



GAS COTTAGE, HUMBER LANE, TIDWORTH, SALISBURY, WILTS

PRELIMINARY ECOLOGICAL APPRAISAL AND PHASE 2 BAT & REPTILE SURVEY

Final Report
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Executive Summary

This report has been prepared by Bourne Ecology on behalf of Mr. P. Hill, who is proposing to submit a planning application to extend an existing 2 storey residential dwelling and renovate an existing rendered concrete outbuilding, linking this with the newly extended property. The application also proposes the removal of a dilapidated portakabin and a new garden access from the south at Gas Cottage, Humber Lane, Tidworth, Wilts, SP9 7BE. The proposals will extend the existing dwelling to the west and south through the centre of the site and also include additional landscaping works to remodel the neglected garden.

This report includes ecological information on Gas Cottage gathered by Bourne Ecology, an assessment of the likely impacts of the proposals, any ecological constraints to works on site and a mitigation strategy, providing additional enhancements for biodiversity.

A Preliminary Ecological Appraisal (PEA) was undertaken by Des Purdy of Bourne Ecology on 23rd June 2025. This involved a walkover survey of the Site, as well as a daytime inspection of the buildings to be impacted by proposals within the development boundary (both internal and external areas).

During the PEA, limited potential bat access points to squeeze gap and void roosting locations were identified around the building exterior of the residential dwelling. These comprised of gaps around wall cap beams on the western aspect and missing mortar around a ridge tile on the single storey extension of the residential dwelling. With the exception of these areas, mortar around the ridges and tile verges was in good condition and all roof slates and soffits were otherwise close fitting. There were a number of gaps around raised, slipped or missing tiles on the southern aspect of the concrete outbuilding, as well as gaps in the exterior render on the western aspect which may allow bat access to potential crevice roosting sites or the building interior. The northern aspect of the roof was entirely covered by a climbing Wisteria. The portakabin did not offer suitable roost access points.

There is a single shallow loft space running the entire length of the ridge above the first floor of the residential dwelling. This was insulated at floor level with glass fibre insulation and lined with breathable roofing membrane. A small number of droppings (5-10) resembling those of bats were noted on the glass fibre insulation. Subsequent DNA analysis of these collected droppings from the loft space confirmed these had originated from Pygmy Shrew (*Sorex minutus*) and not bats.

Based on the observation of gaps around the exterior of the residential dwelling which potentially lead to crevice roosting sites, the residential dwelling was assessed according to Bat Conservation Trust Best Practice Guidelines (Collins, 2023) as providing 'moderate' bat roost potential. The concrete outbuilding was assessed as providing 'low' bat roosting potential and the portakabin was assessed as providing negligible bat roost potential. Further Phase 2 emergence/re-entry surveys were carried out on the residential dwelling and concrete outbuilding in order to determine the numbers and species of any bats (if present) and the nature of any roost(s) within the buildings.

Three Phase 2 Bat Surveys, using two surveyors during each survey, were subsequently carried out during the bat active season on 14th July, 7th August and 29th August 2025 to determine the presence of bats within the residential dwelling at Gas Cottage. A single survey using a single surveyor was undertaken on 9th July 2025 on the concrete outbuilding, according to current BCT Guidelines (Collins, 2023). During the dusk survey of the 29th August, a maximum count of three individual common pipistrelles (*Pipistrellus pipistrellus*) were observed and recorded emerging from the residential dwelling. Two bats emerged from below a roof slate close to the ridge on the western aspect and a single individual from below a roof tile close to the ridge on the eastern aspect. On the survey of 7th August, a single Common Pipistrelle was also observed emerging from below a roof slate close to the eaves on the western aspect of the building. No bats were observed emerging from

the concrete outbuilding during the single survey carried out on 9th August. Low numbers of Common Pipistrelles (*Pipistrellus pipistrellus*), as well as individual Noctule (*Nyctalus noctula*), Serotine (*Eptesicus serotinus*), Soprano Pipistrelle (*Pipistrellus pygmaeus*), *Myotis* sp. and Long-eared bats (*Plecotus* sp.) were observed and/or recorded commuting overhead or foraging near to the building during the Phase 2 surveys. As surveys have confirmed the presence of Common Pipistrelle bats using three roost sites within Gas Cottage, if roost sites will be damaged or disturbed as a result of repair or renovation works there will be a requirement for a European Protected Species Licence from Natural England to legally carry out proposals.

The surrounding neglected garden shows some suitability for the presence of common and widespread reptile species. Accordingly, a series of 7 presence/absence surveys using 22 artificial refugia were undertaken between 28th July and 5th September 2025. These surveys showed the presence of a low population (maximum count of 2 individuals) of Common Lizard (*Zootoca vivipara*) present within long grass in the garden at Gas Cottage. No reptiles were recorded elsewhere on site.

The surrounding garden also presents opportunity for nesting birds, particularly within boundary vegetation, areas of shrubby growth and within climbing ivy. These were located within areas to be impacted by development. No evidence of the presence of other protected species was recorded within or surrounding the building during the PEA.

If appropriately mitigated, the ecological impacts of the proposals are considered to be low. Recommendations are made to include mitigation and enhancements for biodiversity in line with local and national planning policy. A mitigation and enhancement strategy has been designed that takes into account the full assessment of the Site and will ensure that any foreseeable impacts on ecological receptors are minimised. The mitigation strategy includes the careful timing, phasing and (if necessary) supervision of works.

The impacts of proposals are limited to the existing building and the surrounding garden. The proposed development presents an opportunity to enhance the Site by the incorporation of new bat roosting opportunities, improvements to reptile habitats, provision of new bird nesting features, a woodcrete insect block and additional planting as part of landscaping work within the garden, in line with local and national planning policy. These will promote the favourable conservation status of protected species at the Site.

1. Introduction

Background

- 1.1 Bourne Ecology was commissioned by Mr. P. Hill to undertake a Preliminary Ecological Appraisal (PEA) of the existing residential dwelling, Outbuilding, Portakabin and amenity garden at Gas Cottage Humber Lane, Tidworth, Salisbury, Wilts, SP9 7BE (hereafter referred to as the Site). For Site location please refer to **Appendix 2**. This report summarises the findings of the PEA, the Phase 2 bat emergence surveys and reptile surveys carried out at the Site.
- 1.2 The results set out within this report are valid for one year from the issue date, after which a follow up visit may be required to establish if conditions on site have changed.

Brief

- 1.3 To conduct a Preliminary Ecological Appraisal and subsequent Phase 2 bat emergence/re-entry survey and reptile survey arising as a requirement of the PEA, to advise the Client of the ecological implications of their proposals and to inform a mitigation strategy ensuring there are no negative impacts on the favourable conservation status of protected species currently using the Site.

Development Proposals

- 1.4 The planning application proposes to demolish the existing single storey section of Gas Cottage located on the western aspect of the dwelling and to replace this with new one and two-storey sections running in a north-south direction within the development boundary, linking this new build to the existing Outbuilding (see **Appendix 6**). The existing Portakabin will be removed. Landscaping to facilitate access from the south is planned, which will necessitate works to locate the new access through the existing boundary wall to the garden, along with new hedgerow planting around boundary habitats (see **Appendix 6**).

Site Context & Description

- 1.5 Gas Cottage is located at Ordnance Survey grid reference SU 22547 46977 and is accessed from Humber Lane to the west of the Site. The property was vacant at the time of survey. The dwelling lies within an area of neglected amenity garden, comprising of overgrown lawned areas, large patches of bramble (*Rubus fruticosus*), some of which had been recently cut back and developing ruderals within an area formerly occupied by a large glasshouse. The Site also contains a number of mature trees around boundary areas. An old concrete Outbuilding lies to the south of the Site, which is heavily overgrown by a large Wisteria on the northern aspect. A dilapidated Portakabin also sits on the southern boundary of the Site.
- 1.6 Habitats within the likely zone of influence of proposals comprise of the dwelling house itself, adjacent areas of neglected amenity garden which is heavily overgrown in places, cleared

bramble scrub, small patches of developing ruderals, former lawned areas which have reverted to long grass and the nearby concrete Outbuilding and dilapidated Portakabin.

- 1.7 The Site is situated within an immediate area that is rural in character, within an area of low density residential housing southwest of Tidworth. Nearby habitats predominantly comprise of arable farmland and short sward sports pitches used by the local military garrison. The Site is near to the southeastern edge of Salisbury Plain. The river Bourne flows in a southerly direction to the east of Gas Cottage and is located approximately 630m away at its' nearest point.
- 1.8 The wider landscape is predominantly rural and is dominated by Salisbury Plain (See **Appendix 2 & 3** for building location and context), with military barracks forming the outskirts of Tidworth located approximately 750m northwest of the Site.
- 1.9 The Site's closest Statutory Protected Wildlife Sites are Salisbury Plain Site of Special Scientific Interest (SSSI), Special Area of Conservation (SAC) and Special Protection Area (SPA), all of which are located approximately 850m west of the Site at their nearest combined points.

Relevant Legislation and Policy Implications

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

Biodiversity Action Plans

- 1.11 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.

