



ECOLOGICAL IMPACT ASSESSMENT

286a Nine Mile Road, Wokingham

On Behalf of: Mr Morgan

Planning Issue

Prepared by	GS
Checked by	CO
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Contents

	Page No.
SUMMARY	01
1.0 Introduction	02
2.0 Planning Policy and Legislation	04
3.0 Methodology	06
4.0 Baseline Ecological Conditions	11
5.0 Assessment of Effects and Mitigation Measures	21
6.0 Enhancements	27
7.0 Conclusions	28
8.0 References	29

APPENDICES:

Appendix A – Site Photographs

Appendix B – Bat Survey Results

Appendix C – Original PEA of Site (M1162.001)

FIGURES:

Figure No. 01 – Site Habitat Plan

Figure No. 02 – Bat Survey Results



SUMMARY

Lizard Landscape Design and Ecology has been commissioned by Mr Morgan to undertake an Ecological Impact Assessment of the proposed re-development of 286a Nine Mile Road, Wokingham (*Grid Reference: SU 80667 64981 – hereafter referred to as 'the site'*).

A Bat and Bird Scoping Assessment of the site was undertaken on 13th October 2020 by Crossman Associates, to appraise the existing ecological resource within the land and the surrounding area. Due to evidence of bats being found within the building, and suitable access points being identified, further Bat Emergence / Re-entry surveys were recommended and subsequently undertaken in May 2021 by Lizard Landscape Design and Ecology. A full Ecological Impact Assessment was then undertaken using this baseline data.

The site is formed of a detached bungalow and garage surrounded by gardens and a small pond. The habitats which will be directly impacted by the proposal are of **low ecological value**.

The bungalow (B1) is an occasional day roost for 1no. BLE. The works shall require a Natural England Mitigation Licence to proceed. The licence shall ensure that the proposals do not affect the favourable conservation status of the species. No other impacts upon any European protected species are predicted as a result of this development.

Once mitigation measures as detailed in the below report have been taken into account, the impacts of the planned development upon biodiversity will be **negligible** with proposed ecological enhancements resulting in a **long-term positive increase** in biodiversity in line with national planning policy guidance.

1.0 INTRODUCTION

- 1.1 Lizard Landscape Design and Ecology has been commissioned by Mr Morgan to undertake an Ecological Impact Assessment of the proposed re-development of 286a Nine Mile Road, Wokingham (*Grid Reference: SU 80667 64981 – hereafter referred to as ‘the site’*).
- 1.2 A Bat and Bird Scoping Assessment of the site was undertaken on 13th October 2020 by Crossman Associates, to appraise the existing ecological resource within the land and the surrounding area. Due to evidence of bats being found within the building, and suitable access points being identified, further Bat Emergence / Re-entry surveys were recommended and subsequently undertaken in May 2021 by Lizard Landscape Design and Ecology. A full Ecological Impact Assessment was then undertaken using this baseline data.
- 1.3 A summary of the results of these surveys, potential impacts of the proposals, and details of avoidance, mitigation and compensation measures have been detailed within this report. This report has been prepared by George Sayer (*MCIEEM; Senior Ecologist; Lizard Landscape Design and Ecology*) and reviewed by Catherine O'Reilly (*MCIEEM, Senior Ecologist; Lizard Landscape Design and Ecology*).

Site Information

- 1.4 286a Nine Mile Ride consists of a small and conventionally designed detached brick bungalow, thought to date from the 1940's / 50's. Also present is a small, detached garage. The property covers c.950 sqm and has a large rear garden and smaller front garden/driveway. The property occupies the southern side of Nine Mile Ride (The B3430) which is a long straight road on the southern edge of the town of Wokingham..

Surrounding Landscape

- 1.5 Immediate surroundings to the east and west are further dwellings which form a ribbon of urbanisation along Nine Mile Ride. To the north and south, properties (including 286a) adjoin significant areas of sparsely populated mature mixed broad-leaved / coniferous woodland.

- 1.6 The wider landscape to the north, south and east tends to comprise of less populated areas that include significant areas of natural habitat, mainly consisting of mixed mature broad-leaved/coniferous woodland. To the east two large lakes; Queens Mere and Kings Mere are present. To the west the land is mainly occupied by the largely built up environment that makes up the town of Wokingham and which is mainly composed of residential areas.
- 1.7 There is one small pond on site, with no other waterbodies within 250 metres (m) of the site and one other pond located within 500 m of the site. Surrounding roads are lined with mature trees; the nearest area of designated woodland is located 40m east.

Development Proposals

- 1.8 It is understood that the development proposals include the renovation and enlargement of the dwelling. The garage will be demolished and replaced by a modern style garage.

Survey Aims

- 1.9 The aim of this ecological appraisal survey has been:
- *To identify habitats and protected species present, and any other features of ecological value;*
 - *Identify any potential ecological constraints;*
 - *Identify impacts of the proposed development and set out appropriate avoidance, mitigation and compensation measures;*
 - *To provide suggestions for enhancements to be incorporated into the scheme.*

2.0 PLANNING POLICY AND LEGISLATION

Legislation

2.1 Legislation relating to wildlife and biodiversity of particular relevance to this EclA includes:

- *The Conservation of Habitats and Species Regulations 2017;*
- *The Wildlife and Countryside Act 1981 (as amended);*
- *The Natural Environment and Rural Communities (NERC) Act 2006;*

2.2 This above legislation has been addressed, as appropriate, in the production of this report.

National Planning Policy

2.3 The National Planning Policy Framework (NPPF) 2019 sets out the government planning policies for England and how they should be applied. '*Chapter 15: Conserving and Enhancing the Natural Environment*' states that development should be '*minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.*'

2.4 The Government Circular 06/2005, which is referred to by the NPPF, provides further guidance in respect of statutory obligations for biodiversity and geological conservation and their impact within the planning system.

Local Planning Policy

2.5 Wokingham Borough Local Development Framework Adopted Core Strategy Development Plan Document (January 2010) includes *Core Policy CP7 – Biodiversity*. This states that: "Sites designated as of importance for nature conservation at an international or national level will be conserved and enhanced and inappropriate development will be resisted. The degree of protection given will be appropriate to the status of the site in terms of its international or national importance. Development: A) Which may harm county designated sites (Local Wildlife Sites in Berkshire), whether directly or indirectly, or B) Which may harm habitats or, species of principle importance in England for nature conservation, veteran trees or features of the landscape that are of

major importance for wild flora and fauna (including wildlife and river corridors), whether directly or indirectly, or C) That compromises the implementation of the national, regional, county and local biodiversity action plans will be only permitted if it has been clearly demonstrated that the need for the proposal outweighs the need to safeguard the nature conservation importance, that no alternative site that would result in less or no harm is available which will meet the need, and: i) Mitigation measures can be put in place to prevent damaging impacts; or ii) Appropriate compensation measures to offset the scale and kind of losses are provided.

- 2.6 *Core Policy CP8 - Thames Basin Heaths Special Protection Area* states that “Development which alone or in combination is likely to have a significant effects on the Thames Basin Heaths Special Protection Area will be required to demonstrate that adequate measures to avoid and mitigate any potential adverse effects are delivered.”
- 2.7 The current development proposals have been designed to comply with all national and local planning policy with regards biodiversity.

3.0 METHODOLOGY

3.1 Desk Study

- 3.1.1 The Multi-Agency Geographical Information Centre (*MAG/C*) was consulted for information regarding priority habitats and statutory designated sites within 2.0km of the proposed construction site. Due to the small size of the site and the poor-quality habitats on site, a protected species records check was not considered proportionate to the potential impacts. This approach is in line with CIEEM guidance (*CIEEM, 2016*).

