impacts on bats. These curfews may involve either turning off lighting or dimming light units at specific times of the night, dimming units at key times of the year, providing the luminaire allows for this option via a control unit. Lighting to be triggered by PIR sensors can be expected to be illuminated only when required and for a low proportion of time.

- To consider no lighting solutions where possible.

  Options such as white lining, good signage and LED cats eyes should be considered as preferable. Reflective fittings may help make use of headlights to provide any necessary illumination in some areas.

- To use only high pressure sodium or warm white LED lamps where possible.

  High pressure sodium and warm white LED lamps emit lower proportions of insect attracting UV light than mercury, metal halide lamps and white LED lighting. Generally, lamps should have a lower proportion of white or blue wavelengths, with a colour temperature <4200 kelvin recommended (BCT, 2014).

- To minimise the spread of light.

  The light spread should be kept at or near horizontal to ensure that only the task area is lit. Flat cut-off lanterns or accessories should be used to shield or direct light to where it is required. Baffles, hoods, louvres and shields should be used where necessary to reduce light spill.

- To consider the height of the lighting column.

  While downward facing bollard lighting is often preferable, it should be noted that a lower mounting height does not automatically reduce impacts to bats as bollard lighting can often be designed to provide up-lighting. Where bollard lighting is considered to be the most appropriate system, bollard spacing or unit density should be kept to a minimum and units should be fitted with the appropriate hoods/deflectors to reduce any up-lighting.

- To avoid reflective surfaces below lights.

  The polarisation of light by shiny surfaces attracts insects increasing bat activity (BCT, 2012). Consequently, surface materials around lighting require consideration.

Appendix C: Photographic Records

No site visit has been undertaken; therefore, no photographic records can be provided.

Appendix D: The Annual Bat Year (BCT)

A Year in the Life of a Bat			
January		**February**	
	Hibernating; using up fat reserves.		Still hibernating; few fat reserves left.
March		**April**	
	Some activity; occasional bat seen feeding.		Awake and feeding at night.
May		**June**	
	Females looking for nursery sites.		Young born, usually only one.
July		**August**	
	Young still suckling.		Young start catching insects; females leave nursery to find males.
September		**October**	
	Mating season begins; start building fat reserves for hibernation.		Search for suitable hibernation site.
November		**December**	
	Hibernation begins although still some activity in warm weather.		Hibernating.

Appendix E: Legislation and Policy

All species of bat are fully protected under a variety of domestic, European and international legislation and conventions. These include:

- Bern Convention (Appendix II)
- Bonn Convention (Appendix II)
- Conservation Regulations (Northern Ireland) 1995
- Conservation of Habitats and Species Regulations 2017
- Countryside Rights of Way Act 2000
- Eurobats Agreement
- Habitats Directive (Annexes IV and II)
- Habitats Regulations 1994 (as amended) Scotland
- NERC Act 2006
- Wildlife and Countryside Act 1981 (as amended)
- Wild Mammals Protection Act

In addition to this, some species have additional protection by being listed on the UK Biodiversity Action Plan (UKBAP).

The legislation afforded to bats makes it illegal to possess or control any live or dead specimens, to damage, destroy or obstruct access to any structure or place used for shelter, protection or breeding, and to intentionally disturb a bat while it is occupying a structure or place which it uses for that purpose.

All nesting birds are protected under the Wildlife and Countryside Act 1981 (as amended), which protects birds, nests, eggs and nestlings from harm. In addition to this, some rarer species, such as barn owls are afforded extra protection.

National Planning Policy Framework, Section 15:

In early 2012, the National Planning Policy Framework (NPPF) replaced much previous planning policy guidance, including Planning Policy Statement 9: Biological and Geological Conservation. The government circular 06/05: Biodiversity and Geological Conservation - Statutory Obligations and Their Impact within the Planning System, which accompanied PPS9, still remains valid. A presumption towards sustainable development is at the heart of the NPPF. This presumption does not apply however where developments require appropriate assessment under the Birds or Habitats Directives. The latest National Planning Policy Framework was updated in February 2019, with the section in relation to conserving the natural environment being located within section 15.

Section 15, on conserving and enhancing the natural environment, sets out how the planning system should contribute to and enhance the natural and local environment by minimising impacts on biodiversity and, where possible, provide net gains in biodiversity. Opportunities to incorporate biodiversity gains into a development should be encouraged.

Biodiversity 2020:

This sets out to halt overall biodiversity loss and support healthy well-functioning ecosystems by establishing coherent ecological networks, with more and better places for nature, to the benefit of wildlife and people. The government's policy is aimed at individuals, communities, local authorities, charities, business and government, which all have a role to play in delivering Biodiversity 2020.

5. Notice to Readers: Conditions of this Report

All reports are certified products and cannot be shown, copied, or distributed to third parties without the written permission of Elite Ecology. No liability is accepted for the contents of the report, other than to that of the client(s). If any part of this report is altered without the written permission of Elite Ecology, then the whole report becomes invalid.

Elite Ecology agrees to supply ecological consulting services and advice of a preliminary or thorough nature as advised or commissioned. Upon commissioning Elite Ecology to undertake the work, the client(s) grant access to the site upon the agreed date. If no site access is available upon this date, Elite Ecology holds the right to charge the client(s) for lost staffing time and additional travel costs.

Elite Ecology undertake all site surveys with reasonable skill, care, and diligence, within the terms of the contract that has been agreed with the client and abiding by the Elite Ecology Terms and Conditions. The actions of the surveyors on site, and during the production of the report, were undertaken in accordance with the Code of Professional Conduct for the Chartered Institute of Ecology and Environmental Management.

The latest good practice guidelines put in place by Natural England or the relevant statutory conservation bodies have been followed by the surveyors on site. If those methodologies fail to identify a protected species during the survey efforts, no responsibility can be attributed to Elite Ecology. If any of these guidelines are adapted between the date(s) of the surveys being undertaken and the submission of this report, then Elite Ecology takes no responsibility for this.

Should any equipment be damaged or lost on site at the fault of the client(s), then Elite Ecology withholds the right to charge 100% above the current market value for that exact product or the nearest similar product.

The survey results purport the current status of the site and its potential for protected species utilisation at the time of surveying. It should not be viewed as a complete list of the possible flora and fauna species that could be using the site at different times of the year.

Elite Ecology has been provided with full payment for this report and thus the product has been released to the client(s) for the purpose of their planning application. If any part of the report is lost or altered without the written permission of Elite Ecology, then the entire report becomes invalid. Due to the potential for continual change within the natural world, this report is valid for **2 years only** from the date of the last survey visit. If this report is submitted after the 2 year deadline, then a further updated inspection will be required to ascertain whether the site remains in the same condition as it was when initially inspected.

No reliance should be made on any such comments in relation to the structural integrity of the features located on the surveyed site. All information within the report is based solely on evidence that has been found on site during the service provided. No individual opinion or inference will be made other than that of the suitably qualified ecologist appointed to the project.