Planning Implications

- 1.12 The Government has set out its policies for the protection and enhancement of biodiversity in the planning system within the revised National Planning Policy Framework (*NPPF, 2023*) 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.
- 1.13 The Site is situated within the Wiltshire Council planning area. The Wiltshire Council Core Strategy (Adopted 2015) (Wiltshire Council, 2015) contains Core Policy 50 relating to Biodiversity and Geodiversity, which states:

Protection

Development proposals must demonstrate how they protect features of nature conservation and geological value as part of the design rationale. There is an expectation that such features shall be retained, buffered, and managed favourably in order to maintain their ecological value, connectivity and functionality in the long-term. Where it has been demonstrated that such features cannot be retained, removal or damage shall only be acceptable in circumstances where the anticipated ecological impacts have been mitigated as far as possible and appropriate compensatory measures can be secured to ensure no net loss of the local biodiversity resource, and secure the integrity of local ecological networks and provision of ecosystem services.

All development proposals shall incorporate appropriate measures to avoid and reduce disturbance of sensitive wildlife species and habitats throughout the lifetime of the development.

Any development potentially affecting a Natura 2000 site must provide avoidance measures in accordance with the strategic plans or guidance set out in paragraphs 6.75-6.77 above where possible, otherwise bespoke measures must be provided to demonstrate that the proposals would have no adverse effect upon the Natura 2000 network. Any development that would have an adverse effect on the integrity of a European nature conservation site will not be in accordance with the Core Strategy.

Biodiversity enhancement

All development should seek opportunities to enhance biodiversity. Major development in particular must include measures to deliver biodiversity gains through opportunities to restore, enhance and create valuable habitats, ecological networks and ecosystem services. Such enhancement measures will contribute to the objectives and targets of the Biodiversity

Action Plan (BAP) or River Basin/ Catchment Management Plan, particularly through landscape scale projects, and be relevant to the local landscape character.

Local sites

Sustainable development will avoid direct and indirect impacts upon local sites through sensitive site location and layout, and by maintaining sufficient buffers and ecological connectivity with the wider environment. Damage or disturbance to local sites will generally be unacceptable, other than in exceptional circumstances where it has been demonstrated that such impacts:

- i. cannot reasonably be avoided*
- ii. are reduced as far as possible*
- iii. are outweighed by other planning considerations in the public interest*
- iv. where appropriate compensation measures can be secured through planning obligations or agreements.*

Development proposals affecting local sites must make a reasonable contribution to their favourable management in the long-term.

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 CIEEM guidelines (2017).

Defining the Zone of Influence

- 2.2 In order to define the spatial scope of the ecological survey at Gas Cottage, 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 Gas Cottage and the likely biophysical changes (in the absence of mitigation) include:
- a. Removal of part of the existing dwelling and Portakabin with impacts on roosting bats and nesting birds (if present) during works;
 - b. Disturbance to surrounding habitats, with potential impacts on nesting and foraging birds, common and widespread reptile species and commuting and foraging bats;
 - c. Permanent loss of a small area of long grass and developing ruderals to facilitate the new building footprint and landscaping works, with potential impacts on reptiles and foraging birds;
 - d. An increase of noise and dust during the construction 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). Given the relatively small scale of the proposed development, a data-gathering exercise was undertaken to obtain information relating to statutory designated sites and key protected species which may be within the zone of influence or otherwise adversely affected by development proposals. This involved requesting records of protected and notable species within 1km of the Site from

Wiltshire and Swindon Biological Records Centre (WSBRC), as well as interrogating Natural England's "Nature on the Map" (MAGIC) to establish protected sites and habitats within the likely zone of influence of the proposals. Key protected species records are summarised within this report and a full list of records is available on request.

- 2.5 Previous bat surveys available to view on the planning portal were also reviewed to collect additional information of bats recorded within the vicinity of the Site.

Preliminary Ecological Appraisal

- 2.6 An initial survey of the Site was undertaken on 23rd June 2025 by Des Purdy (Natural England Bat Licence N^o: 2025-84448-CL18-BAT, Great Crested Newt Licence N^o: 2025-81393-SCI-CL08, Dormouse Licence N^o: 2026-88780-CL10a-DOR) of Bourne Ecology during calm and partly overcast weather conditions and an ambient temperature of 21°C. The survey is essentially an ecological appraisal of the Site. The habitats and features within the Site boundary were noted and classified. In addition any evidence of, or potential for protected species to be on the Site or within the Zone of Influence was recorded.

Bats

Overview

- 2.7 The bat survey comprised of a combination of an assessment of habitats within the likely zone of influence of the proposals and a daytime inspection (internal and external areas) of any buildings on site.

Daytime Inspection of Buildings within the Site Boundary

- 2.8 Bats use features within buildings such as stone crevices or cracks in brickwork, ridge beams, gaps between roofing materials and the main building structure, along with other potential access points. An internal and external inspection of the buildings were conducted paying note to these features.
- 2.9 The buildings were 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.

- 2.10 Any accessible voids were searched using a Pixfra Arc A613 thermal imager and very bright torch. The external inspection of the building involved searching for evidence with the use of a torch and binoculars.
- 2.11 Bats may roost in locations that are inaccessible to a surveyor, such as in between roof linings and exterior tiles, gaps under hanging tiles, within soffits etc. Therefore, potential areas for bats to roost or potential access points were also noted during the survey in order to assess the buildings 'potential' to support roosting bats in line with Bat Conservation Trust best practice guidelines (Collins, 2016). An assessment of the buildings' potential value to bats was also made at the initial inspection stage in order to determine the level of any further survey work required to fully assess the Site for bats.

Table 1: Assessment of Bat Roost Suitability of Buildings

Potential	Criteria
Negligible	Negligible features on site likely to be used by bats
Low	Potential features present which may support low numbers of bats irregularly but no suitable features for regular use by large numbers of bats
Moderate	A building with one or more potential roost features that may be used by bats due to their size, shelter, protection, condition and habitats present. Unlikely to support a roost of high conservation value
High	A building with one or more potential roost sites that are suitable for use by a large number of bats on a regular basis

Phase 2 Bat Surveys

- 2.12 As the residential property of Gas Cottage was assessed as providing a 'moderate' bat roost following the PRA, further surveys were undertaken to assess the presence or likely absence of roosting bats and to characterise any roost types. Surveys comprised of three emergence/re-entry surveys undertaken according to BCT Best Practice Guidelines (Collins, 2023).
- 2.13 The Outbuilding was assessed as providing 'low' bat roost potential and a single emergence survey was carried out according to BCT Best Practice Guidelines (Collins, 2023) to assess the presence or likely absence of roosting bats.
- 2.14 Two surveyors in total (for each survey) were positioned around Gas Cottage, at locations identified as allowing good sight lines and ensuring that all potential bat access/egress points

were visible between the surveyors. Each surveyor was equipped with either an Anabat Walkabout or Batlogger M to record any unidentified calls for subsequent computer analysis.

- 2.15 A single surveyor was positioned southwest of The Outbuilding, at a location identified as allowing good sight lines and ensuring that all potential bat access/egress points were visible. The surveyor was equipped with an Anabat Walkabout.
- 2.16 All observers used during emergence/re-entry surveys are experienced bat surveyors, including Des Purdy (NE Class 2 Bat Licence: 2025-84448-CL18-BAT), Shona Campbell and Jake Cousins.
- 2.17 Each surveyor was supplied with a plan of the Site on which to mark bat activity. The following information was 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 or re-entered the building.
- 2.18 Behaviour was identified by flight patterns and call characteristics, as heard on the bat detector. Weather conditions (temperature, wind speed/direction, cloud cover, rainfall in the last hour) were also recorded at the start and end of each survey.
- 2.19 In addition to acoustic survey methods, the building was also filmed using night vision aids (NVAs). Thermal imagers (Pixfra Arc A613) were used to film bat activity and identify potential bat roost locations within and around the building in low light conditions.

Bat Survey Timings

- 2.20 Three dusk emergence surveys were conducted on 14th July 2025, 7th August 2025 and 29th August 2025 at Gas Cottage. A single emergence survey was carried out on the Outbuilding on 9th July 2025.

Table 2.1 Timings & weather conditions of bat surveys undertaken at Gas Cottage and the Outbuilding.

Date	Type	Personnel	Start	End	Sunset/ Sunrise	Weather
07/07/25	Dusk Emergence (The Outbuilding)	Des Purdy	21:06	22:51	21:21	Start temp: 20.8°C, finish temp: 19.1°C, wind BF 0-1, cloud 10%, no rain
14/07/25	Dusk Emergence (Gas Cottage)	Des Purdy Jake Cousins	21:01	22:46	21:16	Start temp: 18.1°C, finish temp: 15.9°C, wind BF 1-3, cloud 0%, no rain
07/08/25	Dusk Emergence (Gas Cottage)	Des Purdy Jake Cousins	20:28	22:13	20:43	Start temp: 19.1°C, finish temp: 18.9°C, wind BF 1-3, cloud 100%, no rain
29/08/25	Dusk Emergence (Gas Cottage)	Des Purdy Shona Campbell	19:44	21:29	19:59	Start temp: 17°C, finish temp: 15°C, wind BF 1-3, cloud 0%, no rain

Birds

- 2.21 Any habitat features, for example buildings, scrub, hedgerows 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.

