



TOWN STREET FARMHOUSE, ROPLEY, HAMPSHIRE

PRELIMINARY ECOLOGICAL APPRAISAL AND PRELIMINARY ROOST ASSESSMENT

Initial Report

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Client:	Mr and Dr Pinder
Author(s):	Claire Clarke, BSc (Hons), ACIEEM Sarah Facey BSc (Hons) PGCert MRSB
Surveyors/Contributors:	Claire Clarke BSc (Hons), ACIEEM Matthew Clarke BSc (Hons)

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Executive Summary

This report has been prepared by CC Ecology Ltd on behalf of Mr and Mrs Pinder who are submitting a planning application for the extension of their home, Town Street Farmhouse, Ropley, Hampshire. The proposals for the Site include extending a west to east wing from the north end of the property. This will require the demolition of a modern garage building in the driveway tying in the new wing with the existing north end of the house.

This report includes ecological information on Town Street Farmhouse gathered during a Preliminary Ecological Appraisal (PEA) and Preliminary Roost Assessment (PRA) undertaken by CC Ecology Ltd. Three further phase 2 bat surveys have been recommended and will be carried out during the 2024 active bat season. This report includes an assessment of the likely impacts of the proposals on ecological features and recommendations for mitigation and enhancements for biodiversity are included. These recommendations are based upon the scenario where bats are found to be roosting in the property, and will be appropriately modified in response to phase 2 bat survey results. Should bats not be found to be roosting in areas of the property affected by the works, no restrictions in relation to bats will apply other than the use of bat sensitive external lighting.

A Preliminary Roost Assessment of the house was carried out in February 2024 by CC Ecology Ltd. This noted large numbers of gaps under roof tiles in the roof of the garage and a small number of gaps at the end of the roof and under weather boarding at the end of the house where the new wing will be tied in. Due to the abundance of opportunities for roosting by crevice-dwelling species in crevices under roof tiles on the garage, as well as the rural location which is near optimal for bats, the site as a whole was assessed as having high potential to support crevice-dwelling species of bat. The garage and north end of the main house do not have any voids that are suitable for void-dwelling species of bat.

The most likely outcome, if bat roosts are found in the garage or north end of the house, is that they will be small day roosts of common and widespread crevice dwelling species such as Common and Soprano Pipistrelles.

A mitigation strategy for bats has been designed which replaces like with like potential bat roost features, which would ensure that the impacts on bats are mitigated if they are found to be present. This strategy is subject to change depending on the results of the phase 2 surveys and is included to demonstrate how the discovery of this type of bat roost would be managed. The mitigation strategy includes the careful timing, phasing and supervision of works to potential bat roosting areas. Should bats be found to be roosting in areas affected by the works a European protected Species (EPS) Licence in respect of bats may be required to undertake the works.

The house, garage and gardens have some potential to support nesting birds and therefore recommendations for carrying out works sensitively and timing works outside the nesting bird season are made within the report.

Wider assessment of habitats outside the construction zone have taken place in order to ensure that recommendations for enhancements for biodiversity are bespoke to the Site and the surrounding landscape. The report includes enhancements to the site for biodiversity within a Biodiversity Enhancements Strategy designed to ensure that the proposals result in a Biodiversity Gain in line with local and national planning policy.

1. Introduction

Background and Brief

- 1.1 CC Ecology was commissioned Mr and Dr Pinder to by undertake a Preliminary Roost Assessment (PRA) and Preliminary Ecological Appraisal (PEA) of their property, Town Street Farmhouse, Ropley, and to undertake further targeted Phase 2 surveys for bats.
- 1.2 The purpose of the PEA/PRA and targeted phase 2 bat surveys is to identify the potential ecological constraints and opportunities that may be presented to the proposed development. Opportunities and constraints are identified so that recommendations on the enhancement of the site for biodiversity can be taken into account at the design stage, in addition recommendations for any further ecological assessment can be made and if required recommendations for mitigation and compensation measures.

Development Proposals

- 1.3 The proposals for Town Street Farmhouse include the construction of an additional wing to the main house which will require the demolition of a modern timber framed garage building in the driveway which is situated in the footprint of the proposed wing.
- 1.4 Refer to **Map 1** for the Site Proposals.

Site Context

- 1.5 Town Street Farmhouse is situated on Dunsell's Lane the east side of the village of Ropley, Hampshire at Ordnance survey grid reference SU64703195(Refer to **Map 1** for Site Location). The Site covers an area of approximately 0.3ha and includes the house, garage building, and surrounding garden.
- 1.6 The site is on the edge of a village with well-maintained houses and gardens of a similar size and age. To the east of the site, and surrounding the village, is a patchwork of large pastures and arable fields. Some of these are bisected by hedgerows, a few of which contain mature trees. A few small areas of deciduous woodland are scattered across the landscape.
- 1.7 The closest statutory protected site is the South Downs National Park located approximately 2.7km east of the site. The only other statutory protected site within 5km of Town Street Farmhouse is Alresford Pond Site of Special Scientific Interest (SSSI) which is approximately 4.7km to the west of the site at its closest point. Town Street Farmhouse is located within an Impact Risk Zone for Alresford Pond SSSI however the zone it falls within places no restrictions on householder applications.
- 1.8 Town Street Farmhouse is situated within the Hampshire Downs National Character Area.

