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62 Upper South Wraxall
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Wiltshire
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Avondale Ecology

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11th September 2025

Dear Robert and Clare

Re: Bat Survey for 62 Upper South Wraxall

A Preliminary Bat Roost Assessment (PRA) was completed for a residential property at 62 Upper South Wraxall, Bradford-on-Avon, Wiltshire, BA15 2SE (Ordnance Survey grid reference ST83326510). As a result of the findings, a bat emergence survey was also completed. The plans relate to demolition of single storey flat roofed extensions and construction of a two storey extension on the south-west elevation to provide upgrading living accommodation. As the new ridge line will be offset from the existing roof, there will be minimal direct disturbance to the existing pitched roofs, also indirect disturbance as a result of the works is possible. The proposals will be submitted as a householder application and is therefore exempt from Biodiversity Net Gain requirements as set out in the Environment Act 2021.

The survey aimed to identify features suitable for use by protected species and identify any evidence which may indicate use by protected species, particularly bats and nesting birds. This included the following objectives:

- To identify any designated nature conservation sites on or in the vicinity of the property;
- To provide an indication of protected or notable species likely to be on or in the vicinity of the site;
- To record and map the suitable features for protected species, particularly bat species;
- To record any habitats of ecological importance;
- To identify whether there is any evidence of or potential for protected or notable species to be present and impacted by the proposals;
- To detail requirements for a mitigation licence(s), if needed;
- To make suggestions for avoidance, mitigation, compensation measures and working practices to meet legislative and best practice requirements; and
- To make recommendations for ecological enhancement measures.

A letter-style report has been produced, proportional to the scale of the proposals.

There are 18 species of bats in the UK, all of which are fully protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). They are also included in Schedule 2 of the Conservation of Habitats and Species Regulations 2017 (as amended). The Wildlife and Countryside

Act, the “Habitats Regulations” and the CRoW Act 2000 together make it an offence, among other things, to recklessly, intentionally or deliberately:

- Disturb roosting bats or obstruct access to their roosts;
- Disturb a significant number of bats (whether in a roost or not);
- Damage, destroy or obstruct access to bat roosts;
- Kill, injure or capture (or take) bats.

A bat roost is defined as “any structure or place (including trees) which any bat uses for shelter or protection”. Because bats tend to re-use the same roosts, legal opinion is that the roost is protected whether or not the bat(s) are present at the time. Great crested newt *Triturus cristatus* (GCN), including their breeding ponds and terrestrial habitat, are similarly protected.

Statutory protection is given to nesting birds in the UK under the Wildlife and Countryside Act 1981 (as amended). It is an offence to intentionally kill, injure or take any wild bird or take, damage or destroy its nest whilst in use or being built, or take or destroy its eggs. In addition, it is an offence to intentionally or recklessly disturb species listed on Schedule 1 of the Act while they are nest building or at/ near a nest with eggs or young, or to disturb the dependent young of such a bird.

This is a brief summary of the legislation and is not to be regarded as a definitive legal opinion. When dealing with individual cases, the client is advised to consult the full texts of the relevant legislation and obtain further legal advice.

Methodology

Desk Study

A Wiltshire and Swindon Biological Records Centre (WSBRC) data search was not completed for records of protected and notable species due to the small and localised scale of the proposals. Internationally and nationally designated sites up to a 1km from the site and Special Areas of Conservation (SACs) designated for bat species up to 10km from the site were identified using MAGIC mapping. The proposals will not fall within or impact on Local Wildlife Sites due to their scale and nature. Aerial photographs and Ordnance Survey maps were also reviewed to assess the site in context of surrounding habitats. In addition, Wiltshire Council's planning portal was searched for evidence of protected species having been a consideration in other planning applications in the immediate area. MAGIC was also searched for Natural England mitigation licence application records within 1km and GCN records. The GCN Risk Zone map for Wiltshire's District Licence was also reviewed.