Reptiles

- 2.22 During the survey, habitats within the Site boundary were assessed for their potential to support reptiles. In addition, the surrounding landscape and adjoining habitats were appraised for their potential to support reptiles in order to ascertain the likelihood of these species being present. Any natural refugia encountered were inspected for reptile presence.
- 2.23 Following the identification of areas of potentially suitable reptile habitat, a series of presence / absence surveys were conducted, targeting those areas of on-site habitat with the potential to support reptiles. Artificial refugia were laid out within the Site boundaries on 9th July 2025 and allowed to 'bed-in' for at least two weeks. A total of seven separate survey visits were

then conducted between 28th July 2025 and 5th September 2025, under suitable weather conditions (as defined by Griffiths and Inns, *In* HGBI, 1998). All field surveys were undertaken by a suitably experienced ecologist.

2.24 The surveys consisted of the following three methods, in accordance with current guidance (Griffiths and Inns, *In* HGBI 1998; Froglife, 1999; Sewell *et al.*, 2013):

- *Visual Search* – The Site was searched visually during each visit. Details of reptiles encountered basking in the open were recorded. Recorded data included; species, sex, age and location.
- *Extant Refugia* – Any existing potential refugia present within the Site boundaries were carefully searched by hand for reptiles. Such refugia included; profiled metal sheets, logs and discarded wood.
- *Artificial Refugia* – 22 artificial refugia consisting of bitumen roofing felt and profiled galvanised metal sheeting were sited in areas of habitat with reptile potential throughout the entire Site. Such areas included; areas of cleared bramble scrub, overgrown grassland and sunny areas close to dense vegetation. All refugia were lifted during each survey visit and all reptiles present on, under or next to each refugium were recorded. It must be noted that the number of refugia used was higher than the recommended number of 10 per hectare (22 rather than the recommended 2 for a 1,860 square metre site) as the survey aimed to prove presence/absence and this must be taken into account when assessing the population size class estimate for the reptile population.

Dormice (*Muscardinus avellanarius*)

2.25 Habitats within and adjacent to the Site boundary were considered for their potential to support dormice. The structure of any boundary and woody habitats were noted 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, in order to assess how well linked any suitable habitats on the Site are to those surrounding habitats within the wider landscape.

Amphibians

2.26 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 presence and habitats were mapped and described during the preliminary ecological appraisal.

Badgers (*Meles meles*)

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

Terrestrial Invertebrates

- 2.28 An assessment was made of the site for the potential to support diverse communities of invertebrates, or any Biodiversity Action Plan (BAP) species. The assessment was made based on the presence of a number of habitat features which may support important invertebrate communities such as:
- An abundance of deadwood;
 - Presence of diverse plant communities;
 - Presence of varied woodland structure and sunny woodland edge;
 - Presence of ponds or watercourses; and
 - Presence of free draining soil exposures.
- 2.29 During the initial survey, no attempt was made to identify invertebrate species and where habitats were identified capable of supporting important or rare species, further Phase II survey work may be necessary to assess the importance of the site.

Survey Constraints

- 2.30 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.
- 2.31 Bats are nomadic and invariably move between roost sites, therefore any bat survey will only provide a snapshot of how bats may be using a particular site at that time.

3. Survey Results and Evaluation

Desk Survey

Designated Sites

- 3.1 The Site's closest Statutory Protected Wildlife Site is Salisbury Plain Site of Special Scientific Interest (SSSI), Special Protection Area (SPA) and Special Area of Conservation (SAC) which are located approximately 850m west of the Site. Although the Site lies within the SSSI impact zone for Salisbury Plain, given the lack of immediate spatial proximity to statutory designated sites and as the proposed development will not result in any net increase in the number of residential dwellings locally, any potential direct impacts on statutory designated sites as a result of the proposed development would not be considered ecologically significant, either in isolation or combination.

Pre-existing Bat Records

- 3.2 Local bat records provided by Wiltshire and Swindon Biological Records Centre show presence of Common Pipistrelle (*Pipistrellus pipistrellus*), Soprano Pipistrelle (*Pipistrellus pygmaeus*), Brown Long-eared bat (*Plecotus auritus*), Western Barbastelle (*Barbastella barbastellus*), Natterer's bat (*Myotis nattereri*), Whiskered Bat (*Myotis mystacinus*), Noctule (*Nyctalus noctula*), Leisler's Bat (*Nyctalus leisleri*) and Serotine (*Eptesicus serotinus*), within 2km of the Site. Of these species, only the Common & Soprano Pipistrelle and Brown Long-eared bat can be considered as being at all common. The other species range from local to rare.

European Protected Species Licences (EPSLs)

- 3.3 A search of the Government website Multi-Agency Geographic Information for the Countryside (MAGIC) revealed the presence of two granted EPSL with respect to bats within 1km of Gas Cottage. The nearest of these concerns the damage of a resting place for Common Pipistrelle, Soprano Pipistrelle, Brown Long-eared bat and Serotine which is located approximately 330m north of the Site. The second EPSL concerns the damage of a breeding site used by Brandt's Bat (*Myotis brandtii*), and Common and Soprano Pipistrelle and is located approximately 510m northeast of the Site. No further EPSLs with respect to other protected species have been granted within 2km of the Site.

Site Overview: Broad Habitats and Features

- 3.4 Refer to **Appendix 3 & 4** which show surrounding habitats and the existing site layout.
- 3.5 The Site comprises of the existing residential dwelling at Gas Cottage, the Outbuilding, the Portakabin and the associated amenity garden within the residential curtilage. A more detailed description of the buildings affected by development plans is included within the bat survey section below.

- 3.6 The garden surrounding the Gas Cottage has been recently untended and parts have succeeded to rough grassland and bramble-dominated scrub. Large parts of this bramble scrub in the centre of the Site had been recently cleared (**Figures 1 & 2**). Some locally common taller ruderal species such as Great Willowherb (*Epilobium hirsutum*) and Hogweed (*Heracleum sphondylium*) were noted in remaining vegetated areas around the site boundaries (**Figures 3 & 4**) and areas of Box hedging (*Buxus sempervirens*) remain in several areas from amenity planting. Some taller grasses such as False Oat Grass (*Arrhenatherum elatius*) were also noted adjacent to cleared areas (**Figure 5**). Bramble scrub and tall grasses had also been recently cleared to the east of the site in an area bordering a compacted aggregate hard standing used for vehicle parking and access from Humber Lane.



Figure 1: Land to the southwest of the plot showing areas of bramble clearance and tall ruderals with blockwork boundary wall visible



Figure 2: Land to the northwest of the plot with surrounding fruit trees & bramble scrub



Figure 3: Tall ruderals and remaining Box (*Buxus*) planting close to the Portakabin



Figure 4: Grassland in the centre of the Site



Figure 5: Areas of taller False Oat Grass bordering former lawned area



Figure 6: Recently cleared tall grasses and bramble scrub to the east of the Site adjoining hard standing car parking area

External Building Inspection – Residential Dwelling

- 3.7 Gas Cottage is a rectilinear, two-storey, brick-built building with a cavity wall (see **Appendix 5**), supporting a pitched slate tiled roof and ridge with two chimneys on the northern aspect (**Figures 7, 8 and 9**). A small single storey slate tiled extension and dilapidated conservatory adjoins the western aspect. The property was unoccupied at the time of survey.
- 3.8 The building is in variable exterior condition, with close fitting soffits around exterior masonry at eaves height on the two storey section of the dwelling. These would not allow bat access to internal roost sites. The slate roof is in generally good condition, with no raised, missing or slipped slates noted during the inspection. Ridge tiles were well mortared in position on the main section of roof, with a single ridge tile showing signs of recent repointing. However, a small section of mortar is missing below a ridge tile on the single storey section to the west (**Figure 10**). Small gaps were noted alongside the northern and southern wall cap beams on the western gable (**Figure 11**) and there are gaps around barge boarding and soffits on the western aspect of the single storey extension which may allow bat access (**Figure 12**).



Figure 7: Southern and eastern aspects of Gas Cottage



Figure 8: Northern aspect of Gas Cottage



Figure 9: Western aspect of Gas Cottage



Figure 10: Missing mortar below ridge tile on western aspect extension



Figure 11: Gap alongside wall cap beam on western aspect



Figure 12: Gaps around barge boards and soffits on western aspect of extension

Internal Inspection – Residential Dwelling

- 3.9 The internal inspection revealed the presence of a single enclosed void space running the entire length of the main ridge. This was lined internally with breathable roofing membrane (**Figures 13 & 14**). This was accessible from a single access point.
- 3.10 This low void is un-boarded and inspection could only be carried out from the loft access. The void is A-frame trussed and was not used for storage at the time of survey. The void measures approximately 9m (l) x 3m (w) x 1.2m (h) and internal conditions were warm, dark and draught free. Parts of the void space were heavily cobwebbed, which does not suggest signs of recent bat usage. The floor was insulated throughout with glass fibre insulation. Several unused bales of glass fibre insulation obstructed the void space to the east of the access hatch.
- 3.11 There was some evidence of rodent presence, with both mouse and rat droppings noted. Several droppings (~10) resembling those of small bat species were noted close to the access hatch. These were collected for DNA analysis and were subsequently confirmed to have originated from Pygmy Shrew (*Sorex minutus*).