'The Hampshire Downs are part of the central southern England belt of Chalk, rising to 297m in the north-west on the Hampshire-Wiltshire border. A steep scarp face delineates the Downs to the north, overlooking the Thames Basin, and to the east, overlooking the Weald. The majority of the area is an elevated, open, rolling landscape dominated by large arable fields with low hedgerows on thin chalk soils, scattered woodland blocks (mostly on clay with-flint caps) and shelterbelts. To the east hedgerows are often overgrown and there are larger blocks of woodland. A fifth of the area is within the North Wessex Downs Area of Outstanding Natural Beauty and 6 per cent in the South Downs National Park due to the scenic quality of the landscape. Flower- and invertebrate-rich remnants of calcareous grassland remain mostly along the northern scarp and on isolated commons throughout.

The Chalk is a large and important aquifer; hence groundwater protection and source Inerability designations cover most of the area, and catchment sensitive farming - to control pollution, run-off and soil erosion - is a vital activity. The aquifer feeds several small streams flowing north and east, but the dominant catchment of the area is that of the rivers Test and Itchen, which flow in straight-sided, relatively deeply incised valleys across most of the National Character Area. The Itchen is a Special Area of Conservation and, with the Test, is designated as a Site of Special Scientific Interest. These rivers, with the watermeadows, peat soils, mires and fens of their flood plains, are the most important habitats of the area. The valleys are also home to the main settlements, the local road system and important economic activities such as watercress growing and fly fishing..' (Natural England, NCA Profile:130)

Relevant Legislation and Policy Implications

Relevant Legislation

1.9 The key legislative provisions of relevance to this report with respect to the development proposals and their potential effects on ecological features are listed below, with further detail provided in **Appendix 1**.

- The Environment Act 2021
- The Habitats and Species Regulations 2017
- The Wildlife and Countryside Act 1981
- The Countryside and Rights of Way (CROW) Act 2000
- The Natural Environment and Rural Communities (NERC) Act 2006
- The Badgers Act 1992

Biodiversity Action Plans

- 1.10 The UK Biodiversity Action Plan (BAP) was the Government's response to the 1992 Convention on Biodiversity (The Rio Convention), with the aim of halting the loss of biodiversity in the UK. The new UK post-2010 Biodiversity Framework replaces the previous UK Biodiversity Action Plan and is the government's response to the new strategic plan on the United Nations Convention on Biological Diversity (CBD). Although the UK Post-2010 Biodiversity Framework supersedes the UK BAP, the UK BAP lists of priority species and habitats still remain an important reference source for identifying habitats and species of principal importance within England, Wales, Northern Ireland and Scotland. Within England Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 list species and habitats of principal importance for the conservation of biodiversity.
- 1.11 In England, *Biodiversity 2020: A strategy for England's wildlife and ecosystem services* is the national biodiversity strategy, which has the stated mission "(...) to halt overall biodiversity loss, support healthy well-functioning ecosystems and establish coherent ecological networks, with more and better places for nature for the benefit of wildlife and people."

Planning Implications

- 1.13 The Government has set out its policies for the protection and enhancement of biodiversity in the planning system in the revised *National Planning Policy Framework (NPPF, 2021)* which states that plan policies and planning decisions should aim to maintain, and enhance, restore or add to biodiversity and geological conservation interests'. The key principles of the NPPF describe the importance of avoiding, mitigating and compensating for adverse effects.
- 1.12 Town Street Farmhouse is situated within the East Hampshire District. The East Hampshire District Council Local Plan – Joint Core Strategy contains proposed policies for determining planning applications within the borough. The Local Plan was adopted by the Council on 8th May 2014. Policy CP21 within the Local Plan is of relevance to biodiversity:

Development proposals must maintain, enhance and protect the Districts biodiversity and its surrounding environment.

New development will be required to:

a) maintain, enhance and protect district wide biodiversity, in particular the nature conservation designations (see Map 2).

i) Special Protection Areas (SPA), Special Areas of Conservation (SAC) and Ramsar (International);

ii) Sites of Special Scientific Interest (SSSI) and National Nature Reserves (National);

iii) Sites of Importance for Nature Conservation (SINC) (Hampshire) and Local Nature Reserves (LNR).

b) extend specific protection to, and encourage enhancement of, other sites and features which are of local value for wildlife, for example important trees, rivers, river corridors and hedgerows, but which are not included in designated sites.

c) contribute towards maintaining a district-wide network of local wildlife sites, wildlife corridors and stepping stones between designated sites and other areas of biodiversity value or natural green space. This will help to prevent the fragmentation of existing habitats and allow species to respond to the impacts of climate change by making provision for habitat adaptation and species migration. This is supported by Policy CP28 (Green Infrastructure) and the Districts Green Infrastructure work.

d) ensure wildlife enhancements are incorporated into the design to achieve a net gain in biodiversity by designing in wildlife and by ensuring that any adverse impacts are avoided where possible or, if unavoidable, they are appropriately mitigated for, with compensatory measures only used as a last resort.

e) protect and, where appropriate, strengthen populations of protected species;

f) protect and enhance open spaces in accordance with the District's 'Open Space, Sports and Built Facilities Study', Policy CP17 (Protection of open space, sport & recreation) and Policy CP28 (Green Infrastructure). The provision of open space should be in advance of the relevant new developments being occupied.