Building Inspection

The internal and external building inspection was undertaken in accordance with *Bat Surveys for Professional Ecologists - Good Practice Guidelines* 4th Edition (Collins Ed., 2023), *Bat Mitigation Guidelines* (Reason and Wray, 2023) and the *Bat Workers Manual* (Mitchell-Jones and McLeish, 2004). The survey was completed on 29th May 2025 by Sarah Dale (MCIEEM and Natural England bat survey Class 2 licence holder 2018-36720-CLS-CLS), an experienced ecologist with 19 years of professional practice.

All suitable internal areas of the house were accessed and thoroughly searched for evidence of roosting bats. All exterior features were assessed from ground level using a high-powered torch and flexible endoscope (if required) for evidence and potential for use by roosting bats, and potential bat access into the building. Signs of bats include live animals, corpses, noises, droppings, urine staining, feeding remains (e.g. moth and butterfly wings) and scratches. Where present, these signs were recorded and mapped. Any evidence of nesting birds was also recorded. The building was categorised using the criteria in Table 1. The potential for any trees within 10m of the works to support roosting bats was also assessed.

Although there is limited semi-natural habitat within the area of works, any habitats present were noted, with key species recorded and habitats characterised. The pond within the site was assessed and any potential for great crested newt noted. A Habitat Suitability Index assessment could not be completed as the pond was dry and appeared to have been so for some time. Any potential for other protected and notable species to be present and impacted was also assessed.

Table 1: Bat Roost Potential Categories
(Category descriptions drawn from Colins, 2023 and Mitchell-Jones, 2004)

Roost Potential	Description
Confirmed	Confirmed signs of bat presence/ occupation (droppings, oily staining around entry points, insect remains, odour, scratching) or actual bat presence (live or dead bats).
High	A structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions (for example, in terms of temperature, humidity, height above ground level, light levels or levels of disturbance) and surrounding habitat. These structures have the potential to support high conservation status roosts, e.g. maternity or classic cool/stable hibernation site.
Moderate	A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions (for example, in terms of temperature, humidity, height above ground level, light levels or levels of disturbance) and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only, such as maternity and hibernation – the categorisation described in this table is made irrespective of species conservation status, which is established after presence is confirmed).
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of the year. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions (for example, in terms of temperature, humidity, height above ground level, light levels or levels of disturbance) and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity and not a classic cool/stable hibernation site but could be used by individual hibernating bats).
Negligible	No obvious habitat features on site likely to be used by roosting bats; however, a small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion. (Note: Negligible is defined as 'so small or unimportant as to be not worth considering, insignificant'. This category may be used where there are places that a bat could roost or forage (due to one attribute) but it is unlikely that they actually would (due to another attribute).

Dusk Bat Emergence Survey

Due to the findings of the Preliminary Bat Roost Assessment, a dusk bat emergence survey was completed on undertaken on 29 May 2025 following guidance detailing in *Bat Surveys for Professional Ecologists - Good Practice Guidelines* 4th Edition (Collins Ed., 2023). Weather conditions were optimal and are detailed in Table 2. Two ecologists and a Pulsar Axion XG35 thermal imaging camera (NVA – night vision aid) paired with a SM Mini bat detector were positioned around the building to observe all elevations of the buildings with potential roost features, as shown on Figure 1. Gillian Challis, an assistant ecologist with two years' of bat survey experience and Sarah Dale (as above) completed the surveys. The dusk survey started 10-15 minutes before sunset and continued until 90 minutes after sunset. The species and behaviour of bats seen or heard by the surveyors was recorded. Echometer Touch detectors were used by the surveyors, with surveyors recording bat calls. Sonograms were analysed to confirm species identification. The recorded footage on the thermal imaging camera was also fully reviewed.

Table 2 Survey Information and Weather Conditions

Date	Weather Conditions					Time Start	Time End	Sunset/ Sunrise
	Temp start	Temp End	Cloud cover (%)	Wind (Beaufort scale)	Rain			
01/05/24	16°C	13°C	25	1B	No recent rain	21:01	22:43	21:13

Constraints: There was access to all areas of the house. There were numerous surfaces within the loft which had not been disturbed for some time and evidence of use by bats or nesting birds should have been evident, if present. Use by species such as bats and nesting birds can change seasonally and over time, so any survey is only a sample of activity at any given time.