Figure 13: Void space viewed westwards at Gas Cottage



Figure 14: Void space viewed eastwards from access hatch

The Outbuilding – External Inspection

- 3.12 The small concrete-walled Outbuilding to the south of Gas Cottage was inspected for signs of protected species presence. The northern aspect is heavily overgrown by a large scrambling Wisteria, Ivy (*Hedera helix*) and a large climbing Rose (*Rosa* sp.) (**Figure 15**), which entirely cover the northern aspect of the roof. A single access door is present on the northern aspect and a glazed window allows ingress of light into the interior of the eastern aspect (**Figure 16**). The slate roof showed several lifted and missing slates (**Figure 17**) and there were large gaps at eaves height on the southern aspect which would allow access to the interior of the building (**Figure 18**). Exterior render was cracked and peeling on the southern and western aspects (**Figures 17 and 19**).

The Outbuilding- Internal Inspection

- 3.13 Internal conditions within the Outbuilding were light due to the window on the eastern aspect. The slate roof is unlined and supported on a timber frame (**Figure 20**). Several gaps at eaves height and from missing slates were noted. All roof joists and beams were close fitting and do not offer potential bat roosting sites. The Outbuilding was used for storage of old domestic items. There was no evidence of current or historic occupation of the building by roosting bats or nesting birds.



Figure 15: Northern and western aspects of the Outbuilding



Figure 16: Eastern and southern aspects of the Outbuilding



Figure 17: Slate tiled roof & ridge of the Outbuilding



Figure 18: Gaps around eaves & slipped slates allowing access to building interior



Figure 19: Gaps within exterior render on SW corner of Outbuilding



Figure 20: Interior of Outbuilding with unlined roof and visible gaps

The Portakabin – External Inspection

- 3.14 A dilapidated Portakabin is situated on the southern boundary of the plot. This did not show suitable exterior access points to potential crevice roosting sites (**Figure 21**).

The Portakabin – Internal Inspection

- 3.15 Interior conditions were bright and well-lit due to the presence of windows on northern, southern and western aspects (**Figure 22**). The building was used for storage of domestic items and gardening paraphernalia. The internal walls and roof were failing and had collapsed in several places. There was no evidence of current or historic occupation of the building by roosting bats or nesting birds.

Overall Building Assessments for Bats

- 3.16 Following the identification of several gaps around the building exterior which may allow potential bat access to crevice roosting sites, the residential dwelling at Gas Cottage was assessed according to current BCT guidelines (Collins, 2023) as providing a 'moderate-unconfirmed' bat roosting potential. Three further emergence surveys to ascertain bat numbers and species were subsequently undertaken according to BCT Best Practice Guidelines (Collins, 2023).
- 3.17 The Outbuilding was assessed as providing 'low- unconfirmed' bat roosting potential, due to the presence of several large cracks in exterior render, raised and missing roof slates and gaps around the eaves which may allow bat access to the interior of the building. One further emergence survey to ascertain bat presence/likely absence was undertaken according to BCT Best Practice Guidelines (Collins, 2023). The Outbuilding does offer some bird nesting potential within dense climbing vegetation on the northern aspect.
- 3.18 The Portakabin was assessed as providing 'negligible' bat roosting potential and will not require further bat survey prior to its removal.



Figure 21: Northern aspect of Portakabin

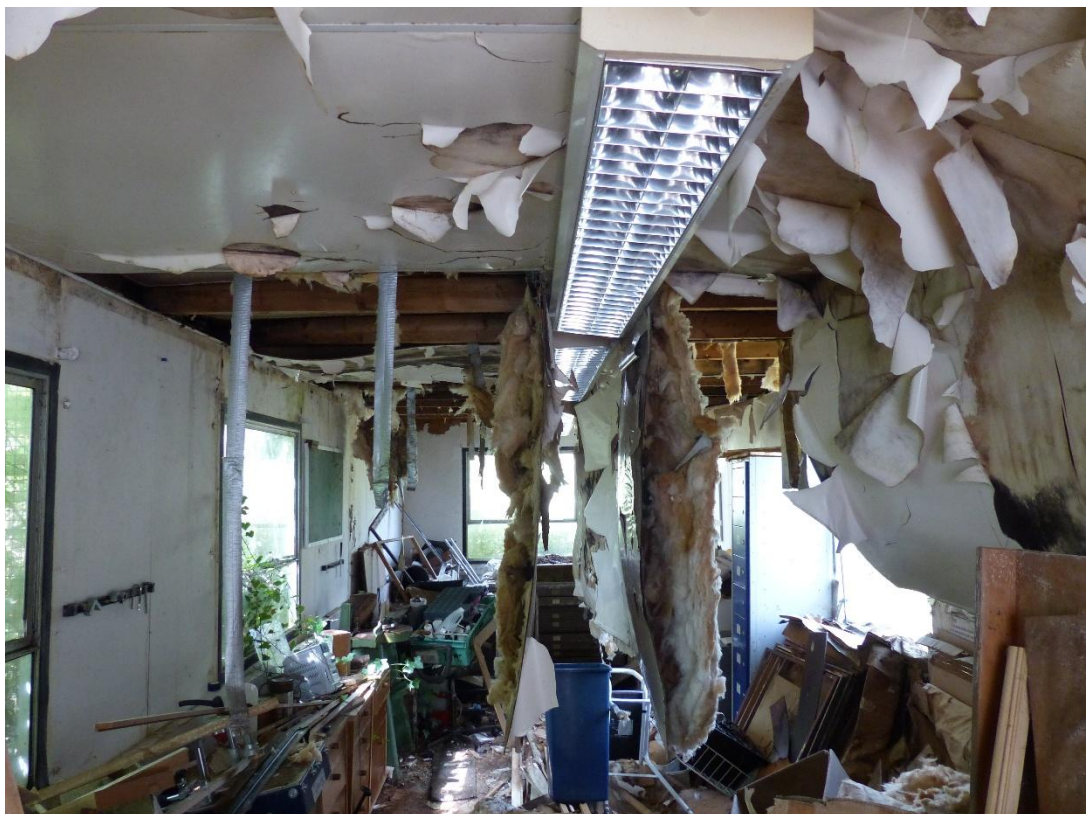


Figure 22: Interior of the Portakabin

Phase 2 Bat Surveys

3.19 The emergence surveys undertaken at Gas Cottage and The Outbuilding are summarised in **Table 3.1** below:

Table 3.1: Summarised results of the bat activity surveys at Gas Cottage & The Outbuilding

Survey Date & Location	Bat Emergences	General Activity
9 th July 2025 The Outbuilding	No bats were observed or recorded emerging from the Outbuilding during the survey.	Species recorded: Common Pipistrelle, Soprano Pipistrelle & Noctule. Activity: Low levels of bat activity were observed and recorded from individual foraging Common Pipistrelles, notably during the latter part of the survey. No bats were recorded until 22:03. Occasional passes were recorded from individual commuting or foraging Noctules high above the site. Two passes from an individual commuting Soprano Pipistrelle were recorded between 22:28 and 22:30.
14 th July 2025 Gas Cottage	No bats were observed emerging from Gas Cottage during the survey.	Species recorded: Common Pipistrelle, Soprano Pipistrelle & Noctule. Activity: Low levels of foraging activity from individual/low numbers of Common Pipistrelles, again during the latter part the survey, with no bat activity recorded until 22:00. A limited number of passes from individual heard, but not seen Soprano Pipistrelles and Noctules were recorded commuting/foraging during the survey.
7 th August 2025 Gas Cottage	A single Common pipistrelle was observed & recorded emerging from below a roof slate on the main western gable tile verge of Gas Cottage at 20:56.	Species recorded: Common Pipistrelle, Soprano Pipistrelle, Serotine & Noctule. Activity: Low levels of foraging activity from individual/low numbers of Common Pipistrelles. A limited number of passes from individual soprano pipistrelles, serotines and noctules were observed by both surveyors, with heard, but not seen bats of the same species also recorded commuting/foraging later during the survey.
29 th August 2025 Gas Cottage	A single common pipistrelle was observed emerging from below a roof slate on the eastern tile verge close to the apex at 20:22. Two common pipistrelles were observed emerging from below a roof tile on the western tile verge close to the roof apex at 20:24 & 20:33.	Species recorded: Common Pipistrelle, Soprano Pipistrelle & Noctule. Activity: Following the 3 emergences, low levels of bat activity were observed and recorded from individual Common Pipistrelles during the survey. Occasional passes were recorded from individual commuting or foraging Soprano Pipistrelles and Noctules. During the latter 30 minutes of the survey bat activity declined, although conditions remained favourable.

Bat survey interpretation and evaluation of results

- 3.20 No evidence of roosting bats was found within the loft void during the PEA at Gas Cottage or the Outbuilding. Further Phase 2 emergence surveys identified the presence of an individual Common Pipistrelle using a roost site below roofing slates on the western gable tile verge of Gas Cottage to the southwest. Two Common Pipistrelles were noted emerging from below a roof slate in a different location the on the western tile verge close to the apex on 29/8/25. A single Common Pipistrelle was observed emerging from below a roof slate on the eastern tile verge close to the apex on 29/08/25. Roost locations are shown in **Appendix 9**. Gas Cottage is confirmed to support up to three roosting Common pipistrelles using three different roost sites and a European Protected Species Licence (EPSL) will be required if works to repair and extend the property affect the roof structure, including repairs to failing timbers forming wall cap beams. No bats were noted emerging from the Outbuilding during the single survey and there is no requirement for an EPSL prior to renovation of this building.

Nesting Birds

- 3.21 During the PEA and external inspection of Gas Cottage, the Outbuilding and the Portakabin, no evidence of bird nesting was observed. However, the shrubby vegetation on site, boundary hedgerows and areas of climbing Wisteria, rose and ivy associated with the Outbuilding and the northern aspect of Gas Cottage provide some nesting opportunities for common passerine species.