2. Methodology

Introduction

- 2.1 Methodology for the evaluation of the site and assessment of the potential impacts has been based on the Guidelines for Ecological Impact Assessment (EclA) in the United Kingdom published by the Chartered Institute of Ecology and Environmental Management (CIEEM, 2018). Methodology for the undertaking of targeted protected species surveys have been based upon Best Practice Guidelines for each species/species group and these have also been used to evaluate relevant features in combination with additional CIEEM guidelines for Preliminary Ecological Appraisal (2017).

Defining the Zone of Influence

- 2.2 In order to define the spatial scope of the ecological surveys at Town Street Farmhouse it is necessary to predict the likely zone of influence of the development proposals. The zone of influence of a proposed development is defined by CIEEM's EclA guidelines as '*...the areas/(ecological) resources that may be affected by the biophysical changes caused by a development, both in the construction and operational phases*'.
- 2.3 The types of activities that might occur as a result of the development at Town Street Farmhouse and the likely biophysical changes (in the absence of mitigation) include:
- a. Demolition of the freestanding garage, resulting in the destruction of roosts for crevice-dwelling species of bat and nesting birds, *if present*;
 - b. Construction of an additional wing to the main house, requiring the removal of, weatherboarding and soffits on the north end of the house. This could result in the destruction of roosts for crevice-dwelling bat species and impact on nesting birds *if present*;
 - c. Injury or death of bats if roosting at the time of destructive works, *if bat roosts are present in parts of the property affected by the work*;
 - d. Removal of a small amount of ornamental scrub with potential impacts on nesting birds *if present at the time of works*;
 - e. An increase in dust and noise during the works; and
 - f. Increase in lighting and light spill during the construction and operational phase.

Desktop Study

- 2.4 The desk study methodology is based upon guidelines set out by the Chartered Institute of Environmental and Ecological Management (CIEEM, 2017). A data-gathering exercise was undertaken to obtain any available information relating to statutory designated sites, non-statutory designated sites and priority habitats and species on the site and within the zone of influence. This involved searching the National Biodiversity Network website, assessing the known distribution of bats in Britain (Richardson, 2001), as well as interrogating Natural England's "Nature on the Map" (MAGIC) to establish protected sites and habitats within the zone of influence of the proposals.

Preliminary Ecological Appraisal (PEA)

- 2.5 A Preliminary Ecological Appraisal (PEA) and Preliminary Roost Assessment (PRA) Survey of the Site was undertaken on 20th February 2024 by Claire Clarke of CC Ecology Ltd, a licensed bat worker. The survey is essentially an ecological appraisal of the site. The habitats and features within the site boundary were mapped and classified, in addition any evidence of or potential for protected species to be on the site or within the zone of influence was noted.

Bats

Overview

- 2.6 The bat surveys comprised a combination of an assessment of habitats within the zone of influence for bats during the PEA and PRA Survey which included a daytime inspection of the internal and external areas of the house and carrying out of targeted Phase 2 bat surveys.

Daytime Inspection of Buildings within the Site Boundary

- 2.7 The PRA survey of the Site was carried out by Claire Clarke (a licensed bat ecologist). The building was searched for evidence that bats may be using, or previously have used, the building for roosting. Such evidence may include:
- The presence of bats;
 - Bat droppings within the building or on external surfaces on and/or immediately adjacent to the building; and
 - Staining or scratch marks around suitable bat roost locations or suitable access points into the building.
- 2.8 All accessible loft voids were searched using a very bright torch. The external inspection of the building involved searching for evidence with the use of a torch and binoculars.

- 2.9 Features considered suitable for roosting bats (potential roost sites and potential access/egress points) were marked on a plan.

Phase 2 Bat Surveys

- 2.10 Based the number of bat suitable features present in the buildings a full suite of further bat surveys will be carried out during the peak active bat season 2024.
- 2.11 Two surveyors in total will be positioned at locations identified as allowing good sight lines of the building and ensuring that all potential bat access/egress points are visible between the surveyors. Refer to **Map 2**. Each surveyor will be equipped with either Petterson D240x, EM Touch and Iphone, or BatBox Duet and an Edirol recorder. Each surveyor will also be equipped with an infrared (IR) camera with suitable IR lighting to capture video of the building. Unidentified calls will be recorded for subsequent computer analysis.
- 2.12 Each surveyor will be supplied with a plan of the site on which to mark bat activity. The following information will be recorded for any bats seen or heard:
- Species;
 - Time;
 - Behaviour (whether it was feeding, commuting, social calling or swarming);
 - If seen, direction of flight; and
 - If it emerged from the building.
- 2.13 Behaviour will be identified by flight patterns and bat morphology, and by call characteristics as heard on the bat detector. Weather conditions (temperature, wind speed, cloud cover, rainfall in the last hour) will be recorded at the start and end of each survey.
- 2.14 Bat call recordings will subsequently be analysed and processed following the surveys.

Timing

- 2.15 All phase 2 surveys will be carried out during the period of time considered to be the active bat season, with at least two of these taking place in the peak maternity season (May to August inclusive). Two surveys will be dusk surveys and one will be a pre-dawn survey.

Reptiles

- 2.11 During the PEA survey, habitats within the site boundary were assessed for their potential to support reptiles and any habitats considered suitable were noted. In addition the surrounding landscape and adjoining habitats were appraised for their potential to support reptiles in order to ascertain the likelihood of reptiles being present.