3.2 Bat and Bird Scoping Assessment

- 3.2.1 A bat and bird scoping appraisal was undertaken on 13th October 2020 by Crossman Associates (*Refer to M1162.001*). A further update assessment was undertaken by Lizard Landscape Design and Ecology on 5th May 2021.
- 3.2.2 A Preliminary Bat Roost Assessment of buildings on site was undertaken on 13th October 2020 by an experienced, licenced bat surveyor who undertook an internal and external examination of the existing buildings. A further update assessment was undertaken by Lizard Landscape Design and Ecology on 5th May 2021. The bat surveyor assessed the existing building and structures visually and searched for evidence such as;
- *Staining beneath or around a hole caused by natural oils in bat fur;*
 - *Bat droppings beneath a hole, roost or resting area;*
 - *Bat droppings and / or insect remains beneath a feeding area;*
 - *Audible squeaking from within a hole;*
 - *Insects (especially flies) around a hole;*
 - *Dead bats.*
- 3.2.3 An external investigation assessed the fabric of the buildings to determine whether there were access points readily available for bats to utilise. Gaps / crevices identified within the structure were examined using a Clulite CB2 torch, ladder and endoscope where appropriate.

3.2.4 Trees were visually identified from the ground, using binoculars where necessary, for features that could be used by bats such as:

- *Woodpecker Holes;*
- *Knot Holes;*
- *Tear-outs;*
- *Flush Cuts;*
- *Double Leaders.*

3.2.5 Once features had been assessed the trees and buildings were then categorised in accordance with *Table 4.1 of the Bat Conservation Trust's Good Survey Guidelines (2016)*:

Table No. 01 – Categorisation Criteria

Category	Buildings	Trees
`Negligible`	<i>No suitable features identified.</i>	<i>No suitable features identified.</i>
`Low`	<i>A structure which could be used opportunistically, however, are not likely to be used on a regular basis / by a large number of bats.</i>	<i>Tree of sufficient size / age to support bat roost features; but with none identified from the ground.</i>
`Moderate`	<i>A building with features which, could be used regularly by a small number of bats.</i>	<i>Tree with features which, may support a bat roost of low conservation status.</i>
`High`	<i>A building with features suitable for use by a large number of bats on a regular basis.</i>	<i>A tree with several potential bat roost sites that are suitable for use by a large number of bats.</i>

3.3.5 The buildings on site were assessed internally and externally for any evidence of nesting birds such as house martin and house sparrow.

3.4 Bat Emergence / Re-entry Surveys

3.4.1 Survey visits were undertaken on the 5th May and 20th May 2021, in accordance with the recommendations given within the assessment undertaken by Crossman Associates (*Refer to M1162.001*).

- 3.4.2 3no. bat surveyors were assigned a point each to adequately cover all aspects of the building B1. An IR camera was also used to provide additional coverage of features of interest.
- 3.4.3 The dusk survey began 15 minutes before sunset and ended 1.5 hours after. Dawn survey begin 1.5 hours before sunrise and ended 15 minutes after. Data including species, behaviour and general patterns of activity were recorded throughout the survey. Full results of the surveys can be found in *appendix B*.

Table No. 02 – Bat Emergence / Re-entry Survey Details

Date		
Building No.	<i>B1</i>	<i>B1</i>
Survey Type	<i>Dusk</i>	<i>Dawn</i>
Surveyors	<i>LB, JH, GQ</i>	<i>GS, JH, GQ</i>
Weather	<i>8°C, WF2, Light Rain showers at start.</i>	<i>6.5°C, WF2, Light Cloud</i>
Sunset / Sunrise	<i>20:31</i>	<i>05:05</i>
Start	<i>20:16</i>	<i>03:35</i>
Finish	<i>22:01</i>	<i>05:20</i>

- 3.4.4 Bats were identified using Anabat SD2, Peersonic RPA 3 and Echo Meter Touch Pro 2 bat detectors. In addition, a CCTV infrared camera system was employed on the second (dawn) survey, with a camera and IR illuminator aimed at the likely access point and a further camera and IR illuminator aimed at the western gable end.

Surveyor Details

- 3.4.5 All surveys were led by licenced ecologists assisted by experienced field surveyors. The following surveyors were used:

- George Sayer – NE Class 2 licence holder with 7 years survey experience
- Louise Barker – Project Ecologist with 4 years survey experience
- Josh Harwood - Assistant ecologist with 3 years survey experience
- Guy Quartermaine - Assistant ecologist with 1 year survey experience

Data Analysis

- 3.4.6 Sonogram analysis was undertaken using the AnalookW and kaleidoscope viewer programmes.

Limitations

- 3.4.7 The temperatures, and levels of activity were low during both emergence and re-entry surveys; bat activity generally during May 2021 was lower than typical during previous years, in the experience of the surveyors. Therefore, the lack of bat re-entry or emergence may not be representative of the rest of the activity season.

Controls for Limitations – Further Data Gathering

- 3.4.8 As a means to control for this and obtain further detailed information, three clean white dustsheets were laid out in the loft in locations of previous evidence of bats (droppings) and the likely access point. These covered the majority of the ridgeline. In addition, an Anabat Express static bat detector was installed into the loft. The sheets and detector were left in the loft for the nights of 11th - 18th June 2021 (*a period of warm, settled weather*). The sheets were carefully checked for any new bat droppings, and the detector checked for any bat calls which would likely have come from bats within the loft.

3.5 Ecological Impact Assessment

- 3.5.1 The methodology for Ecological Impact Assessment (EcIA) follows best practice guidelines set by the Chartered Institute of Ecology & Environmental Management (CIEEM): 'Guidelines for Ecological Impact Assessment' (CIEEM, 2018). This includes identifying the baseline conditions on the site and subsequently rating the potential effects of the development based on the sensitivity and value of the resource affected, combined with the magnitude, duration and scale of the impact (or change). This is initially assessed without mitigation measures, and then assessed again after allowing for the proposed mitigation measures; this provides the residual effects. The assessment is divided into construction effects and longer term operational effects.

3.5.2 Each ecological feature within the site has been considered within a defined Geographic context such as:

- *International and European;*
- *National;*
- *Regional;*
- *County;*
- *District;*
- *Local;*
- *Site Level;*
- *Negligible.*

3.5.3 Based upon CIEEM guidance, value was determined with reference to the following factors:

- *Its inclusion as a Designated Site or other protected area;*
- *The presence of habitat types of conservation significance, e.g. Habitats of Principal Importance (NERC 2006);*
- *The presence (or potential presence) of species of conservation significance e.g. Species of Principal Importance (NERC 2006);*
- *The presence of other protected species e.g. those protected under The Wildlife and Countryside Act 1981;*
- *The sites social and economic value.*

3.5.4 The ecological impacts resulting from the proposals were then described according to a defined set of characteristics as defined within '*Guidelines for Ecological Impact Assessment in the UK and Ireland*' (CIEEM, 2018). This assessment considers residual impacts (once all mitigation has been taken into account), with any significant effects highlighted. A significant effect is defined as "*an effect which either supports or undermines biodiversity conservation objectives for 'important ecological features' or for biodiversity in general*".

3.5.5 The confidence that a certain activity will result in a significant adverse effect has been ranked as follows:

- *Highly probable;*
- *Probable;*
- *Unlikely;*
- *Highly unlikely.*

3.5.6 Where initial impacts have been identified as significant, avoidance, mitigation and compensation measures have been proposed to avoid, prevent or offset such effects. Enhancement has been proposed to ensure that the development represents a net gain in biodiversity in accordance with National Policy.

4.0 BASELINE ECOLOGICAL CONDITIONS

4.1 Desk Study – Designated Sites

4.1.1 The following designated sites are not necessarily representative of the existing site's ecology but are indicative of the ecological context of the surrounding area; a factor that may be important when assessing the presence / absence potential of certain species groups.