Reptiles

- 3.22 A limited number of records within the last 7 years provided by WSBRC indicate presence of reptiles within 1km of the Site. Records exist for Grass snake (*Natrix helvetica*), Common Lizard (*Zootoca vivipara*) and a single record for Slow Worm (*Anguis fragilis*). Following the identification of potentially suitable reptile habitat at Gas Cottage, a series of presence/absence surveys using artificial refugia was carried out. Table 3.2 summarises the results of reptile surveys.

Table 3.2: Summarised results of reptile presence/ absence surveys at Gas Cottage

Survey No.	Date	Weather	Method	Location	Species	Sex	Age	Peak Count
1	28.7.25	Start time: 08:10 Finish time: 08:20 Start temp (°C): 12.0 End Temp (°C): 12.3 Cloud cover (%): 50% Wind speed: BF0-1 Rain: None Ground: Dry	A.R.	Mat 13	<i>Z. vivipara</i>	-	Juv	1
2	2.8.25	Start time: 08:30 Finish time: 08:45 Start temp (°C): 15.9 End Temp (°C): 16.0 Cloud cover (%): 0%	A.R.	Mat 13	<i>Z. vivipara</i>	-	Juv	1

		Wind speed: BF0-1 Rain: None Ground: Dry						
3	5.8.25	Start time: 08:30 Finish time: 08:40 Start temp (°C): 16.4 End Temp (°C): 16.5 Cloud cover (%): 5% Wind speed: BF0-1 Rain: None Ground: Damp (dew)			No reptiles recorded			N/A
4	6.8.25	Start time: 08:30 Finish time: 08:40 Start temp (°C): 12.6 End Temp (°C): 12.7 Cloud cover (%): 0% Wind speed: BF0-1 Rain: None Ground: Dry	A.R.	Mat 13	<i>Z. vivipara</i>	-	Juv	<u>1</u>
5	22.8.25	Start time: 09:07 Finish time: 09:25 Start temp (°C): 11.0 End Temp (°C): 11.3 Cloud cover (%): 50% Wind speed: BF0-1 Rain: None Ground: Dry			No reptiles recorded			N/A
6	28.8.25	Start time: 08:35 Finish time: 08:45 Start temp (°C): 15.3 End Temp (°C): 15.5 Cloud cover (%): 20% Wind speed: BF1-2 Rain: None Ground: Damp from overnight rain			No reptiles recorded			N/A
7	5.9.25	Start time: 09:15 Finish time: 09:35 Start temp (°C): 14.8 End Temp (°C): 15.1 Cloud cover (%): 0% Wind speed: BF0-1 Rain: None Ground: Damp (dew)	A.R.	Mat 3	<i>Z. vivipara</i>	F	Ad	1

3.23 Reptiles were recorded during 4 of the 7 separate reptile surveys carried out. The Site provides a limited range of potentially suitable habitats for reptiles. Recorded presence of individuals was confined to areas within the garden boundary wall (locations of reptiles found during surveys are shown in **Appendix 8**). In accordance with current guidance (HGBI, 1998) the site has been found to support a low population of Common Lizard.

Amphibians

3.24 Three records provided by WSBRC indicate the presence of Common Frog (*Rana temporaria*) and two records for Common Toad (*Bufo bufo*) within 1km of the Site. No records within the previous 50 years exist for other protected amphibian species. There are no

records of EPSLs with respect to Great Crested Newts (*Triturus cristatus*) locally. A search of the Government website Multi-Agency Geographic Information for the Countryside (MAGIC) revealed no standing water within 500m of the Site.

- 3.25 There is no suitable breeding habitat for amphibians within the development site. Limited opportunity exists for terrestrial life phases of amphibian species elsewhere within the site boundaries at Gas Cottage. Recommendations are made within **Section 5.0** for on-going site maintenance to ensure habitats do not become suitable for colonisation by amphibian species prior to the commencement of any development work. Accordingly, no further survey work for these species is considered necessary or proportionate prior to development.

Hazel dormouse

- 3.26 Habitats within the zone of influence of the proposals (the construction zone and any potential working zone) are isolated and considered to be of limited quality for hazel dormice. No records of local dormouse presence were returned in the WSBRC search. Consequently the proposed works are deemed very unlikely to impact on dormice and no further surveys for this species are considered necessary.

Other Protected and Notable Species

- 3.27 Given the size and scale of development proposals, it is considered unlikely that other protected and notable species would be significantly impacted by works at the Site. No Badger (*Meles meles*) setts were noted during the survey, although given the rural location of the Site it is possible the species may commute and forage locally. An individual Hedgehog (*Erinaceus europaeus*) was observed within the garden during the bat survey of 7th August 2025 and the species may commute through the Site to areas of more suitable habitat nearby. This species is of conservation priority and is listed under Section 41 of the NERC Act.

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 relevant legislation and planning policy, are detailed in **Section 5**.

Impacts to Sites & Habitats

- 4.2 Given the relatively small scale of the proposed development, negligible direct ecological impacts to designated nature conservation sites are anticipated.
- 4.3 None of the habitats within the Site boundary are considered to be of intrinsic nature conservation value, apart from their potential to support protected species.

Impacts on Fauna & Flora

- 4.4 Works to repair and extend the existing residential dwelling at Gas Cottage may result in disturbance to, or potential loss of, up to three confirmed bat roosts within the roof structure used by Common Pipistrelle bats, in contravention of The Conservation of Habitats and Species Regulations 2017 (as amended).
- 4.5 As bats are known to be active within the local area, any increase in lighting post development may impact on commuting corridors or foraging areas (Institute of Lighting Professionals, 2018; Lacoeuilhe *et al.*, 2014).
- 4.6 The completion of the proposed works will require the clearance of some shrubby vegetation within the garden. Works undertaken during the nesting season may disturb and destroy bird nests, resulting in a contravention of Section 1 of the Wildlife and Countryside Act 1981 (as amended).
- 4.7 As a result of the removal of parts of the western aspect of Gas Cottage to facilitate the new extension, there will be some indirect disturbance to nearby areas of shrubby cover. This is considered to be sub-optimal for most species, although if nesting birds, reptiles or amphibians are present at the time of works there is the potential for animals to be harmed and disturbed.
- 4.8 Proposals will require re-landscaping work to facilitate construction of the extended residential dwelling and new garden access from the south. This will result in the loss of habitat for protected species of reptile and may cause harm or injury to any individual animals if present during works. Appropriate measures should be undertaken to ensure reptiles are protected during and post-construction.

- 4.9 In the absence of mitigation, the proposals may have an impact upon reptiles present on site, resulting in a negative impact upon the favourable conservation status of the species present and the potential to harm individual animals which would cause an offence under the Wildlife and Countryside Act 1981 (as amended).
- 4.10 Failure to observe appropriate root protection areas around all retained mature trees on Site during construction works could result in damage to trees from root compaction, leading to a decline in general tree health.
- 4.11 Overall impacts on biodiversity as a whole may arise from the loss of habitats available for a variety of species including bats, birds and reptiles (if present). Any increase in lighting during the construction & operational phases of the development and post-development changes to on-site structure may also affect commuting and foraging bat species.

5. Requirements and Recommendations

Ecological Constraints

- 5.1 As the Site is currently subject to low existing levels of light pollution and bats are known to commute and forage locally, any increase in lighting post development must be avoided (Institute of Lighting Professionals, 2018; Lacoeyuilhe *et al.*, 2014).
- 5.2 Any new 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 (2018). 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 any new bat roosting features associated with proposals;
 - 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

- 5.3 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 and ensure a net gain in biodiversity as a result of development. 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.

Mitigation & Opportunities for Enhancement

Bats

- 5.4 All species of bat and their roosts are protected under the Habitats and Species Regulations 2017 (as amended) and local records confirm the presence of a good suite of bat species in the surrounding area. Phase 2 bat surveys confirmed the presence of up to 3 roosting

Common Pipistrelle bats using three different roosting locations within the residential dwelling at Gas Cottage. Should development work require replacement of the rotting top wall plate beams and disturbance to roof tiles or tile verges on the main 2 storey section of Gas Cottage, proposals will not comply with the Habitats Regulations (2017), and a European Protected Species Licence (EPSL) will be required prior to the commencement of any works to areas of the building that support bat roosts.