Dormice

- 2.12 Habitats within and adjacent to the Site boundary were considered for their potential to support dormice. The species of any boundary and woody habitats were recorded and the composition of species, as well as links to other patches of suitable habitat in the surrounding area was considered. During the desktop study, aerial maps were referred to assess how well linked any suitable habitats on the site are to surrounding habitats in the wider landscape.

Amphibians

- 2.13 During the PEA the site was searched for any ponds. Ordnance survey maps and aerial photos were assessed for the presence of ponds within 500m of the boundary. The terrestrial habitats within and adjacent to the site boundary were assessed for their suitability for amphibian species and habitats were recorded and described during The PEA survey.

Badgers

- 2.14 The Site and its environs was searched for any evidence of badger activity as well as setts. Any signs were mapped and any holes were classified according to their use.

Birds

- 2.15 Any habitat features, for example buildings, scrub and trees, which could potentially be used by nesting birds were surveyed and any nesting activity was noted. The habitat was also assessed regarding its potential for bird activity.

Survey Constraints

- 2.16 The PEA and PRA took place on a day when the weather was dry with no weather constraints.
- 2.17 Bats will often roost in places that are inaccessible to the surveyor, such as under tiles and within soffits. During the inspection due regard was paid to the noting of features that have the potential to support crevice dwelling species.
- 2.18 Bats are nomadic and invariably move between roost sites, therefore any bat survey will only provide a snapshot of how bats are using a particular site at that time.
- 2.19 The PEA Survey is not particularly targeted to any species group rather an initial survey to determine the potential for protected species to be present within the zone of influence of the proposals. A lack of records does not constitute absence of any particular species or species group.
- 2.20 As with all ecological surveys, conditions can vary across the seasons and change with time, however due to the nature of the Site and the lack of diverse natural habitats it is considered

that sufficient information was gathered to enable an evaluation of the habitats and features present.

3. Survey results and evaluation

Designated Sites

- 3.1 The closest statutory protected site is the South Downs National Park located approximately 2.7km east of the site. The only other statutory protected site within 5km of Town Street Farm house is Alresford Pond Site of Special Scientific Interest (SSSI) which is approximately 4.7km to the west of the site at its closest point. Town Street Farmhouse is located within an Impact Risk Zone for Alresford Pond SSSI however the zone it falls within, places no restrictions on householder applications.
- 3.2 No priority habitats are situated within a 1km radius of the site.

Site Overview: Broad Habitats and Features

- 3.3 Refer to **Map 2** which shows existing Habitats and Features.
- 3.4 The Site covers an area of approximately 0.3ha and is comprised of the house and garage building, (described in more detail in the bat survey section below) and the garden.
- 3.5 The Site is located on the east side of Dunsell's Lane on the east side of the village of Ropley. The entrance opens onto a gravel drive which leads to a garage building near the north boundary of the site, and turns south to pass in front of the house. The majority of the garden is west of the house and is laid to lawn, with ornamental shrubs and mature trees. To the south of the house is a smaller garden containing a mown lawn bisected by a path and containing a few shrubs and trees. The gardens are tidy and well-maintained, with mown lawns.

Bat Surveys

Pre-existing Records

- 3.6 Local bat records including those of Richardson (2001) occurring within a 100 km area show Greater Horseshoe bat *Rhinolophus ferrumequinum*, Lesser Horseshoe bat *R. Hipposideros*, Whiskered bat *Myotis mystacinus*, Brandt's bat *Myotis brandtii*, Natterer's bat *M. nattereri*, Bechstein's bat *M. bechsteinii*, Daubenton's bat *M. daubentonii*, Common Pipistrelle *Pipistrellus pipistrellus*, Soprano Pipistrelle *P. pygmaeus*, Brown Long-eared bat *Plecotus auritus*, Grey Long-eared bat *P. austriacus*, Serotine bat, Noctule bat, Leisler's bat *N. leisleri* and Barbastelle bat *Barbastella barbastellus*.

Ground Level Tree Inspection

- 3.7 A ground level tree inspection for bats was undertaken at the same time as the PEA Survey. No trees with bat roost potential are located within the zone of influence of the proposals.

Preliminary Roost Assessment (PRA)

- 3.8 A daytime inspection of the house was undertaken on 20th February 2024 at the same time as the PEA walkover survey, this included a thorough internal and external inspection of the whole building.
- 3.9 The house is composed of various section: the original two-storey farmhouse of 16th century construction with 17th century alterations and 18th century extension to the west; a 17th century barn converted to living space in modern times; and a modern single-storey section that connects the farmhouse and barn conversion. The house is a built with brick inlaid into timber and has a footprint that is approximately 'L' shaped. The original house and modern extension form a west-east wing of the 'L', and the barn conversion and connecting extension form a north-south wing. The roof is pitched and half hipped, and clad in traditional handmade clay tiles. There is a dormer window in the east pitch of the barn conversion. This original farmhouse has two brick chimneys with lead flashing. The barn conversion is clad in wooden shiplap/weather boarding. All soffits, bargeboards and window frames are wooden.
- 3.10 The noting of bat sensitive features present in the house was limited to the north end of the north-south wing, as this is the only area of the house expected to experience impacts from the proposed works. The external inspection of this area found a small number of gaps suitable to provide bats, within the areas to be impacted (the roof of the existing building will not be directly affected by the works), in the form of lifted gaps at the end of the roof with the potential to provide bats with access to crevices between the roof tiles and the felt.
- 3.11 The internal inspection of the house found no loft voids in the north-south wing, the converted barn has a vaulted ceiling and no void is present.
- 3.12 The gable end of the barn is clad with wooden weatherboarding which will be impacted upon by the proposals but this is relatively tight with a couple of small gaps that are cobwebbed and considered unlikely to support roosting bats.
- 3.13 The garage building was constructed in 2002. It is a single-skinned, timber-framed, single-storey building with a brick base. The roof is pitched and hipped and clad in traditional handmade clay tiles. The external inspection of the garage found an external crevice with the potential to support roosting bats between the roof tiles and roofing felt with gaps under numerous lifted tiles.
- 3.14 The internal inspection of the garage found that the walls were unlined, the space is open to the roof, and the roof is lined with black bitumen felt. The space would be sub-optimal for void dwelling species due to its lack of insulation, which would allow wide fluctuations in internal temperature, there is also a lack of crevices, and the space is regularly used for the storage of gardening equipment.