Figure 1 Surveyor Locations

(blue – surveyors, yellow – NVA, red – common pipistrelle roost)

From Google Maps

Site Context and Desk Study

There are no statutory designated sites within 1km and the proposals, as a householder application, do not meet Natural England's Site of Special Scientific Interest (SSSI) Impact Risk Zone criteria.

There are several SSSI component units of the Bath and Bradford-on-Avon Bats Special Area of Conservation (SAC) within 10km; the closest of which – Brown's Folly SSSI – is 3.7km to the west. The SAC is designated for internationally-important populations of hibernating greater horseshoe *Rhinolophus ferrumequinum*, lesser horseshoe *Rhinolophus hipposideros* and Bechstein's *Myotis bechstenii* bats. The proposals will not impact on habitat for horseshoe bats as there is no fly-in access for horseshoe bats to the building and no suitable semi-natural habitats will be impacted. Light spill is unlikely to result in significant impacts, but as there may be localised impacts on horseshoe and other light-sensitive bat species, recommendations are provided below.

The north Wiltshire area has an exceptional bat biodiversity supporting 16 of the UK's bat species including common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelle *Pipistrellus pygmaeus*, Nathusius' pipistrelle *Pipistrellus nathusii*, greater horseshoe, lesser horseshoe, serotine *Eptesicus serotinus*, noctule *Nyctalus noctula*, Leisler's *Nyctalus leisleri*, barbastelle *Barbastella barbastellus Myotis* and brown long-eared *Plecotus auritus* bats. There are three Natural England bat mitigation licence applications within 1km shown on MAGIC mapping; one 650m south for brown long eared bat, one 750m south for brown long-eared, common pipistrelle and lesser horseshoe bats and one 900m south for common pipistrelle.

There are numerous nearby records for bird species including Birds of Conservation Concern (RSPB, 2021) within the area. This includes red and amber list species, which have been subject to recent declines, such as house sparrow *Passer domesticus*, and starling *Sturnus vulgaris.* There is one numerous record of a screaming party of swifts *Apus apus* recorded in the Wraxall area, but no nesting records on the RSPB Swift Mapper (swiftmapper.org.uk).

There is a pond within the site, 20m north of the house, as shown on Ordnance Survey mapping. This pond was dry at the time of the survey and appeared likely to have been dry for some time. As it was dry during breeding season, it is not considered likely to support breeding great crested newt. There are no additional ponds within 250m, although there are numerous ponds within 250m-500m from the house. The closest great crested newt (GCN) record shown on MAGIC mapping is approximately 1km to the north. The site falls within an amber i.e. medium risk zone for great crested newts in Wiltshire's GCN District Licence map.

There are two recent planning applications from the postcode area from the past decade with ecological information of relevance:

- Application PL/2022/05897 for 63A Upper South Wraxall: The ecological survey (Ben Mitchell, Ecologist) recorded no emerging bats, but recorded common and soprano pipistrelle and noctule bats foraging and commuting. Potential for low numbers of nesting birds and reptiles was also reported.
- Application PL/2024/10942 for 47-49 Upper South Wraxall: The ecological survey (Alder Ecology) recorded low numbers of roosting common pipistrelle bats and commuting/foraging noctule, common pipistrelle, serotine, Leisler's bat and soprano pipistrelle bats. Nesting jackdaw were also recorded in the chimney.

The proposals are focused on a detached property, likely to date from pre-1900, but which has been modified including single storey flat roofed modern extensions. The property is set within mature gardens, with a gravelled parking area and a series of barns/outbuildings to the north. The property is located in a rural area approximately 300m north of the village of South Wraxall. There are surrounding fields in agricultural and equestrian use, as well as networks of mature hedgerows and scattered mature trees.