Statutory Protected Sites

4.1.2 The following potential zones of influence have been utilised when identifying designated sites in the local area: Local Nature Reserves and Sites of Special Scientific Interest (*within 2.0km of the site*) and European Designated sites including SAC's and SPA's (*within 10km of the site*). Statutory protected areas in the vicinity of the site include:

Table No. 03 – Statutory Protected Sites

Site	Description	Location
<i>Heathlake LNR</i>	<i>An area of woodland and heathland. The shallow 7 acre lake is the only acid lake in Berkshire. This means it has a naturally high pH which supports several rare plants, including the water-millfoil and the 6 stemmed water crowfoot.</i>	<i>2.0 km E</i>
<i>Heath Lake SSSI</i>	<i>A small, shallow lake, surrounded by birch and pine woodland with areas of relict heathland. Heath Lake is a long-established open water habitat supporting specialist communities of native plants and animals. Of particular interest are populations of some uncommon and rare aquatic plant species.</i>	<i>2.0 km E</i>
<i>Thames Basin Heaths SPA</i>	<i>A large area of heathland which supports breeding populations of Dartford warbler, nightjar and woodlark. Designated for Natural dystrophic lakes and ponds (Cranmer Pond), European dry heaths and Depressions on peat substrates of the Rhynchosporion. Also present are Northern Atlantic wet heaths with Erica tetralix and Transition mires and quaking bogs.</i>	<i>3.8 km E</i>

- 4.1.3 The site is located within the *Impact Risk Zone* of *Heath Lake SSSI* however the proposed development does not fall into the criteria which would require the LPA to consult with Natural England. The site is located within the 5km Mitigation Zone of The Thames Basin Heaths SPA, but given that there is no increase in accommodation on the site, a contribution towards Suitable Alternative Natural Greenspace (SANG) is not required.

Non-Statutory Protected Areas

- 4.1.4 *Local Wildlife Sites* (LWSs) are designations applied to the most important non-statutory nature conservation sites. They are recognised by the *National Planning Policy Framework (2019)* and as such are material considerations when assessing planning applications. The following LWSs were identified within 2.0km of the site:

Table No. 04 – Non-Statutory Protected Sites

Site	Location
<i>Gorrick Plantation</i>	<i>325 m N</i>
<i>Land to East and West of Sandhurst Road</i>	<i>500 m NW</i>
<i>Simon's Wood and Heath Pond</i>	<i>1.0 km SE</i>
<i>Finchamstead Ridges</i>	<i>1.45 km S</i>
<i>Fishers Copse</i>	<i>1.75 km SE</i>

4.2 Habitats

- 4.2.1 Within 2.0 km of the site there are *Priority Habitats* of *Purple Moor Grass and Rush Pastures, Lowland Heathland, Lowland Fens, Ancient Woodland and Deciduous Woodland*. There is no Priority Habitat located within or directly adjacent to the site.

- 4.2.2 Habitats within and adjacent to the land include:

- *Existing Building;*
- *Hard / Bare Ground;*
- *Amenity Grassland;*
- *Scattered Trees;*
- *Introduced Shrub;*
- *Pond.*

Existing Building

- 4.2.3 2no. buildings are present in the site area. The main bungalow is constructed of brick with a flat clay tile pitched roof.

- 4.2.4 Building B2 is a detached single storey garage constructed of brick with a pitched, corrugated panel roof.
- 4.2.5 The buildings are assessed further for their bat and bird potential but are of inherent 'negligible' value.

Hard / Bare Ground

- 4.2.6 The House is surrounded by gravel parking area and paved paths, of 'negligible' value.

Amenity Grassland

- 4.2.7 The rear garden is partly formed of an amenity grassland lawn. This is dominated by common grasses such as cocksfoot (*Dactylis glomerata*) and is now unmown, with patches of moss. The grassland is of 'site' value at most.

Scattered Trees

- 4.2.8 The garden contains small ornamental trees such as magnolia (*Magnolia sp.*). The rear of the garden is lined with a row of larger trees which includes leyland cypresses (*Cupressocyparis x leylandii*) and silver birches (*Betula pendula*). A mature beech tree (*Fagus sylvatica*) is present to the front garden. The trees are of 'site' value.

Introduced Shrub

- 4.2.9 The garden contains introduced shrubs such as roses (*Rosa sp.*) and firethorn (*Pyracantha sp.*). A hedge to the frontage is formed of rhododendron (*Rhododendron ponticum*) whilst the garage is covered in Virginia Creeper (*Parthenocissus quinquefolia*). These last two species are listed as invasive species on Schedule 9 of the Wildlife and Countryside Act (as amended) 1981.

Pond

- 4.2.10 A small pond is present on-site covering c. 4m², formed of a concrete basin lined with stones and covered with a mesh. Dense vegetation formed of curly waterweed (*Lagarosiphon major* / *Elodea crispa*) and algae were noted inside, with the water being c. 40cm deep. Curly waterweed is listed as an invasive species on Schedule 9 of the Wildlife and Countryside Act (as amended) 1981. The pond is believed to contain or have contained ornamental goldfish.

4.3 Protected Species Assessment

Amphibians

Desk Study

- 4.3.1 Records of palmate newt, common frog and common toad exist within 2.0km of the site. The desk study returned a small number of GCN returns from Barkham to the north. Great crested newts and their resting / breeding sites are protected under The Conservation of Habitats and Species Regulations 2017 and The Wildlife and Countryside Act 1981 (*as amended*).

Site Assessment

- 4.3.2 A HSI assessment of the on-site pond was undertaken, which revealed the pond as offering 'poor' suitability. The results of the HSI assessment are shown in table no. 05 below.

Table No. 05 – Summary of HSI Results

HSI Criteria	Pond P1
Location	1.00
Pond Area	0.05
Permanence	0.90
Water Quality	0.67
Shade	1.00
Waterfowl	1.00
Fish	0.01
Pond Count	0.67
Terrestrial Habitat	0.67
Macrophytes	1.00
HSI Score	0.43
Suitability	Poor

- 4.3.3 The site is dominated by buildings, gardens and hard standing; habitats of limited value to GCN. There are small areas of tall ruderal and grassland on site, however the value of these areas is negated by their small size and isolation from other areas of suitable habitat. The site is considered to be of **negligible value to GCN**, however common amphibians such as frogs are known to utilise the pond on site.

Reptiles

Desk Study

- 4.3.4 The desk study has returned records of slow worm, grass snake and common lizard within 2.0km of the site, mostly associated with local heathland and woodland. All species of UK reptile are protected against reckless or intentional killing or injuring under The Wildlife and Countryside Act 1981 (*as amended*).

Site Assessment

- 4.3.5 The site is dominated by buildings and hard standing, habitats of no value to reptiles. The amenity grassland is now rank and therefore suitable for reptiles; however, the value of these areas is negated by their small size and isolation from other areas of suitable reptile habitat, with the site isolated from other areas by better-maintained gardens and a commercial unit. The site is considered to be of at most **low value** to reptiles.

Bats

Desk Study

- 4.3.6 Common Pipistrelle (*Pipistrellus pipistrellus*) and Brown Long-eared (*Plecotus auritus*) bats have been recorded within 2.0km of the site area. Numerous EPSM licences have been granted in the surroundings, including on Nine Mile Ride for bats including pipistrelles and brown long-eared bats.

Preliminary Roost Assessment

- 4.3.7 The existing buildings on site were assessed for their potential to support roosting bats, a summary of the assessment is shown below. Further detail can be reviewed within M1162.001:

Table No. 06 – Building Assessment

Ref.	Description	Category
B01	An external assessment revealed a gap in the tiles below the chimney suitable for bat ingress. The loft contained a number of long-eared bat droppings, with many scattered in the vicinity of the external gap and chimney and a small number along the ridge line. Refer to M1162.001 for more information.	Confirmed Bat Roost
B02	A small basic linear shaped single-story brick built garage which has been enlarged on the southern end with the attachment of a small brick and timber shed. Both the garage and shed are fitted with basic roofs, composed of single skin of asbestos / cement fibre corrugated roof sheets. Refer to M1162.001 for more information.	Negligible

- 4.3.8 None of the trees within the main body of site were assessed as offering any bat roost suitability, being semi-mature and ornamental in nature.
- 4.3.9 Nine Mile Ride backs onto a large area of woodland likely of significance to bats. This particular property and its neighbours are isolated from this by a commercial unit to the south of the gardens. This unit is likely to disturb bats through light whilst also limiting vegetative connectivity. As such the gardens are considered of no more than **site importance** to the local bat community.