Phase 2 Bat Surveys

- 3.15 A full suite of phase 2 bat surveys is planned for the active bat season (April to September inclusive) 2024, with at least two within the peak bat season (May to August inclusive).

Bat survey interpretation and evaluation of results

- 3.16 No bat roosts have been discovered at this stage of the ecological survey programme. However, phase 2 surveys of the property have not yet been performed. The areas of the property to be directly affected by the proposals have high potential to support crevice dwelling species (the garage). This is based on the large number of crevices present under the traditional clay roof tiles, as well as the rural location of the property.
- 3.17 No voids suitable for void-dwelling species are present in the parts of the property affected by the proposals.
- 3.18 Further bat surveys are recommended to meet Best Practice Guidelines (BCT, 2024)

Reptiles

- 3.19 During the survey the Site was assessed for its potential to support reptiles. Whilst the site as a whole will have some value to reptiles, the areas within the zone of influence of the proposals are not suitable, being comprised of gravel and mown lawn. As areas within the zone of influence are of limited suitability no further surveys are considered necessary.

Amphibians

- 3.20 During the survey the Site was assessed for its potential to support amphibians. Whilst the site as a whole may have some value to amphibians during their terrestrial phase, the areas within the zone of influence of the proposals are not suitable, being comprised of gravel and mown lawn.
- 3.21 As areas within the zone of influence are of limited suitability no further surveys are considered necessary.

Hazel dormouse

- 3.22 Whilst some habitats on site may be suitable for hazel dormouse, none of these lie within the zone of influence of the proposed works.

Nesting Birds

- 3.23 Although bird nests were not found within the buildings or surrounding hedges or shrubs, it is probable that on-site vegetation and buildings provide nesting opportunities for common and widespread species.

Other Protected and Notable Species

- 3.24 No Badger setts were noted during the survey. The site may support other species such as Hedgehog *Erinaceus europaeus*. This species is of conservation priority listed under Section 41 of the NERC act. Habitat features within the zone of influence of the proposals were considered generally unlikely to support notable invertebrate assemblages.

4. Potential impacts in the absence of mitigation

Introduction

- 4.1 This section details the potential ecological impacts of the proposal in the absence of mitigation. The potential activities are identified with reference to the scheme, as identified in **Section 1**. Recommended mitigation and enhancements to ensure that the favourable conservation status of species is maintained, in compliance with the relevant legislation and planning policy, is detailed in **Section 5**.

Impacts to Sites and Habitats

- 4.2 Given the small scale of the proposed development, and the distance to the nearest designated sites, no impacts to designated nature conservation sites are anticipated.
- 4.3 No valuable habitats have been noted within the construction zone and therefore no impacts are anticipated.

Impacts to Fauna

- 4.4 The development proposals at Town Street Farmhouse will result in the remodelling of the existing house, including the construction of a new wing requiring the demolition of the free-standing garage building. The demolition of the garage will result in the destruction potential bat roosting opportunities. If present these are most likely to be in the form of roosts for crevice-dwelling species under lifted roof tiles or in other small gaps on the building. Tying the new wing into the existing house will require the removal of weatherboarding, and has the potential to obstruct roost entrances if present under tiles at the north half-hipped end of the house. The works have the potential to disturb, injure or kill bats if roosting in the property at the time of the works.
- 4.5 The site is likely to be used by bats for foraging and/or commuting (phase 2 surveys will determine this). Increases in lighting levels or changes in the direction of outside lights could reduce the suitability of the site for these purposes. Additional artificial lighting may also impact on other nocturnal species.
- 4.6 If works are carried out during the nesting bird season it could result in the disturbance of nesting birds and destruction of nests, if present. This would be contrary to Section 1 of the Wildlife and Countryside Act 1981 (as amended).
- 4.7 Overall impacts on biodiversity as a whole may arise from an increase of lighting in the construction and operational phases of the development and changes to on-site structure.

5. Recommendations

Opportunities for mitigation and enhancement

Introduction

- 5.1 In order for the proposals to comply fully with applicable legislation and planning policy, it is necessary to mitigate or compensate for the ecological impacts as identified in **Section 4**. The NPPF also places an onus on developments to provide ecological enhancements and to meet local biodiversity objectives wherever possible. Within this section mitigation measures are recommended to ensure that sensitive habitats and protected species are considered during the construction and operation phases of the development, in compliance with applicable legislation and planning policy.