Survey Results

Preliminary Bat Roost Inspection and Protected Species Audit

The site comprises a domestic property, which is in need of modernisation and renovation. Until recently, it was unoccupied for at least four years. There is an older two storey section of traditional construction comprising intact and well-pointed stone walls with a pitched roof covered with clay pantiles. Externally, there are occasional gaps of 1-2cm under wooden fascia and soffit boxes, including small gaps under the south-west gable, close to where the extension will key into the building. Other areas of fascia boards, such as on the south-east elevation, are well-sealed. There are some gaps under clay pantiles, particularly around Velux windows, the dormers on the south-east elevation and along valleys. However, ridge tiles and other tiles are generally intact and well-fitting. The stone work on the south-west gable is entirely intact and well-pointed.

There is one connected loft space above the first floor. The pitched roofs are T-shaped and are 8m long (maximum), 11m wide (maximum) and up to 1.5m high. There is light spill into the northern section of the loft as a result of a glazed and intact window. The east and western wings of the loft are relatively dark in comparison. The pitched roofs are constructed of a mixture of modern and traditional timbers, with intact and well-sealed bitumen and foil insulation underlay. The loft was very warm. There are possible gaps into the loft space around the stone wall plates on the gable ends, but these appear to be the only potential access features for bats or nesting birds. The loft was entirely covered in very dense cobwebs, indicating no recent use by bats or nesting birds, and there was no evidence of use such as bat or bird droppings or feeding remains. A number of mouse droppings were found in the loft.

There is also a modern single storey flat roofed extension to the south-west/west. This is covered with intact and well-sealed roofing felt, with uPVC soffits. The soffits are either flush with the wall, or provide less than 1cm gaps, which would be sub-optimal for roosting bats to access.

Overall, the building has moderate potential to support roosting bats, mostly within lifted/shifted tiles on the south-east elevations and along valleys, as well as under soffits and fascias. However, the works are limited in scale and nature and so there is considered to be low potential for roosting bats within areas which will be impacted by the proposals (south-west elevation and single storey extension). No potential features suitable for use by hibernating bats were found.

There was no evidence of nesting birds using the roof, although use by species such as house sparrow is possible. There is very limited potential in the area of works. One pair of nesting house sparrow appear to have been nesting in a dense shrub (possibly *Pyracantha* sp.) on the north-west corner of the house, adjacent to the single storey section which will be demolished.

There are limited semi-natural habitats within the footprint of the proposals. Most of the area includes existing single-storey extensions. There will be a small additional area of regularly mown lawn which had a sward height of less than 5cm at the time of the survey, as well as the pocket of shrubs adjacent to the north-west corner. Aside from nesting birds as detailed above, there is negligible

potential for other species to be present and impacted. The area of the proposals does not offer optimal terrestrial habitat for great crested newt, which are considered unlikely to be present in any case due to lack of nearby records and the dry pond within the site which appears to be highly ephemeral and unsuitable for breeding GCN.

Nearby outbuildings were also assessed for context. No evidence of roosting bats was found and there is fairly limited potential for day roosting, but the buildings could be used as night roosts by bat species such brown long-eared and horseshoes. No evidence of current use was found.

The site is mostly dark at night, with the exception of PIR/motion-triggered security lighting. Although bat species are likely to disperse and forage across the garden and adjacent habitat, the footprint of works is limited to very low value habitats for commuting and foraging bat species. No flightlines will be directly impacted by the proposals.

Nearby properties are also likely to have potential to support roosting bats.

Dusk Bat Emergence Survey

The proposals for the house will impact on low potential bat roost features. Therefore, one dusk emergence survey was completed for all elevations of the house to confirm presence or likely absence of a bat roost in the building, following best practice methods outlined in *Bat Surveys for Professional Ecologists – Good Practice Guidelines* 4th Edition (Collins Editor, 2023).

One common pipistrelle bat was recorded emerging from the eastern-most dormer window on the south-east elevation at 22:10 (1 hour after sunset) – see photos and Figure 1 for location. This species usually roosts in crevices, and in this instance, is unlikely to be accessing the loft space. No other emergences were recorded from anywhere else on the building, including the area of works and flat-roofed extension on the south-west elevation.