Dusk Emergence Survey – Building B1 – 5th May 2021

- 4.3.10 The emergence survey did not reveal any bats using the building, with only a single soprano pipistrelle recorded once during the survey. Activity may have been reduced by light rain showers during the survey although parameters were otherwise suitable.

Dawn Re-entry Survey – Building B1 – 20th May 2021

- 4.3.11 No bats were seen re-entering the building at any point during the survey. There was no bat activity recorded at all during the survey. The cold temperatures during this survey may have reduced general activity levels, although the night was otherwise dry, still and suitable for foraging.

Further Data Gathering

- 4.3.12 The dust sheets left covering the areas of interest between 11th – 18th June did not collect any new bat droppings, feeding remains or other evidence of bats.
- 4.3.13 The static bat detector within the loft recorded each night between 11th – 18th June, and did not record any bat calls of any bat species.

Roost Type

- 4.3.14 The survey results suggest that bats have not used the building during the early part of the 2021 season. Given the number of droppings, the building is likely to have been used by a small number of BLE over a period of time. These bats either no longer use the building or do so only on occasion or for a part of the season. It is concluded that building B1 supports an occasional day roost of a small number of BLE. Roosts which support small number of common species of bats are of **low conservation value**.

Dormouse*Desk Study*

- 4.3.15 The desk study has returned no records of dormice within 2.0km of the site. Hazel Dormice are protected under The Wildlife and Countryside Act 1981 (as *amended*) through their inclusion on Schedule 5 and The Conservation of Habitats and Species Regulations 2017.

Site Assessment

- 4.3.16 The garden does not contain the connectivity or variety of species required to support dormice. The proposed site is of **negligible value** to dormice.

Badger*Desk Study*

- 4.3.17 Badger records are confidential and were therefore not included within the data search.

Site Assessment

- 4.3.18 The garden was until recently well-maintained, and isolated from other suitable badger habitat by adjacent gardens and commercial unit. The site is of **negligible value** to badgers.

Other Mammals

- 4.3.19 Numerous records of common mammals including rabbit exist within 2.0km of the site area. No evidence of any other mammals on site was recorded, although the gardens are highly suitable for hedgehogs.

Birds*Desk Study*

- 4.3.20 A wide range of bird species have been recorded within 2.0km of the site, including a high proportion of Schedule I species and a number of species listed on the BoCC Red List. A single woodlark record (*for which the nearby Thames Basin Heaths is partly designated*) is present further along Nine Mile Ride.

Site Assessment

- 4.3.21 Optimal nesting habitat is limited to the garden shrubs and trees. The area overall is likely to be of **site value** to breeding / foraging birds. The habitats are unsuitable for the locally-significant woodlark, Dartford warbler or nightjar. The buildings are of **negligible value** to nesting birds.

Invertebrates***Desk Study***

- 4.3.22 The data search returned records of numerous species of invertebrates within 2.0km of the site including records of stag beetle, numerous dragonfly and bees species.

Site Assessment

- 4.3.23 The site in general lacks the floral diversity to support a good range of invertebrates, with the grassland and introduced shrubs likely supporting only common assemblages. The site is likely to be of **site value only**.

Others

- 4.3.24 No suitable habitat for any other protected species was recorded on site.

4.4 Survey Constraints / Considerations

- 4.4.1 Bat surveys were slightly constrained by weather and the generally slow start to bat activity in 2021; measures to control for this were put in place as discussed above and were considered sufficient to provide a robust assessment.

5.0 ASSESSMENT OF EFFECTS AND MITIGATION MEASURES

5.1 Designated Sites

Potential Impacts

- 5.1.1 The site is located within the *Impact Risk Zone* of *Heath Lake SSSI* however the proposed development does not fall into the criteria which would require the LPA to consult with Natural England. The site is located within the 5km Mitigation Zone of The Thames Basin Heaths SPA. The impacts upon these sites are likely to be negligible, consisting of a very minor increase in local temporary construction traffic pollution, and very minor increases in recreational use of local sites.

Mitigation and Compensation

- 5.1.3 Given that there is no increase in accommodation on the site, a contribution towards Suitable Alternative Natural Greenspace (SANG) is not required.

Residual Impacts

- 5.1.4 **No likely significant effect** upon surrounding designated sites will arise from the proposed development.

5.2 Habitats

Potential Impacts

- 5.2.1 Development will cause the permanent loss of areas hard standing and small areas of amenity grassland and introduced shrubs, with the permanent loss of Building B2 and alteration of building B1.
- 5.2.2 In the absence of mitigation, impacts upon the scattered trees, amenity grassland and introduced shrubs could include soil compaction, dust smothering and vehicle strike while impacts upon the adjacent pond could include sedimentation and pollution events. Uncontrolled removal of rhododendron and Virginia Creeper might result in their spread to the wild. Given the small scale of the site, impacts would be of a minor impact magnitude but likely to occur.

Mitigation and Compensation

- 5.2.3 Works during the construction phase will be undertaken in accordance with guidance provided within *The Control of Dust and Emissions During Construction and Demolition SPG (July 2014)* to control any excess dust creation which may impact adjacent scattered trees and hedgerows.
- 5.2.4 Construction lighting (if required) will be angled down and away from the nearby trees. All light spill on the adjacent scattered trees and shrubs will be avoided during the operational phase.
- 5.2.5 All re-fueling and storage of fuel will be within appropriate compound outside the RPA of retained trees and a minimum of 5m from the pond. Appropriate drip trays and spill kits will be in place to prevent pollution events.
- 5.2.6 Any non-native plants requiring removal shall be manually removed and carefully double-bagged, before being taken to an appropriate green recycling facility. Following construction new areas of hard ground, introduced shrubs and amenity grassland shall be created to replace those lost.

Residual Impacts

- 5.2.7 Residual impacts after mitigation will be **negligible**.

5.3 Bats*Potential Impacts*

- 5.3.1 In the absence of mitigation impacts could include the destruction of an occasional day roost of 1no. BLE, disruption of commuting corridors and foraging habitat through inappropriate lighting and killing or injuring of individual bats using B1 as a roost. The impacts would be of moderate magnitude at the site level and moderately likely to occur.

Mitigation and Compensation

5.3.2 A mitigation licence from Natural England will be required prior to conversion of building B01. Mitigation will be as follows:

- Obtain DNA analysis of droppings to confirm BLE as opposed to GLE;
- Apply for a Mitigation Licence from Natural England once full planning permission is received;
- No works to the building are to take place until the licence is received.
- Install suitable bat boxes (*eg. Greenwoods ecohabitat single cavity bat box*) to the southern aspect of nearby mature tree;
- Once the licence is received, soft strip all roof tiles 1.0m either side of the ridge and in the areas of particular interest by hand under ecological supervision;
- Any bats found will be caught by hand and moved to adjacent bat box;
- Conversion and alteration works may only begin once the building has been declared free of bats by the supervising ecologist.

5.3.3 A sensitive lighting scheme will be employed with lighting kept to the minimum levels and angled down and away from surrounding trees, ponds and shrubs.

Residual Impacts

5.3.4 The overall impact of the scheme will be minor-adverse in the short-term, with a **negligible impact** in the long-term as replacement roosting opportunities will be provided in perpetuity.

5.4 Birds

Potential Impacts

5.4.1 In the absence of mitigation impacts could include destruction of a bird nest and loss of habitat. The impacts would be of minor magnitude but likely to occur.

Mitigation and Compensation

5.4.2 Any suitable bird nesting habitat is to be removed outside the bird nesting season (*e.g. avoiding March – August inclusive*) or under the supervision of a qualified ecologist. Compensation for the loss of any nesting habitat will be provided through replacement planting.

Residual impacts

- 5.4.3 Residual impacts after mitigation will be **negligible**.

5.5 Amphibians

Potential Impacts

- 5.5.1 No suitable habitat for protected amphibians exists within the site, impacts will be **negligible**. The pond is suitable for widespread amphibians as is the rank grassland.