Ecological Constraints

- 5.2 As the Site is subject to limited existing levels of light splay and bats are likely to commute and forage locally, any increase in lighting post development must be avoided (Institute of Lighting Professionals, 2018; Lacoeuilhe *et al.*, 2014). Any external security lighting should be directed to minimise light spillage on adjacent trees or hedgerows by the use of directional lighting hoods. All external lighting must be fitted with timing sensors to minimise the period of unnecessary illumination and reduce the potential for the lights to attract invertebrates. All on-site lighting must comply with the Guidance Notes for the Reduction of Obtrusive Light (GN01:2011), as outlined by the Institution of Lighting Professionals. Any luminaires or bollard lighting to be used must be designed to limit upward lighting to 0% above 90° to the horizontal plane. Lighting measures must ensure the following:

- Lights will not be aimed at boundary trees or vegetation;
- Lighting must not be aimed at new bat roosting features associated with the buildings;
- Light levels will be kept to below 1lux where possible;
- Light hoods will be used to reduce light spillage; and
- Timed / motion sensor security lighting will be used where external lighting is required

Mitigation and Compensation Measures

Bats

- 5.3 All species of bat and their roosts are protected under the Habitats and Species Regulations 2017 (as amended). The bat survey carried out on the buildings have found that they have potential to support day roosts for crevice-dwelling species in areas affected by the proposals.

- 5.4 Should bats be found to be roosting in these areas, the most likely scenario is that the roosts are small day roosts of more common and widespread species such as Common Pipistrelles and Soprano Pipistrelles. The following mitigation strategy for bats demonstrates how the presence of one or more small day or transitional roosts for common crevice-dwelling species, found in affected areas of the property, would be managed. This is to demonstrate, for planning purposes, that a suitable mitigation strategy will be used to ensure bats and their roosts are protected during this development.
- 5.5 Should roosts for crevice-dwelling species be found in the garage or the areas of the house being modified, the proposals would result in the destruction of these roosts. In this case a European Protected Species Licence (EPSL) would be required to legally destroy these roosts. An EPSL must be granted prior to the start of any destructive works to bat roosts.
- 5.6 Prior to the start of works temporary roosting opportunities in the form of one woodcrete bat box suitable for a variety of species would be installed on mature trees within the site boundary to provide alternative roosting opportunities for bats whilst the work is being carried out.
- 5.7 The works that will affect bat roosts will be timed accordingly to avoid the sensitive times of year. No destructive works to the house or garage will be carried out during the hibernation season, which is generally considered to be from 1 November to 31 March (although this is dictated by weather conditions). As long as no maternity roost is discovered it would be acceptable to carry out works at any part of the active bat season (April-October inclusive). Works would be best timed in the Spring or Autumn window following the granting of a EPSL to avoid the possibility of use of the building by nesting birds.
- 5.8 Works to bat-sensitive areas (the roofs) will be undertaken under the supervision of a licensed bat ecologist. All sensitive areas of the building such as roof tiles, ridge tiles and barge boards will be hand stripped, following a detailed toolbox talk to all site personnel. If any bats are found during the destructive works, they will be caught by hand by a licensed bat ecologist and transferred to the installed bat box within the Site boundary.
- 5.9 The roof of the new garage will be lined with black bitumen felt. Breathable roof membrane (Tyvek) must not be used as it harmful to bats.
- 5.10 The loss of bat roosting opportunities for crevice dwelling species within the existing buildings will be compensated by installing features for these species within the new garage building. Bat access tiles will be installed into the roof of the garage, to include two access tiles on each roof pitch. The roof of the garage will be clad with clay tiles to match in with the existing building and therefore these will also include natural gaps and crevices for bats. These are self-contained crevice features that when integrated into the structure of the building have longevity and require little to no maintenance.

- 5.11 The bat box on trees within the Site boundary will be retained post development to provide an enhancement to the Site for biodiversity.
- 5.12 Refer to **Map 1** for Bat Mitigation Strategy.
- 5.13 It is considered unlikely that the property supports other bat roost types such as maternity or swarming. In the unlikely event that another type of roost is found, an appropriate alternative mitigation strategy would be developed. As any works to this property that affect bats will require a European Protected Species Licence, any alternative mitigation strategy will still need to be approved by Natural England as appropriate to the roosts present.
- 5.14 Should the phase 2 survey indicate the likely absence of bat roosts in areas affected by the works, the proposed compensatory bat roost features would act as an enhancement to the Site for bats.

Birds

- 5.16 There is potential for nesting birds to use both the buildings and woody vegetation within the Site boundary. To avoid the potential for active bird nests to be present at the time of works it is recommended that works to the house be undertaken outside the nesting bird season (May-September) or if this is not possible for the building to undergo a nesting bird survey to be undertaken by a suitably qualified ecologist immediately prior to the start of works. In the event nesting birds are encountered during development, all work should cease and the consulting ecologist should be contacted for further advice.
- 5.17 To enhance the Site for nesting birds it is recommended that bird boxes are installed on the new section of the house and trees within the Site boundary. Integrated bird boxes within the buildings such as Sparrow terraces would support red-listed species in addition to providing an overall enhancement for biodiversity. In addition to integrated features within the buildings it is recommended that a number of bird boxes are installed on trees such as Schwegler 1B nest boxes (or similar designs).