Otherwise, a moderate level of bat activity was recorded, with at least 30 passes by at least six different bat species. The first pass was a 21:44 (31 minutes after sunset) by a common pipistrelle bat. There were regular common pipistrelle passes, mostly commuting briefly across the site and occasionally foraging over the garden, until the end of the survey. *Myotis* species were also recorded at 21:57 (44 minutes after sunset), 22:03, 22:20 and 22:28. Long-eared passes (likely brown long-eared bat) were recorded at 21:50 (37 minutes after sunset – likely roosting nearby) and 22:05. Larger bat species were recorded including a brief noctule pass at 22:29 and a brief serotine pass at 22:03.

Mitigation and Avoidance Measures

Bats

Bat roosts, defined as a 'place of rest or shelter', are protected from destruction, modification or obstruction under the Conservation of Habitats and Species Regulations 2017 (as amended) and the Wildlife and Countryside Act 1981 (as amended). Bats are protected from deliberate or reckless killing

or injury. Bats are also protected from disturbance whilst in a roost or significant disturbance to their ability to survive or reproduce. Roosts are protected even if bats are not present at the time of works.

As no evidence of roosting bats was found in the immediate vicinity of the works, it is unlikely that roosts would be removed or individual bats harmed during works. The single common pipistrelle day roost by the eastern dormer window is at least 5m from the area of works and unlikely to be indirectly disturbed. The ridgeline will also be offset from the existing roof which will minimise potential impacts. No bats were seen emerging from gaps under the south-west dormer soffit.

Bats can sometimes colonise potential roost features following surveys or use sites dynamically/ seasonally. Contractors must be informed to remain vigilant for roosting bats. In the unlikely event of roosting bats being found or suspected to be present, works must cease and the ecologist contacted for advice. If bat roosts are found, a Natural England licence would be likely to be required for works to proceed lawfully. Bats would not be handled by contractors.

An update preliminary bat roost assessment/building inspection would be required if works proceed after 1 June 2027 as bats may colonise the building in future, particularly if the condition of the building declines over time.

To minimise light spill, it is recommended that any additional lighting is designed in accordance with *Bats and Artificial Lighting at Night* (ILP, 2023). Measures should include:

- Only using external lighting where absolutely necessary for safety reasons;
- Wall-mounted, downward-facing directional lighting, minimising spill onto semi-natural habitats;
- All external lighting to be fitted with PIR sensors and short-duration timers (less than 2 minutes);
- Warmer light colours below 2700K to be used; and
- Internal lighting to be angled away from windows or recessed.

A lighting plan is included at the end of this report. There are currently five external light fittings on the building, two will be removed and two replaced, with a total of three external light fittings after the project is completed. A low-level, wall-mounted light fitting will be used, which is downward-facing such as Astro Oslo 100 (see lighting plan). There is a relatively modest increase in glazing, with any expanses of glazing limited to the ground floor. Given that light spill will be localised within areas of garden close to the building and that there will be an overall reduction in external lighting, there is no credible risk of significant adverse impacts on horseshoe bat populations linked to the Bath and Bradford-on-Avon Bats SAC. As this forms part of the scheme design, rather than mitigation, it is not anticipated that the requirement for a Habitats Regulations Assessment would be triggered in this instance.

<u>Nesting Birds</u>

It is an offence to kill a wild bird or damage or destroy their nests or eggs under Section 1 of the Wildlife and Countryside Act 1981 (as amended). No evidence of nesting birds using the building was recorded during the survey which was completed during the peak time of year for nesting birds. However, there was evidence of one pair of house sparrow nesting in a shrub adjacent to the single storey extension. This is likely to require removal for the works. Any dense shrubs will need to be removed outside of the peak bird nesting season (i.e. removed during September to February inclusive) or will need a pre-commencement nesting bird check no more than 48 hours before works, if removed during the nesting season. Contractors must be instructed to remain vigilant for nesting birds. If active bird nests are found during works, they will need to be left along with a suitable buffer area until the chicks have fledged. The time until fledging varies dependent on species but can take up to six weeks. Nest boxes to the rear of the property must be retained, or removed outside of the nesting season (removed during September to February inclusive).