- 5.5 As Gas Cottage supports three separate day roosts used by Common Pipistrelle bats, it will be necessary to ensure that the works are carefully timed and supervised. Development works which may impact on sensitive areas of the building (all retained areas of roof above the 2 storey section of the dwelling) must not commence during the hibernation season (November to March inclusive, although works undertaken outside this timeframe are also dependant on weather and temperature conditions). Surveys did not suggest the building was likely to be used for maternity purposes.
- 5.6 Any works involving the removal of roof slates will need to be supervised by a suitably qualified and licensed bat ecologist. The methodology for undertaking destructive works would be as detailed below, unless varied under the terms of any subsequently granted EPSL.
- 5.7 Prior to the start of works, a temporary mitigation feature in the form of a Schwegler 2FN bat box (or similar design) will be installed on a retained tree within the garden nearby to provide alternative roosting opportunities for bats whilst the work is being carried out. This box will be left in position following completion of works to provide enhanced roosting opportunities for bats around the site.
- 5.8 The destructive works will be timed accordingly to avoid the sensitive times of year. No destructive works to the roof (bat sensitive areas) will be commenced during the hibernation season, which is generally considered to be from 1st November to 31st March (although this is dictated by weather conditions).
- 5.9 Works to areas that have been confirmed as supporting bats or those that have the potential to support bats will be undertaken under the supervision of a licensed bat ecologist. All sensitive areas of the building such as roofing will be hand stripped, following a detailed tool box talk to all site personnel.
- 5.10 Mitigation in the form of replacement crevice roosting opportunities must be included within the new development if the main 2 storey section of roof is impacted by repair works. As the existing roof is lined with breathable roofing membrane (BRM), replacement bat access slates to recreate roost sites are not appropriate. Suitable mitigation to replace each known roost site if disturbed, damaged or lost as a result of repair works would be the inclusion of an integral bat box for each damaged roost to be recreated within the new sections of building. A suitable design would be a Schwegler 2FR bat tube (or similar integral design). Appropriate locations for these are indicated in **Appendix 7**.

- 5.11 In the unlikely event roosting bats are encountered elsewhere in the building during development, all work should immediately cease and the consulting ecologist should be contacted for further advice.

Birds

- 5.12 It is an offence under the Wildlife and Countryside Act 1981 (as amended) to disturb nesting birds. To avoid contravention of protected species legislation, any modifications to the building or vegetation removal or disturbance associated with the development must be scheduled to avoid peak bird nesting season (which runs from 01st March to 31st August, inclusive), unless prior inspection by an ecologist concludes that there are no nesting birds present immediately prior to the commencement of works. If the presence of nesting birds is confirmed, any works which may disturb them will be delayed until the young birds have fledged the nest of their own accord.
- 5.13 The potential loss of bird nesting opportunities within the existing vegetation will be compensated for by installing new nesting features for a variety of species. These will be located within retained mature trees and shrubs within the garden and on the refurbished Outbuilding. Two Schwegler 1B nest boxes (or similar designs) will be placed in suitable locations, along with two open-fronted 2H Schwegler (or similar design) nest boxes.

Reptiles

- 5.14 The area to be impacted upon by the proposals has been shown to support a low population of Common Lizards. Therefore, a precautionary approach to any necessary vegetation clearance should be employed. Any existing natural refugia will be removed by hand under ecological supervision. Any individual reptiles encountered will be removed to an area of suitable retained habitat in the west of the site unaffected by development work.
- 5.15 In those areas of the site subject to development impacts where reptiles are known to be present, all existing vegetation below 50mm in height should be maintained at a short sward height to prevent colonisation by reptiles. All areas of taller ruderal vegetation which require clearance to facilitate the new build should be directionally cut back in a two-stage process towards areas of suitable retained reptile habitat in the west of the site. This habitat manipulation should be undertaken using hand operated tools such as strimmers. The first cut should be at 150mm and all arisings must be removed. After 24-hours the remaining vegetation should be cut down to a height of 50mm or less and maintained at this height for the duration of the construction period to prevent recolonisation.
- 5.16 A destructive search will take place under ecological supervision once this habitat manipulation is complete. An ecological watching brief will be maintained during the destructive search. An experienced reptile handler will work alongside a mechanical digger (with toothed bucket), stripping the surface layers of grassland, scrub and areas of more suitable reptile habitat, searching each bucket for any individuals and safely relocating any

animals encountered. The construction site should then remain free of Common Lizards for the duration of any building works and landscaping proposals that may have a negative impact on reptiles.

- 5.17 The area of grassland, scrub and fruit trees to the west of the garden amounting to approximately 140 square metres should be left uncut to allow development of a suitable vegetation structure favoured by reptiles (see **Appendix 8**). If necessary, this should be screened off during development work to prevent impacts during construction.
- 5.18 A small log pile should be created in a sunny position within this area using materials recovered from site clearance operations to provide a suitable hibernaculum for reptile species on site. Additional enhancements to this area could include wildflower plug plants to aid their establishment and overseeding with parasitic species such as Yellow Rattle (*Rhinathus minor*) to weaken grass growth. This area should be maintained by annual cutting down to 150mm in early autumn. This area must be retained permanently post-development to ensure the maintenance of a green corridor between areas currently occupied by reptiles and suitable habitats to the north, in order to prevent isolation of the existing population.
- 5.19 In the very unlikely event that reptiles are found during development, an ecologist should be contacted to advise on how to proceed or to carefully catch and move animals out of harm's way to more suitable habitat nearby within the wider ownership of the Client.

Enhancements - General Considerations

- 5.20 In addition to the mitigation recommended for bats, birds and reptiles as described above, the creation of additional habitats can have benefits for biodiversity as a whole, in line with national and local planning policy. Recommendations for these locally and within the wider ownership of the Client include:
- The planting of native, flowering/fruited shrub species within the approximately 95m of new hedgerows on site (see **Appendix 6** for hedgerow locations); and
 - Erection of a woodstone insect block in a suitable sunny position on the southern or western facing aspect of the garden boundary wall.

Residual Impacts

- 5.21 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 redevelopment of the existing building at Gas Cottage.

6. Conclusions and Recommendations

Conclusions

- 6.1 A Preliminary Ecological Appraisal, Reptile Survey and four Phase 2 bat emergence/re-entry surveys have been undertaken at Gas Cottage and the Outbuilding following best practice guidelines (CIEEM, 2017., Sewell *et al.*, 2013 and Collins, 2023).
- 6.2 Within the Site boundary no habitats of any intrinsic nature conservation value were noted. However, habitats within the Site boundary have been shown to, or offer some potential to, support protected species.
- 6.3 Up to three Common Pipistrelle bats were confirmed roosting below roof slates at Gas Cottage, with two roosts on the western gable and a single roost site on the eastern gable tile verge of the two storey section of the property.
- 6.4 A low population of Common Lizards (maximum count of 2 individuals) was confirmed to be using the existing garden at the Site.
- 6.5 Boundary vegetation, on site trees, shrubby habitats and climbing vegetation associated with the Outbuilding are considered to have some potential to support common species of nesting birds.
- 6.6 There is very limited potential for habitats within the development site to support other notable and protected species such as Dormouse or Great Crested Newts.
- 6.7 Recommendations for mitigation and enhancement have been made and are listed below.

Recommendations

- 6.8 Mitigation and enhancement recommendations include:
 - Implementation of a bat mitigation strategy for both licensable and non-licensable works to the building;
 - Creation of replacement roosting features suitable for crevice dwelling bat species within the new building in a like-for-like basis, if existing roosts are impacted;
 - Directional clearance towards suitable retained habitat of the small areas of reptile habitat within parts of the Site subject to development impacts and their maintenance thereafter at a short sward height;
 - Enhancement of retained areas adjoining existing reptile habitat in the west of the Site to mitigate for the loss of existing habitat by the creation of a log pile

hibernaculum and cessation of cutting to allow a longer sward structure to develop;

- Retention of this vegetated strip along the western boundary of the Site to link reptile populations with the wider landscape;
- The installation of bird and insect boxes at suitable locations within the remodelled building and within retained areas at Gas Cottage; and
- Planting of native, fruiting and flowering shrubby species within new hedgerows.

6.9 Provided the mitigation measures recommended above are 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, 2023)

The revised National Planning Policy Framework (2023) (available at: <https://www.gov.uk/government/publications/national-planning-policy-framework--2>) 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