Biodiversity Enhancement Strategy

- 5.15 In addition to the ecological enhancements recommended areas of retained habitat as well as the creation of habitats can have benefits for biodiversity as a whole, in line with national and local planning policy.
- 5.16 The gardens can be managed with biodiversity in mind. Recommendations include. The planting of additional native, fruiting and nut bearing shrub and tree species within the gardens.

Residual Impacts

- 5.17 Provided the mitigation recommended above is implemented in full, there should be no residual impacts to protected species and habitats as a result of the proposed development at Town Street Farmhouse.

6. Conclusions and recommendations

Conclusions

- 6.1 A PEA/PRA Survey has been undertaken at Town Street Farmhouse and this will be followed up with targeted Phase 2 bat surveys during the active bat season.
- 6.2 Within the construction area habitats are present that are considered to be of value within the zone of influence, and habitats within the Site boundary have been found to have the potential to support bats, all species of which are protected by UK law.
- 6.3 If phase 2 surveys confirm the presence of bat roosts within the garage or the north end of the north-south wing, then the proposed works are likely to result in the destruction of these roosts. The most likely scenario involving the presence of bat roosts in these areas is the discovery of small day or transitional roosts for common and widespread crevice dwelling species such as Common and Soprano Pipistrelles. A bat mitigation strategy is proposed that would mitigate the impacts resulting from this scenario. The strategy includes the installation of bat boxes on trees within the Site boundary, the careful timing and supervision of destructive works and the installation of compensatory bat roost features within the new garage.
- 6.4 If bat roosts are present in areas affected by the proposals then the works will likely destroy these roosts or cause other disturbance to them. In that case it would be necessary to gain a European Protected Species Licence to undertake the works.
- 6.5 Should no bat roosts be found in the areas of the building affected by the proposals then the works may go ahead without restrictions relating to bats other than the use of bat sensitive external lighting. However, the installation of bat boxes on trees and bat tiles in the new garage would still be recommended as excellent enhancements for biodiversity.
- 6.6 Provided the mitigation measures recommended above implemented in full, there should be no residual impacts to ecological features as a result of this development.

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Appendix 1

Relevant Legislation

CONSERVATION OF HABITATS AND SPECIES REGULATIONS 2017

These **Regulations** consolidate the Conservation of **Habitats and Species Regulations** 2010 (S.I. 2010/490) with subsequent amending instruments. The Conservation of Habitats and Species Regulations 2010 (the Habitats Regulations) transpose Habitats Directive into UK legislation. The Habitats Regulations provide for the designation and protection of European Sites and European Protected Species. European Sites include Special Areas of Conservation (SACs) and Special Protection Areas (SPAs), which form part of the Natura 2000 network of protected areas across Europe.

European Protected Species (EPS) are those listed under Schedule 2 of the Habitats Regulations and include dormouse, great crested newt, otter and all species of bat. The regulations prohibit the deliberate capture, killing or disturbance of any EPS; it is also an offence to damage or destroy a breeding site or resting place of any of these species. In order to carry out a lawful operation (e.g. development work which has full planning permission) that may result in an offence under the Habitats Regulations, it is necessary to obtain a licence from Natural England. EPS Licences will only be granted after Natural England has been satisfied that there are no satisfactory alternative and that there will not be any adverse impacts on the favourable conservation status of the species.

WILDLIFE AND COUNTRYSIDE ACT 1981

The Wildlife and Countryside Act 1981 is the principle piece of legislative protection of wildlife in Great Britain. Various amendments have occurred since the original enactment. The Wildlife and Countryside Act contains both habitat and species protection. Certain bird, animal and plant species are afforded protection under Schedules 1, 5 and 8 of the Act. Measures for the protection of the countryside, National Parks, Sites of Special Scientific Interest (SSSIs) are also included within the Act.

COUNTRYSIDE AND RIGHTS OF WAY ACT 2000

The Countryside and Rights of Way (CRoW) Act 2000 adds to the protection afforded in the WCA to SSSI's and other important sites for nature conservation. In addition, under the Act it became a criminal offence to "recklessly disturb" Schedule 1 nesting birds and species protected under Schedule 5 of the Wildlife and Countryside Act. It also enabled heavier penalties on the conviction of wildlife offences.

THE NATURAL ENVIRONMENT AND RURAL COMMUNITIES ACT 2006

The Natural Environment and Rural Communities (NERC) Act 2006 improved wildlife protection by amending the WCA. The main function of the NERC Act was to raise the profile of biodiversity amongst public authorities. Section 40 (S40) of the Act places a 'Biodiversity Duty' on all public bodies to have regard to the conservation of biodiversity when carrying out their normal functions.

PLANNING POLICY

NATIONAL LEVEL - THE NATIONAL PLANNING POLICY FRAMEWORK (NPPF, 2019)

The revised National Planning Policy Framework (2018) (available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/779764/NPPF_Feb_2019_web.pdf) sets out the Government's planning policies for England and how these should be applied. Section 15 of the NPPF provides guidance on conserving and enhancing the natural environment through the planning system. This guidance replaces *Planning Policy Statement 9 (PPS9) Biodiversity and Geological Conservation*. Section 15, Paragraph 170, of the NPPF specifies that the planning system should contribute to and enhance the natural and local environment by:

- protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);
- recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;
- maintaining the character of the undeveloped coast, while improving public access to it where appropriate;
- minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;
- preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and
- remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.