Other Species

Given that the pond on-site appears to have been dry for some time, GCN are unlikely to breed at the site. It is recommended that best practice, such as storing waste and materials above ground level (e.g. on pallets) or in sealed containers such as skips within the gravelled area/on hardstanding is followed. If GCN are unexpectedly found during works, all activities which could impact on the species would need to cease and an ecologist contacted for advice. There is negligible potential for other protected and notable species to be present and impacted.

Enhancement Measures

Even though Biodiversity Net Gain requirements do not apply, all schemes should contribute positively to nature conservation in accordance with local and national planning policy. An additional feature for nesting birds such as a swift box or house sparrow terrace could be included in the renovated building as enhancement measures (see universal_swift_nest_brick02.pdf (swift-conservation.org) or RSPB Sparrow Terrace Nest Box - RSPB Shop). Swift nest boxes need be sited at least 4m above ground level or 2m+ for other nest boxes, in a location where it is unlikely to be disturbed or accessible to predators and ideally on a north facing elevation or out of direct sunlight as much as possible.

A bat roost feature should also be installed as an enhancement. Features need to be installed at least 3-4m in height to maximise its chance of use and ideally installed on south/west elevations. Options include:

- Roost feature in new soffit/fascias created by leaving 2-3cm access gaps or holes or installing a soffit bat box (see Soffit Bat Box (wildcare.co.uk)). Ideally, the soffit would be wood or rough-surfaced (i.e. not uPVC) for this option to be most effective;
- Bat tubes such as Schwegler 1FR incorporated into the building fabric;

- Bat bricks such as Ibstock brick or Habibat boxes incorporated into the building fabric; or
- Attached bat boxes to the structure such as Schwegler 2FE or Beaumaris woodstone boxes, although these often degrade more rapidly or become detached over time.
- Attached bat boxes such as such as Schwegler 2F or Wildcare Kent batbox to mature trees within the southern garden.

If you have any queries at all, please let me know.

Yours sincerely,

[redacted]

Sarah Dale MCIEEM
Freelance Ecologist

Site Photographs

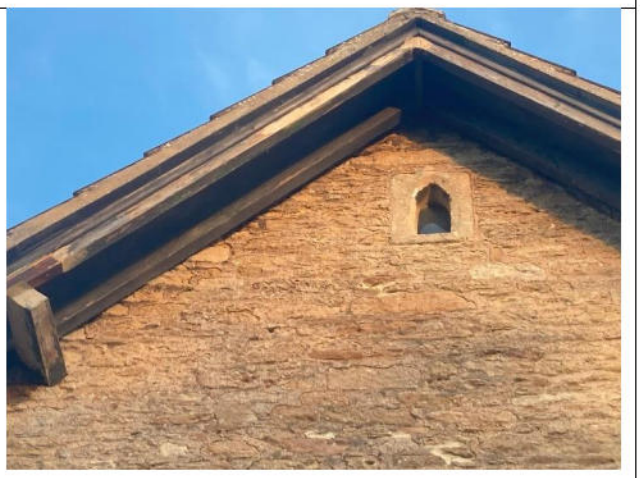
P1 South-west and north-west elevations

P2 North-east elevation

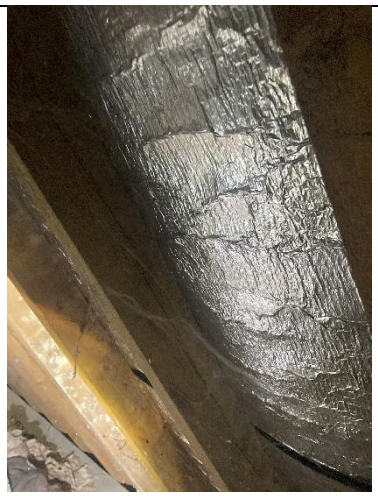
P3 South-east elevation, showing common pipistrelle roost location