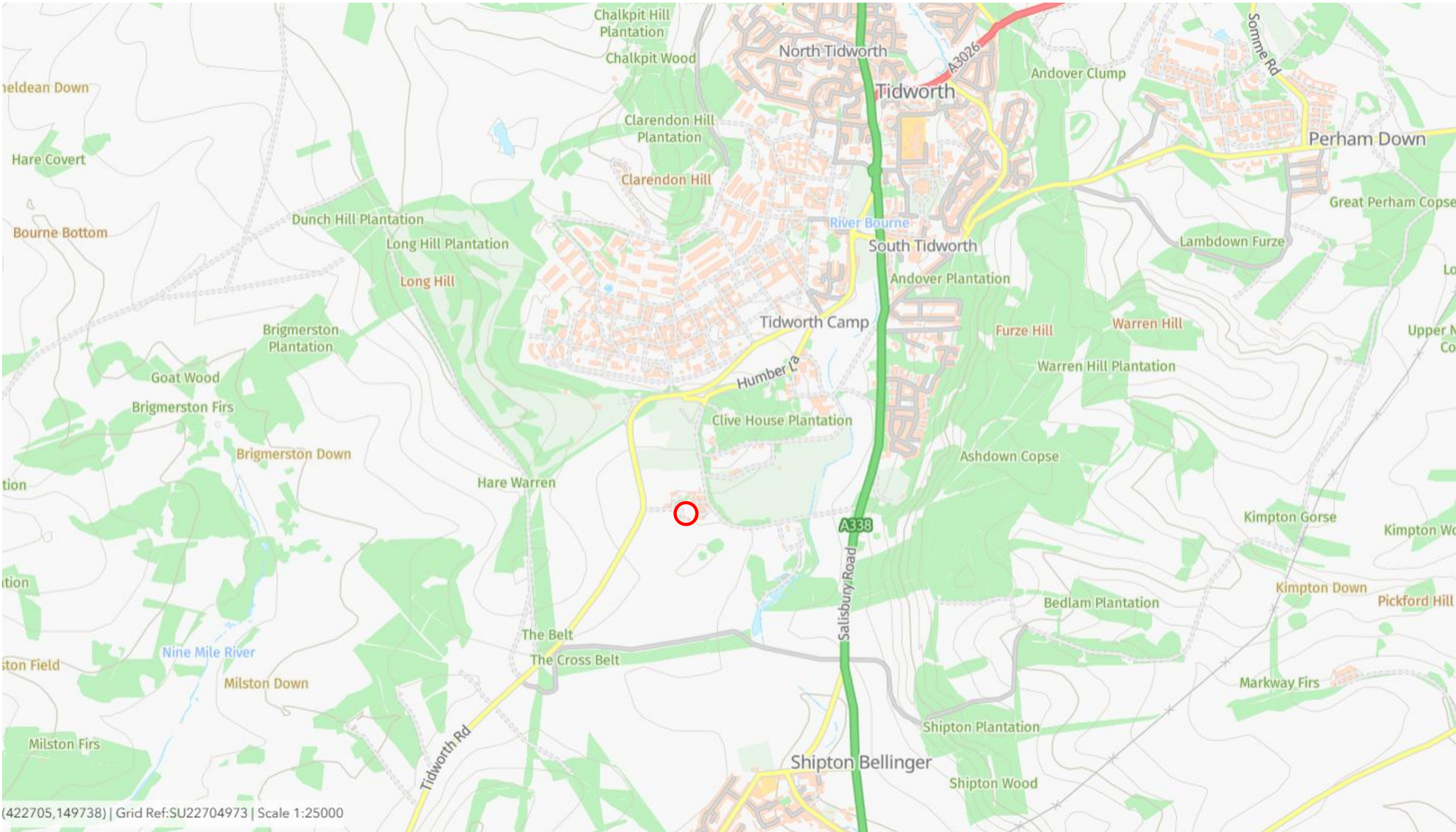
The Wiltshire Core Strategy Development Plan Document (Adopted 2015), available online from www.wiltshire.gov.uk/planning-policy-core-strategy sets out the long term spatial planning strategy for the region.

BIODIVERSITY ACTION PLANS

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.

Appendix 2: Site Location (1:25,000)



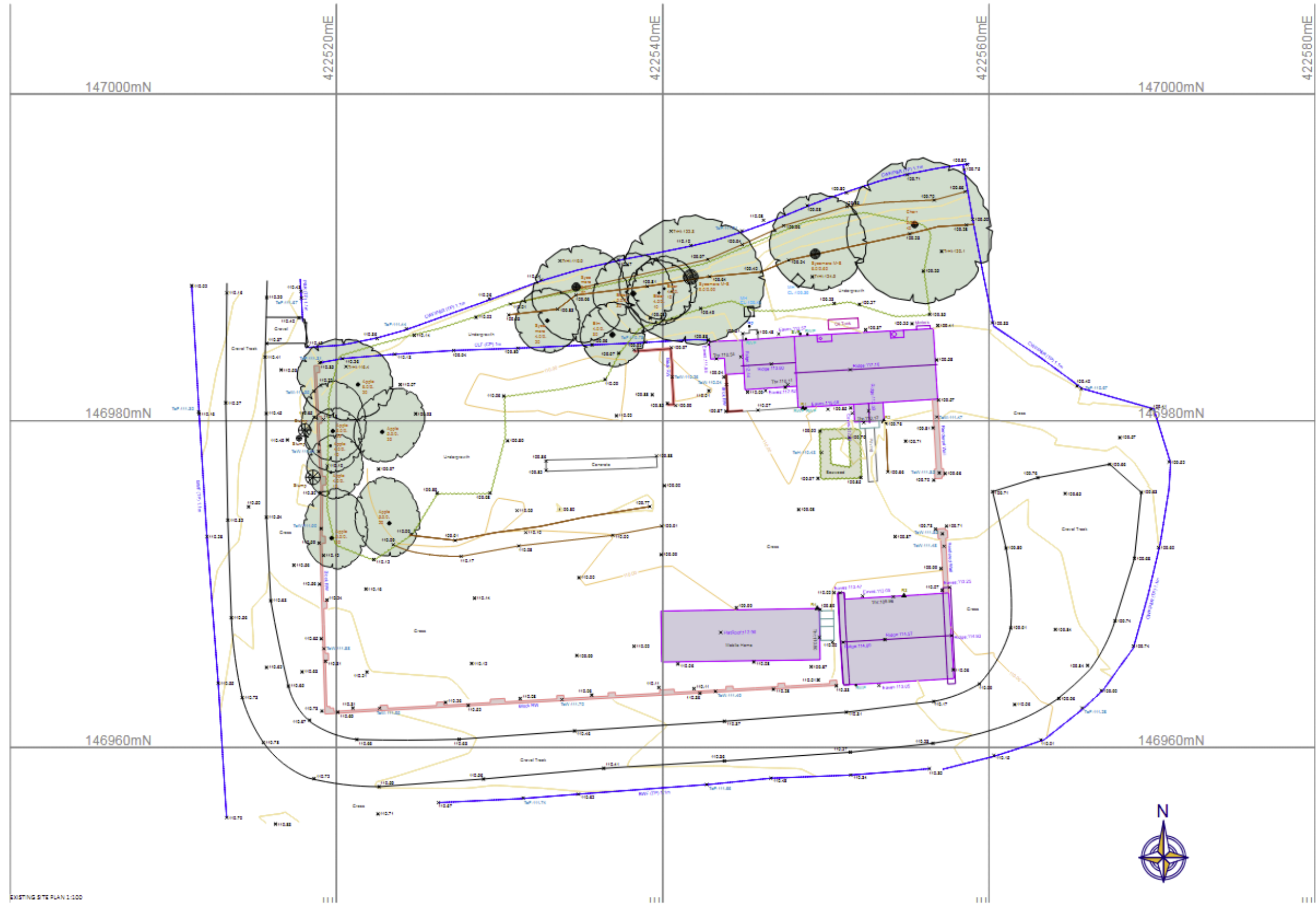
GAS COTTAGE, TIDWORTH
PEA and Phase 2 Bat & Reptile Assessment