In consideration of habitats and biodiversity, Paragraph 174 states plans should:

- Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and
- promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.

Paragraph 175 states when determining planning applications, local planning authorities should apply the following principles:

- 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;
- 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;
- 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 and a suitable compensation strategy exists; and
- development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity.

GOVERNMENT CIRCULAR 06/05: BIODIVERSITY AND GEOLOGICAL CONSERVATION

The Government Circular 06/05 provides guidance on the application of the law relating to planning and nature conservation. It was originally produced to accompany PPS9, and although some of the information contained within it is now out of date, paragraphs 98 and 99 of the document remain relevant.

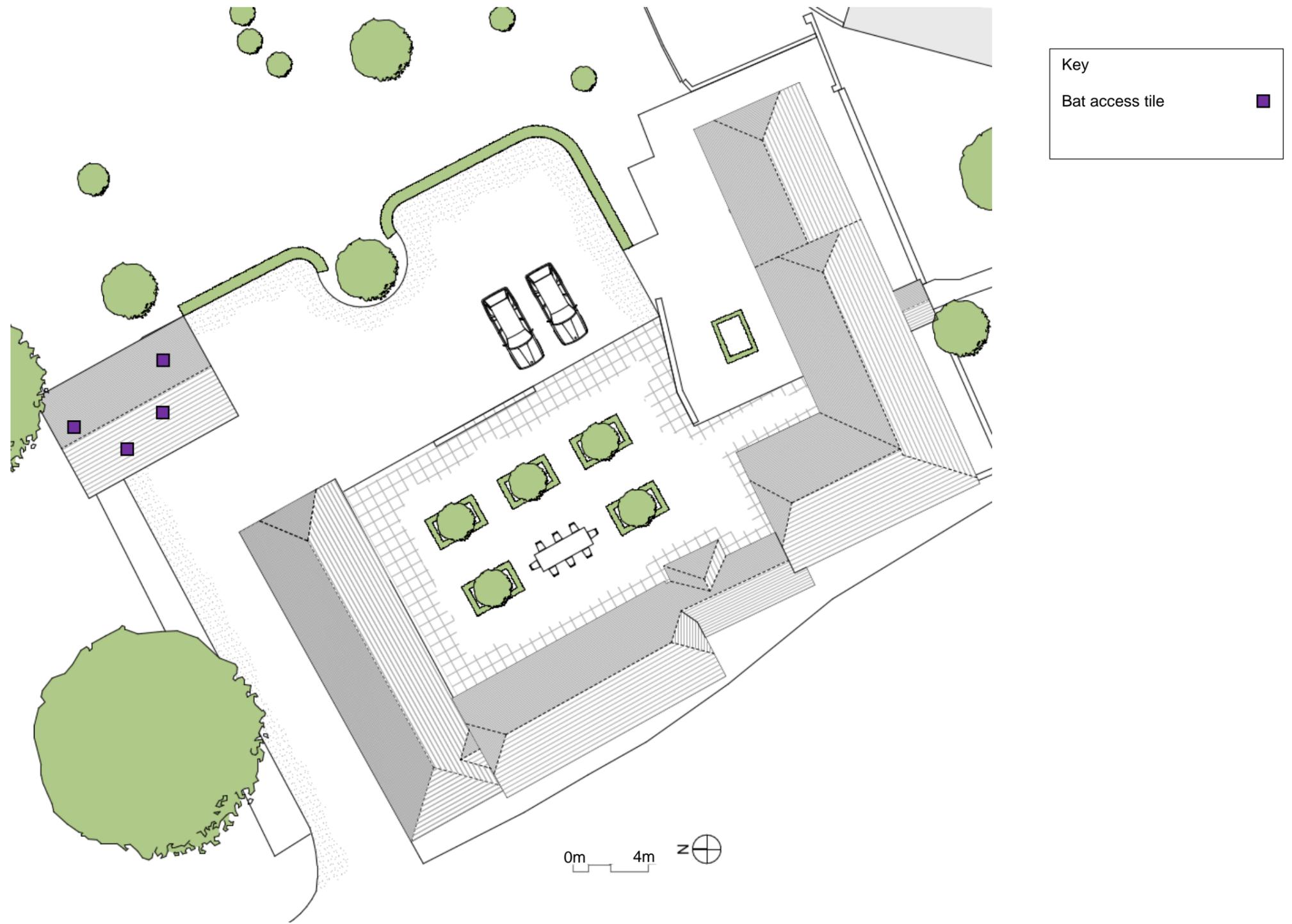
Paragraph 98 states that *“the presence of protected species is a material consideration when a planning authority is considering a development proposal that, if carried out, would be likely to result in harm to the species or its habitats”*

Paragraph 99 states that *“it is essential that the presence or otherwise of protected species, and the extent that they may be affected by the proposed development, is established before the planning permission is granted”*

REGIONAL PLANNING POLICY

The East Hampshire District Council Joint Core Strategy (Available at: <https://www.easthants.gov.uk/planning-services/planning-policy/local-plan/adopted-local-plan>) sets out the long term spatial planning strategy for the region.

Map 1: Proposals and Example Bat Mitigation Strategy



Map 2: Habitats and Features



Key	
Site boundary	
Garage building	
Lifted roof tiles	