P4 Small gaps under barge boards/soffits on south-west elevation: area of works

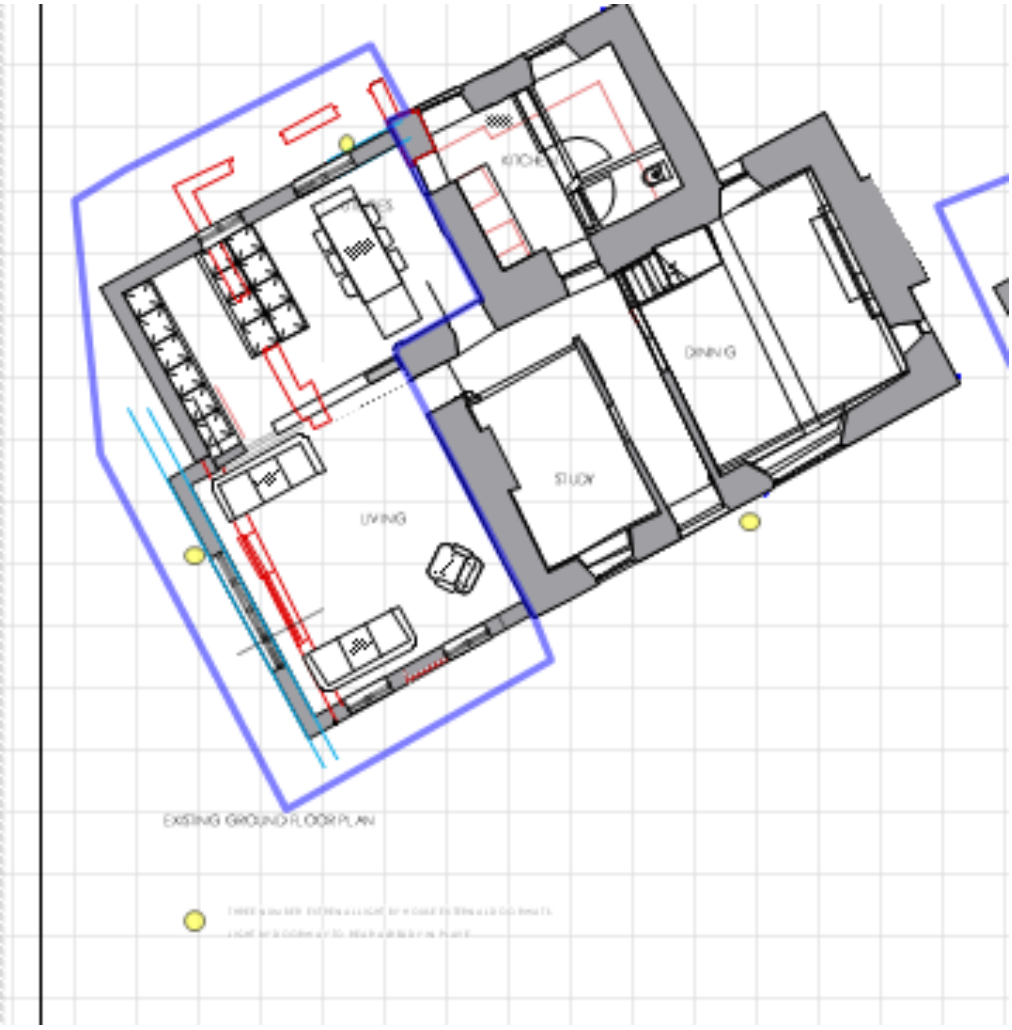
P5 Tiled roof adjacent to south-west elevation: no impacts



P6 Glazed window to loft on north-west elevation

P7 Gaps around dormer windows and rooflight	P8 Eastern wing of loft – no evidence of bats
P9 Northern wing of loft	P10 Thick cobwebs in loft
	
P11 Roof lining	

Lighting Proposals



Luminaire type 1

Name:
Astro Oslo 100

Lumens
47

Colour
3000k

Light splay
48 degrees

Height
2000mm above Ground