Appendix 3: Surrounding Habitats

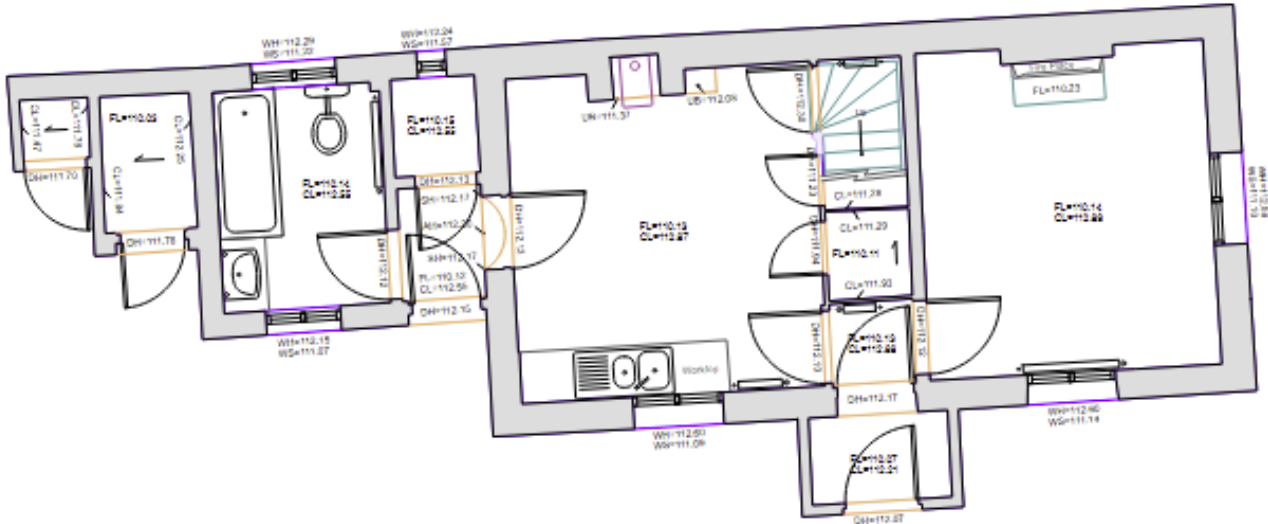


GAS COTTAGE, TIDWORTH
PEA and Phase 2 Bat & Reptile Assessment

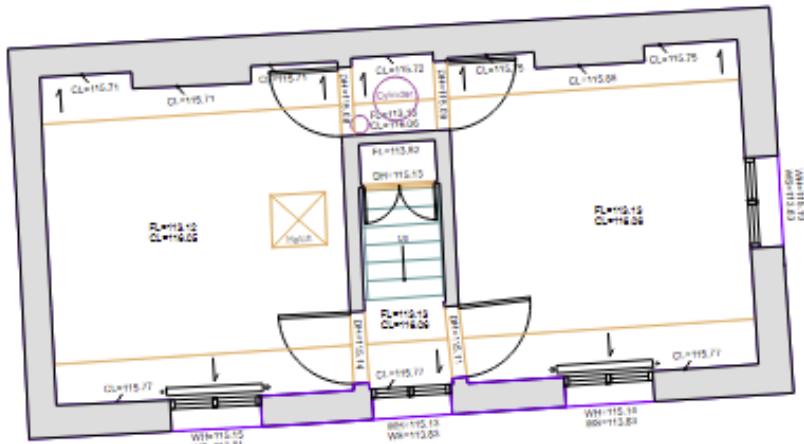
Appendix 4: Current Site Layout



Appendix 5: Existing Floor Plan



EXISTING GF PLAN- 1:50

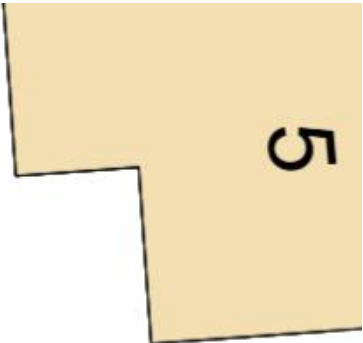


EXISTING FF PLAN - 1:50



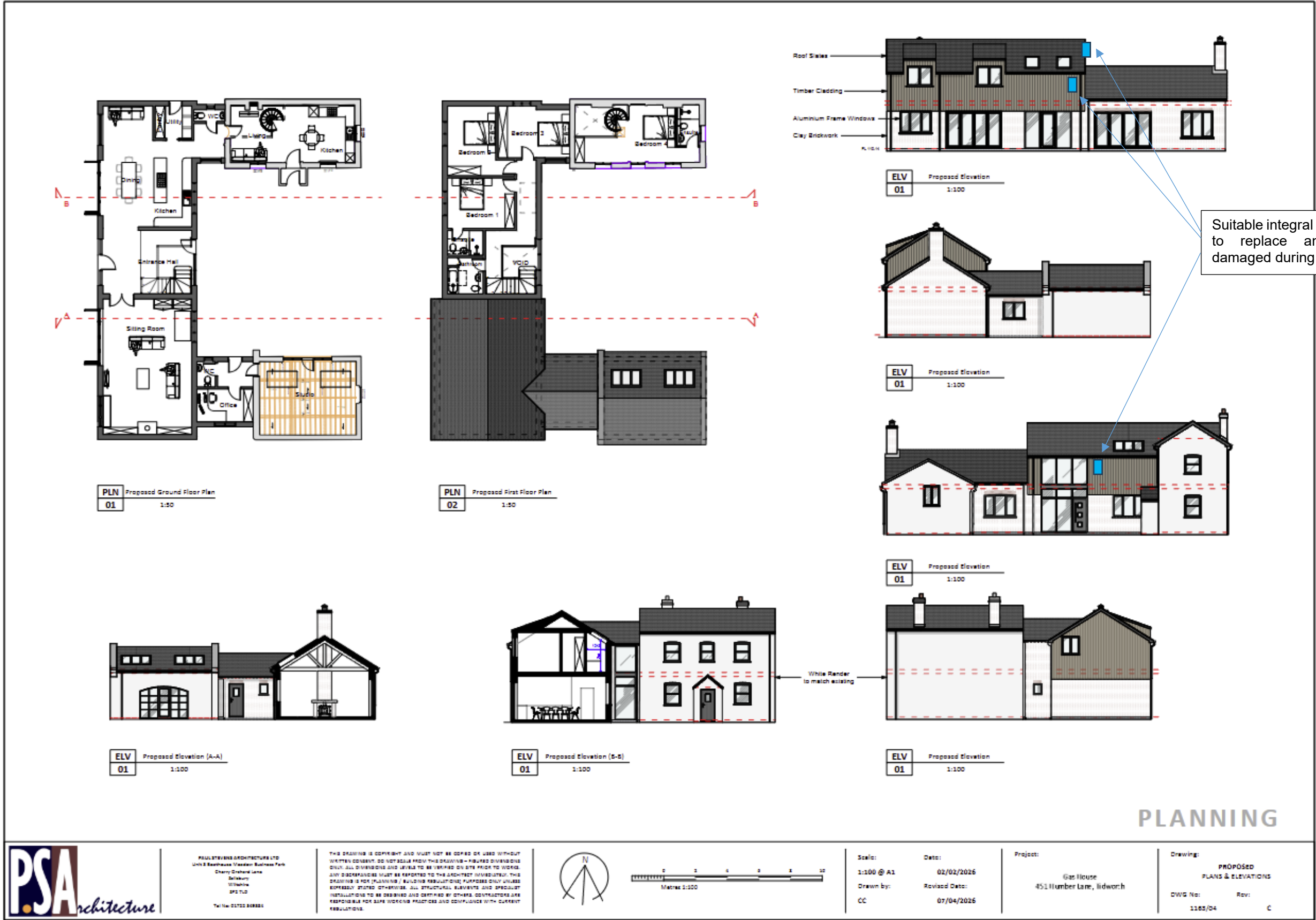
EXISTING GF PLAN- OUTBUILDING- 1:50

Appendix 6: Site Layout Proposals



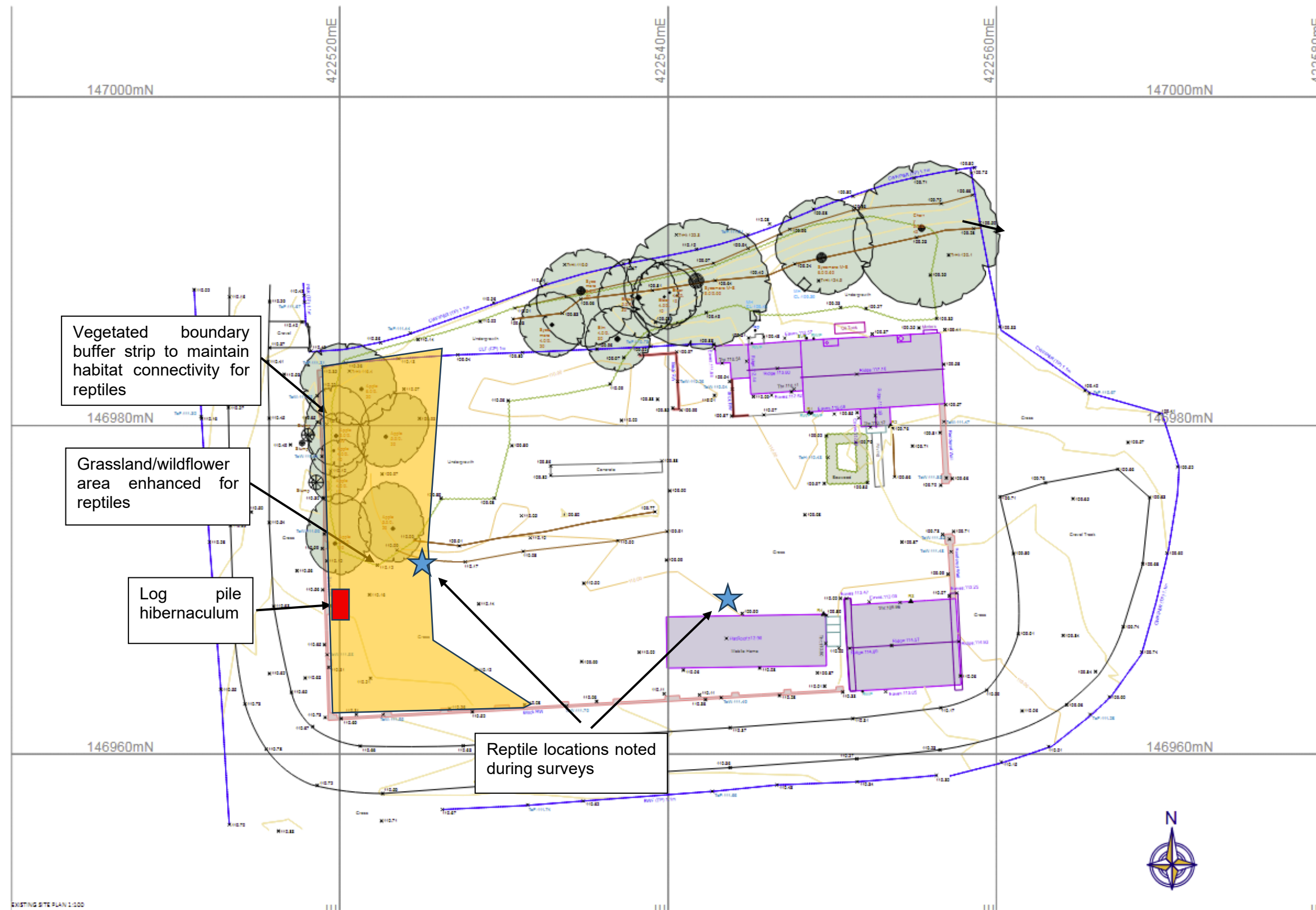
GAS COTTAGE, TIDWORTH
PEA and Phase 2 Bat & Reptile Assessment

Appendix 7: Proposed Elevations



GAS COTTAGE, TIDWORTH
PEA and Phase 2 Bat & Reptile Assessment

Appendix 8: Reptile Survey Results, Mitigation & Enhancements



Appendix 9 – Bat Roost Locations at Gas Cottage



- Single Common Pipistrelle emerged from below roof slate during survey of 7/8/25
- Two Common Pipistrelles emerged from below roof slate during survey of 29/8/25



- Single Common Pipistrelle emerged from below roof slate during survey of 29/8/25