Mitigation and Compensation

- 5.5.2 Should any GCN be found on site all works will cease while an ecologist is contacted for advice. Any common amphibian such as frogs and toads found during the works shall be carefully moved to an area of retained habitat. The grass shall be strimmed in 2 stages with a 24 hour period between, prior to any clearance to allow such wildlife to disperse.

Residual Impacts

- 5.5.3 After mitigation, the overall impact of the scheme will be **negligible**.

5.6 Reptiles

Potential Impacts

- 5.6.1 The habitats on-site are of at most low potential for reptiles; in the absence of mitigation, incautious clearance may harm individual reptiles. Impacts would be of moderate impact at the site level.

Mitigation and Compensation

- 5.6.2 The grass shall be strimmed in 2 stages with a 24 hour period between, prior to any clearance to allow such wildlife to disperse.

Residual Impacts

- 5.6.3 The overall impact of the scheme will be **negligible**.

5.7 Dormouse

Potential Impacts

- 5.7.1 No suitable habitat for dormice exists within the site, impacts will be **negligible**.

Mitigation and Compensation

- 5.7.2 None required.

Residual Impacts

- 5.7.3 The overall impact of the scheme will be **negligible**.

5.8 Badgers

Potential Impacts

- 5.8.1 None required.

Mitigation and Compensation

- 5.8.2 None required.

Residual Impacts

- 5.8.3 The overall impact of the scheme will be **negligible, non-significant**.

5.9 Other potential impacts

- 5.9.1 No other protected species or habitats will be impacted by the proposed development. Any excavations shall be fitted with covers or ramps, and checked daily to ensure hedgehogs, toads etc. do not become trapped.

6.0 ECOLOGICAL ENHANCEMENTS

6.1 The design of the proposed development will include ecological enhancements for the benefit of wildlife in line with the *National Planning Policy Framework* and *Local Planning Policy*. Ecological enhancements which will be included as part of development proposals include

- The use of flowering plants as listed within the RHS 'Plants for Pollinators' plant list within the soft landscape scheme to provide year-round interest for invertebrates;
- The provision of a nesting box for house sparrows or other passerines within the northern aspects of the building;
- The use of log and compost piles in the garden to provide refugia for reptiles and amphibians;
- Bat box suitable for a range of species to be incorporated into the southern aspect of the building or a mature tree (in addition to that needed as mitigation);
- Installation of a solitary bee box to the south facing aspect of a tree or wall.

7.0 CONCLUSIONS

- 7.1 The site is formed of a detached bungalow with surrounding amenity grassland and introduced shrub garden, which incorporates a small garden pond, and hard / bare ground. The habitats which will be directly impacted by the proposal are of **low ecological value**.
- 7.2 The bungalow (*B1*) is an occasional day roost for low numbers of BLE. The works shall require a Natural England Mitigation Licence to proceed. The licence shall ensure that the proposals do not affect the favourable conservation status of the species. No other impacts upon any European protected species are predicted as a result of this development.
- 7.3 Once mitigation measures have been taken into the account, the impacts of the planned development upon biodiversity will be **negligible** with proposed ecological enhancements resulting in a **long-term positive increase** in biodiversity in line with national planning policy guidance.

8.0 REFERENCES

JNCC: Handbook for Phase 1 Habitat Survey – A Technique for Environmental Audit; (2003);

Collins J (ed): Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd ed.) The Bat Conservation Trust (2016);

Mitchell-Jones and McLeish: Bat Workers Manual; JNCC, 3rd Edition (2004);

Streeter, D.: The Most Complete Guide to the Flowers of Britain and Ireland; Harper Collins, London (2010);

Oldham R.S., Keeble J., Swan M.J.S. & Jeffcote M. (2000). Evaluating the suitability of habitat for the Great Crested Newt (Triturus cristatus). Herpetological Journal 10 (4), 143-155

www.magic.gov.uk.

Table No. 07 – Species List for Habitat Parcels**Amenity Grassland**

Common Name	Scientific Name	DAFOR
Cocksfoot Grass	<i>Dactylis glomerata</i>	D
Dandelion	<i>Taraxacum agg.</i>	F
Perennial Rye-grass	<i>Lolium perenne</i>	D
Sedge	<i>Carex sp.</i>	F
Springy Turf-moss	<i>Rhytidiadelphus squarrosus</i>	LA

Scattered Trees

Common Name	Scientific Name	DAFOR
Leyland Cypress	<i>Cupressocyparis x leylandii</i>	LF
Beech	<i>Fagus sylvatica</i>	R
Silver Birch	<i>Betula pendula</i>	LF
Magnolia	<i>Magnolia sp.</i>	R

Introduced Shrubs

Common Name	Scientific Name	DAFOR
Rhododendron*	<i>Rhododendron ponticum</i>	LF
Camellia	<i>Camellia sp.</i>	O
Firethorn	<i>Pyracantha sp.</i>	LF
Rose	<i>Rosa sp.</i>	O
Virginia Creeper*	<i>Parthenocissus quinquefolia</i>	LD

D – Dominant; A – Abundant; F – Frequent; O – Occasional; R – Rare; L – Locally

Table No. 08 – Target Notes

Ref	Feature	Description
TN01	Potential Access Point	Area of raised tiles of B1.
TN02	Bat Droppings	Accumulations of bat droppings.

Appendix A – Site Photographs



Photograph 1: View of B1 from the south.



Photograph 2: View of B2 from the north.



Photograph 3: Gap beneath chimney believed to be used as BLE access point.



Photograph 4: Bat droppings within the loft beneath the above access point.



Photograph 5: Garage Building B2.



Photograph 6: Garden Pond.

Appendix B – Bat Survey Results

Visit 01 – Building B1

Date	05/05/2021
Survey Type	Dusk
Sunrise / Sunset	20:31
Start Time	20:16
End Time	22:01
Temperature	8 °C
Wind	2
Weather	Light Rain

Surveyor	LB	
Point	SW corner of building (Survey Point 3)	
Time	Species	Notes
No bats heard or seen.		

Surveyor	GQ	
Point	NE - corner front garden (Survey Point 1)	
Time	Species	Notes
21:10	Ppyg	Heard not seen.

Surveyor	JH - anabat	
Point	SE - adj to garden pond (Survey Point 2)	
Time	Species	Notes
21:10	Ppyg	Heard not seen.

Visit 02 – Building B1

Date	20/05/2021
Survey Type	Dawn
Sunrise / Sunset	05:05
Start Time	03:35
End Time	05:20
Temperature	6 °C
Wind	2
Weather	Light Cloud

Surveyor	GS	
Point	SW corner of building (Survey Point 3)	
Time	Species	Notes
No bats heard or seen.		

Surveyor	GQ	
Point	NE - corner front garden (Survey Point 1)	
Time	Species	Notes
No bats heard or seen.		

Surveyor	JH - anabat	
Point	SE - adj to garden pond (Survey Point 2)	
Time	Species	Notes
No bats heard or seen.		

Appendix C – Original PEA of Site (M1162.001)

Bat Survey of 286a Nine Mile Ride, Wokingham

Client Mr M Morgan
Reference M1162.001
Issue One
Date 20 November 2020

Crossman Associates

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Non-technical Summary

Background

In September 2020, Crossman Associates was commissioned by Mr M Morgan to undertake a bat and bird scoping survey at 286a Nine Mile Road, Wokingham, Berkshire, RG40 3NT. Proposals include renovation and enlargement of the dwelling and the demolition of the existing garage which will be replaced with a new detached garage.

Methodology

The scoping survey was undertaken by Fairbrass Knowles, a fully licensed bat worker and experienced ecologist. The buildings were inspected both externally and internally for any evidence of bat presence, such as droppings, food remains, staining or actual bats.

Results

The property consists of a small c.1940's brick-built bungalow located on the southern edge of Wokingham in a semi-rural area with nearby woodland.

The dwelling has a spacious roof void and during the survey was found to have bat droppings attributable to long-eared bat, confirming an active roost of at least one bat species. The quantity of bat droppings is typical of a non-breeding day roost. A likely access point was located at the base of a chimney.

No birds were noted in association with any aspect of the buildings.

Recommendations

- Additional bat surveys between May and September
- New provision for nesting birds

Contents

NON-TECHNICAL SUMMARY	1
1. BACKGROUND	3
SITE DESCRIPTION	3
PROPOSALS	4
LEGISLATION	4
2. METHODOLOGY	5
DESKTOP STUDY	5
3. RESULTS	7
DESKTOP STUDY	7
FIELD SURVEY	8
EVALUATION	13
4. RECOMMENDATIONS	16
BATS	16
BIRDS	19
5. LIMITATIONS	21
6. REFERENCES	22

1. Background

- 1.1. In September 2020, Crossman Associates was commissioned by Mr M Morgan to undertake a bat scoping survey at 286a Nine Mile Ride, Wokingham, Berkshire, RG40 3NT; site Ordnance Survey grid reference SU 8067 6499.
- 1.2. Figure 1 within Appendix I provides a site location map.
- 1.3. The objectives of the survey were to:
 - Make an assessment of the likely presence or absence of bats and birds
 - Identify any legislative or planning policy constraints relevant to the site
 - Determine the need for further surveys, compensation or mitigation

Site Description

- 1.4. 286a Nine Mile Ride consists of a small and conventionally designed detached brick bungalow, thought to date from the 1940's / 50's. Also present is a small, detached garage. The property has a large rear garden and smaller front garden/driveway. The property occupies the southern side of Nine Mile Ride (The B3430) which is a long straight road on the southern edge of the town of Wokingham.
- 1.5. Both the dwelling and the garage remain sound and the house has only recently become vacated.
- 1.6. Immediate surroundings to the east and are further dwellings which form a ribbon of urbanisation along Nine Mile Ride. To the north and south, properties (including 286a) adjoin significant areas of sparsely populated mature mixed broad-leaved / coniferous woodland. The wider landscape to the north, south and east tends to comprise of less populated areas that include significant areas of natural habitat, mainly consisting of mixed mature broad-leaved/coniferous woodland. To the east

two large lakes; Queens Mere and Kings Mere are present. To the west the land is mainly occupied by the largely built up environment that makes up the town of Wokingham and which is mainly composed of residential areas.

Proposals

- 1.7. The property is proposed for renovation and enlargement. The garage will be demolished and replaced by a modern style garage.

Legislation

- 1.8. In the UK all species of bats are protected under the Wildlife and Countryside Act (1981) as amended and the Conservation of Habitats and Species Regulations, 2017. Under this legislation it is a strict liability offence to injure or destroy a bat or to disturb damage or destroy the resting place of a bat. Under this legislation the UK is obliged to fully take into account bats within the planning process and the level of bat activity on-site must be fully assessed prior to the assessment the planning application
- 1.9. In Britain all wild birds are granted legal protection under the Wildlife & Countryside Act ((1981) (as amended)). This legislation protects the birds, their eggs and nests whilst being built or in use.

2. Methodology

Desktop Study

Data search

- 2.1. The MAGIC website was accessed to gain information on any statutory site designations within 4 km of the site that are designated for bats.

Planning Policy

- 2.2. National Planning Policy has been reviewed for policies that relate to nature conservation relevant to the site.

Field Survey

Bat scoping survey

- 2.3. The buildings were methodically inspected internally and externally for any evidence of roosting bats, including actual bats, droppings, urine staining and evidence of feeding activity such as discarded insect wings and cases.
- 2.4. The buildings were also assessed for their suitability to support roosting bats by considering several factors including whether bats can access internal and external voids within the building and whether these voids provide adequate protection and shelter for roosting bats. If the building is not confirmed as a roost, it is assessed from High to Negligible Suitability as follows;
 - **High Suitability** – many roosting opportunities. Buildings tend to be old, large and rural

- **Moderate Suitability** – some roosting opportunities. Buildings tend to be old, rural with some recent maintenance
- **Low Suitability** – few roosting opportunities. Buildings tend to be modern, urban and well maintained
- **Negligible Suitability** – insignificant roosting opportunities. Buildings tend to be small, modern, urban and very well maintained.

Birds

- 2.5. The building was also inspected for the presence of birds including house sparrow *Passer domesticus*. The building was checked for field signs including nesting material, accumulations of droppings and/or pellets.:

3. Results

Desktop Study

Data Search

- 3.1. The MAGIC website informed that there are no known sites specifically designated for bats laying within 4 km of the address.

Planning Policy

- 3.2. The National Planning Policy Framework (NPPF) contains sections of relevance to nature conservation that include:

- Paragraph 174: To protect and enhance biodiversity and geodiversity, plans should:
 - a) 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 56; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation;
 - b) 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: When determining planning applications, local planning authorities should apply the following principles:

- a) 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;
- b) 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;
- c) 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 reasons⁵⁸ and a suitable compensation strategy exists; and
- d) 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.

Field Survey

Bat scoping survey

- 3.3. Survey work was undertaken by Fairbrass Knowles an experienced ecologist and fully licensed bat worker, (licence number 12392 CLS-CLS) and took place on 13 October 2020. The buildings were fully accessible.

- 3.4. The external and internal conditions of the buildings are described in the table below and photographic reference can be found within Appendix II.
- 3.5. A table within Appendix III; information sheets set out the criteria for the way a building is assessed for its potential to support roosting bats.

Building	Feature	Feature Description	Bat suitability
286a Nine Mile Ride	Overview	286a Nine Mile Ride consists of a conventionally-designed brick built 2 / 3 bedroom detached bungalow, thought to date from the 1940's / 50's. The dwelling remains in sound condition and has only recently become vacated.	Confirmed roost ☒
	Exterior	Supporting walls are all formed from well-pointed brick work and all elevations remain free of any significant cracks or holes. Windows and doors appear original and all remain in good condition, shutting tightly within their respective reveals.	
	Interior	All areas of living accommodation provide well-decorated rooms. A single spacious rectangular shaped loft is present and is formed from a traditional cut and pitch roof of gauged timber with a floor to ridge height of approximately 2.5 m. The sarking layer is on show and consists of traditional type 1 f bituminous sarking felt which while old remains intact and free of significant tears or holes.	

Building	Feature	Feature Description	Bat suitability
		During the survey a quantity of bat droppings (fresh and old) was noted around the base of brick chimney that is located centrally at the western end of the roof void. The droppings amount into the 100's and the size, shape and context would confirm that the bat present is a species of long-eared bat, most likely brown long-eared bat <i>Plecotus auratus</i> .	
	Roof	The roof is a simple hipped design; with a main rectangular section with two smaller and near identical connected sections present on the front; northern elevation (east and west ends). The roof is entirely clad with flat and tight-fitting concrete peg tiles with standard style half-round concrete ridge tiles forming the hips and ridges. All tiles remain present and well-fitted and overall the roof provides a well-sealed feature with no significant crevices present, the one exception to this consists of a strange feature associated with the chimney base on the roofs southern elevation (western end). Here a line of 4 number roof tiles have become raised, forming a shallow arch, generating a significant crevice	

Building	Feature	Feature Description	Bat suitability
		approximately 500 mm in length and up to 70 mm in height. Refer to photograph 3. Eaves are formed from well-sealed soffits; all of which remain free of any decay or damage and exhibit no significant crevices.	
Garage / workshop	Overview	A small basic linear shaped single-story brick built garage which has been enlarged on the southern end with the attachment of a small brick and timber shed. Both the garage and shed are fitted with basic roofs, composed of single skin of asbestos / cement fibre corrugated roof sheets. All brick and timber that form the walls remains in good condition and the roofs sheets remain present and well-fitted and neither the walls or roof provide any significant crevices. The eastern garage wall and parts of the roof has become moderately encroached by Virginia creeper <i>Parthenocissus quinquefolia</i>. The interior of the garage and shed served until recently as a model making hobby workshop and provide well-sealed rooms.	Negligible Suitability ☒

Birds

- 3.6. No birds or bird nesting activity was recorded in any aspect of the building.

Evaluation

Dwelling

- 3.7. The property is situated close to of natural habitat including mature woodland adjoining the southern side of the property; woodland provides bats with good commuting and foraging habitat.

Long-eared bat roost

- 3.8. The size and shape of the droppings and context would indicate that the droppings come from a species of long-eared bat, most likely a brown long-eared bat *Plecotus auritus*, which is a species that is well known to frequent spacious and un-cluttered lofts in domestic dwellings.
- 3.9. An obvious access point has been identified at the base of the chimney on the southern elevation, where some roof tiles have become lifted forming a shallow arch.
- 3.10. During the survey no bats were present and the lack of a significant build-up of droppings suggests that the building is functioning as a non-breeding summer day roost.
- 3.11. The roof void is not likely to be supporting a maternity roost of long eared bats as in these situations, a larger quantity of droppings and other bat related evidence would be expected.
- 3.12. Long-eared bats do sometimes make use of roof voids as hibernation sites; however, the roof void provides no significant hidden cavities or crevices and is thus considered to be sub-optimal as a hibernation site for this species.

- 3.13. There are two species of long-eared bat in the UK. The widespread and relatively abundant brown long-eared bat *Plecotus auritus* and the grey long-eared bat *Plecotus austriacus*, a species which has a more restricted distribution and is less often encountered. The most likely long-eared bat present is the brown long-eared bat a species strongly associated with older style roof voids of rural dwellings. The two species are difficult to distinguish, and the species could not be identified within this survey. The simplest method to identify which species is present is through DNA analysis of a dropping sample and sample droppings have been retained.

Behaviour and habitat

- 3.14. Long-eared bats are a roof void and crevice dwelling bat, particularly favouring older buildings particularly ones with large open roof spaces. Bats roost singly or in small groups among the roof timbers of the apex, especially around ridge ends, chimneys and in crevices at the top of gable walls. Correctly assessing the quantity of brown-long eared bats can be problematic as the species is very secretive and their detection can be difficult due to their quiet echolocation making them difficult to detect using bat detectors. They also rarely exit their roosts until it has become very dark, so observation can be difficult.
- 3.15. Current proposals will require significant disturbance to the roof void and without mitigation this level of work has the potential to damage / destroy the roost, possibly leading to the injury or death of bats if they are present at the time of works. Without an appropriate Natural England licence in place this would be a strict liability offence.

Garage

- 3.16. The garage, which is very basic, offers no significant bat roosting opportunities and is assessed to have **Negligible Suitability** for roosting bats.

Birds

- 3.17. No birds or bird nesting activity was recorded in any aspect of either the dwelling or the garage. The dwelling offers no bird nesting opportunities. The garage offers nesting opportunities in the form of a moderate covering of Virginia creeper on the eastern wall and to a lesser extent the roof. Species which are known to nest in such habitat include black bird *Turdus merula* and wren *Troglodytes troglodytes*.

4. Recommendations

- 4.1. The recommendations in the paragraphs below are provided to help ensure that wildlife and important ecological features are protected during the course of works. Recommendations also set out mitigation measures to minimise harm where this cannot be avoided and provide compensation measures to allow the proposals to meet current legislative and planning policy objectives.
- 4.2. The Natural Environment and Rural Communities (NERC) Act (2006) states that a public authority must 'in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity; Conserving biodiversity includes, in relation to a living organism or type of habitat, restoring or enhancing a population or habitat'.
- 4.3. Under the Government's National Planning Policy Framework (NPPF) opportunities to incorporate biodiversity in and around developments should be encouraged.
- 4.4. Paragraph 174b) of the NPPF (2018) states 'Plans should ...identify and pursue opportunities for securing measurable net gains for biodiversity' and Paragraph 175d) states that '...opportunities to incorporate biodiversity improvements in and around developments should be encouraged especially where this can secure measurable net gains for biodiversity'.

Bats

Dwelling

Further surveys

- 4.5. In order to fully characterise the type of roost, quantity and species of bat, pattern and usage of the loft and access points, further surveys will be necessary.
- 4.6. At least two activity surveys are recommended to be undertaken for standard European Protected Species Licences (EPSL) and Low Impact Licences (subject to the two surveys returning similar findings). Any discrepancies may require a third survey to fully characterise the roost. Surveys are undertaken during the main bat activity period (May – September) with at least two of these surveys carried out between May – August. Surveys should be spread out by at least two weeks.
- 4.7. Surveys will involve appropriately experienced personnel observing all aspects of the building to watch where bats emerge (evening emergence surveys) and where bats re-enter (dawn re-entry surveys).
- 4.8. Evening emergence surveys commence approximately 20 minutes prior to sunset and continue for approximately 1.5 hours. Dawn re-entry surveys commence 1.5 hours prior to sunrise and will continue for 15 minutes after sunrise.
- 4.9. The results of the surveys will inform an appropriate mitigation / compensation strategy that will ensure that bats are safe-guarded during works and that bats are maintained at a favourable conservation status locally.

Licencing

- 4.10. The loft of the property has been identified as a bat roost and is legally protected and depending on the outcome of the survey findings the proposed works would need to be carried out under either;
 - Natural England Low Impact Licence – A Natural England Low Impact Licence is the most appropriate licence for low status summer roosts used by non-breeding common bat species. The licence requires full planning permission and takes approximately 15 working days to be processed

- European Protected Species Licence – A standard European Protected Species Licence (EPSL) for all other types of bat roosts including breeding and hibernation roosts. The licence requires full planning permission and takes approximately 30 working days to be processed

Provisional compensation / mitigation for long-eared bats

- 4.11. The development has proposals to construct a detached timber framed garage with a double pitched and tiled roof. The garage would have a good sized roof void and with a few relatively inexpensive adjustments could be made suitable as a compensation roost for long-eared bats as well as other species if they prove to be present.
- 4.12. It must however be noted that modern breathable roofing membrane (BRM) is not suitable as the tile sarking layer on buildings known to or intending to support a bat roost. The only acceptable sarking felt consists of traditional type 1 f bituminous felt, to avoid eaves rot Monarflex ridged eaves guard is compatible.
- 4.13. Timing constraints will be dependent on the type of roost present. In the case of non-breeding summer roosts for abundant species (including brown long-eared bat) there is not considered to be a timing constraint to the works. In the case of breeding roosts works directly affecting the roof void would need to take place outside of the main bat activity period which runs between April 31 – September 31.

Garage

- 4.14. Due to the lack of evidence of bats and the Negligible Suitability of the building to support bats, it is not considered necessary or beneficial to undertake any further survey work.

- 4.15. Due to the transitory nature of bats, there is a small possibility that bats could be encountered during demolition works; therefore, all works must proceed under a cautionary approach. Tiles and roof panels will be removed in a vertical rather than horizontal sliding motion. Soffits and masonry will be dismantled using a 'soft' approach taking care with cavity walls where present. All site workers will be vigilant at all times and in the very unlikely event that a bat is found, then works must stop immediately and advice should be sought from Crossman Associates or Natural England (telephone number 0300 0603900).

Birds

- 4.16. Areas of Virginia on the walls and roof of the garage have the potential to provide nesting opportunities to a number of bird species. Vegetation removal should ideally avoid the bird nesting season (March to September). If this is not possible then a thorough search should be carried out prior to ivy removal to help ensure no birds are nesting or have dependant young. If birds are found to be nesting or rearing young then works must be delayed until all young have left the nest.
- 4.17. There is an opportunity during the development works to enhance the ecological value of the site for birds and new nesting opportunities can be provided for the local bird population with a particular emphasis on house sparrows (which have suffered significant decline) which can be easily accommodated on site. Inexpensive sparrow nesting boxes can be fitted either integrally or externally beneath the eaves. 2 number sparrow terraces are recommended, but more can be fitted if desired. Sparrow nest boxes are ideally fitted below eaves. Suitable models include the Vivara Woodstone Sparrow Nest Box, which is also suitable for surface mounting. This model is strong, durable, long lasting and available in stone colour and is available from www.wildcare.co.uk telephone number 01451 493885.
- 4.18. The final fitting location should be done in consultation with a suitably qualified ecologist.

4.19. An information sheet on bird nesting boxes is provided under Appendix III; information sheets.

5. Limitations

- 5.1. This report records wildlife found during the survey and anecdotal evidence of sightings. It does not record any plants or animals that may appear at other times of the year and were therefore not evident at the time of visit.
- 5.2. This report represents a preliminary assessment only. Recommendations and conclusions are subject to change should further findings significantly differ from those collected from the survey efforts to date.
- 5.3. The advice contained in this report relate primarily to factual survey results and general guidance only. On all legal matters you are advised to take legal advice.

6. References

Bat Conservation Trust (BCT) *Bats and Lighting in the UK* BCT

HMSO (1981) *Wildlife and Countryside Act 1981 (and subsequent amendments)*. HMSO

HMSO (1995) *Biodiversity*. The UK Steering Group Report

Joint Nature Conservation Committee (JNCC) *Common Standards Monitoring Guidance for Reptiles and Amphibians* (2004) JNCC

Mitchell-Jones, A.J (2004) *Bat Mitigation Guidelines* English Nature

Mitchell-Jones, A.J , & McLeish A.P. (2012) *The Bat Worker's Manual* (4th Edition)

Multi-Agency Geographical Information for the Countryside (MAGIC)
Website at www.magic.gov.uk

Stace, C. (1997) *New Flora of the British Isles 2nd Edition*. Cambridge University Press

TSO (2012) *National Planning Policy Framework*. TSO

TSO (2006) *Natural Environment and Rural Communities Act* TSO

Appendix I – Site Figures



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Site location



Client Mr M Morgan
Title Site Location
Site 286a Nine Mile Ride
Figure 1
Date 26 October 2020
Scale Indicative



Appendix II – Site Photographs

Photographs 1- 3



Photograph 1:

Front; northern elevation



Photograph 2:

Rear; southern elevation



Photograph 3:

Detail; showing significant crevice associated with raised tiles adjacent to the base of the chimney and present on the roofs southern elevation.

This is likely to be the entrance for long-eared bats

Photographs 4 - 6



Photograph 4:

Western; side elevation



Photograph 5:

Eastern; side elevation



Photograph 6:

Detail; illustrating well-sealed soffits;
typical throughout

Photographs 7 - 9



Photograph 7:

Roof void; the void follows a standard cut and pitch design which provides a spacious and un-cluttered area with a floor to ridge height of approximately 2.5 m.



Photograph 8:

Bat droppings are from a species of long-eared bat and are concentrated at the base of the chimney which is on the western end of the void.

The quantity of droppings is in the 100's and includes a combination of old and new. The quantity of droppings is not indicative of a maternity roost.



Photograph 9:

Detached brick built garage with corrugated sheet roof.

Photographs 10 - 11



Photograph 10:

The southern end of the garage has a small shed attached to it.



Photograph 11:

Detail; showing the typical interior of the garage and shed, which until recently acted as a hobby model making workshop.

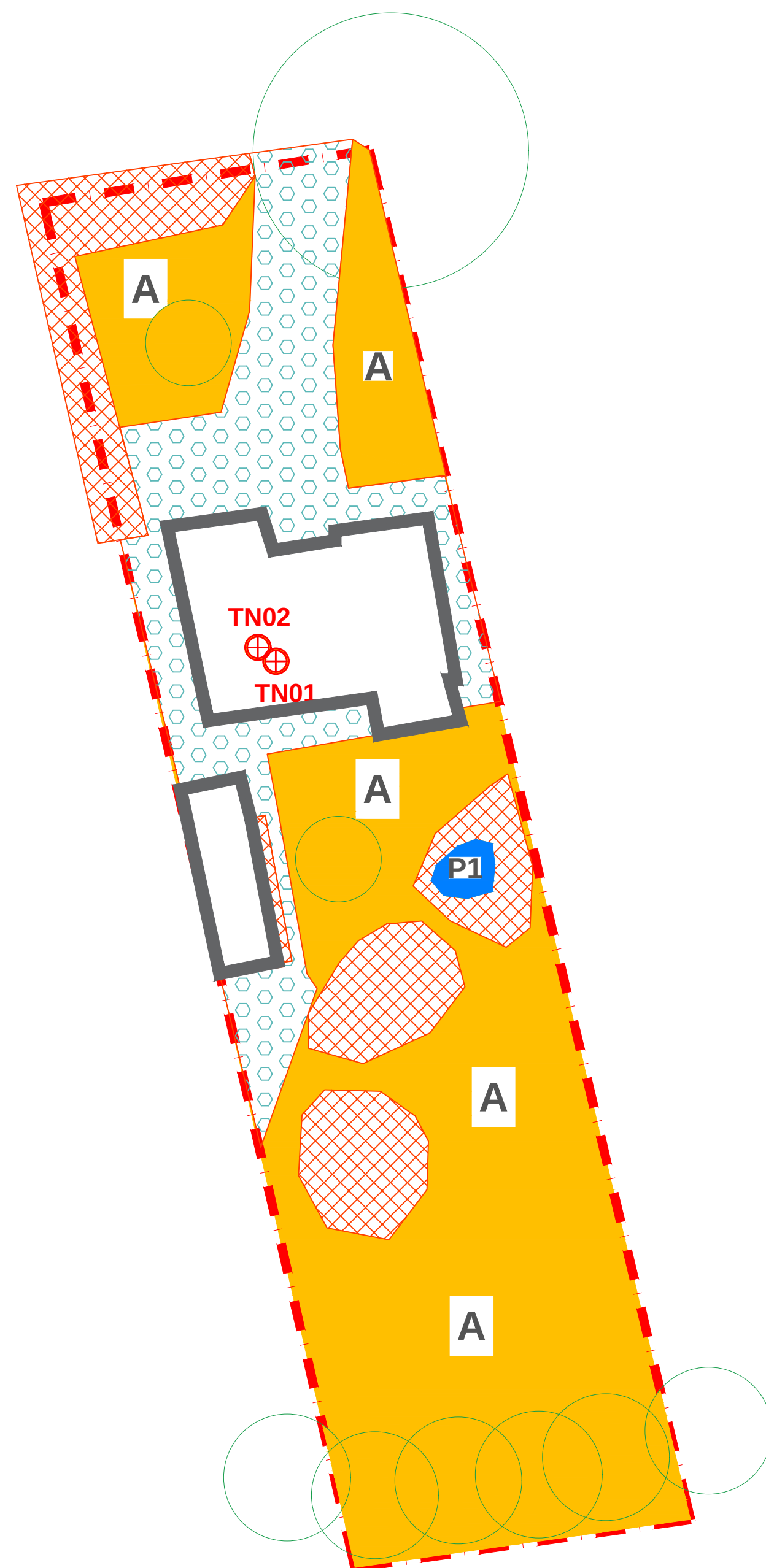


Appendix III– Information Sheets

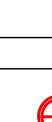
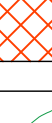
Bat Habitat Suitably Criteria

Bat Roosting Suitability	Criteria	Survey requirement to prove likely absence
Negligible	Negligible habitat features on site likely to be used by roosting bats.	No further survey work required
Low	A building, structure or tree with one or more potential roosting sites that could be used by individual bats opportunistically; however, these possible roost sites do not provide enough space, shelter, protection and/or suitable surrounding habitat to be used by large numbers of bats and are unlikely to be suitable for maternity or hibernation roosts.	One activity survey
Medium	A building, structure or tree with one or more potential roost sites that could be used by bats due to the size, shelter, protection, conditions and surrounding habit, but is unlikely to support a roost of high conservation status.	Two activity surveys
High	A building, structure or tree 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 and surrounding habitat.	Three activity surveys

Survey requirements are taken from Bat Surveys for Professional Ecologists: Good Practice Guidelines (2016), which is the recognised industry standard guidance used by local planning authorities and other statutory consultees.



Legend

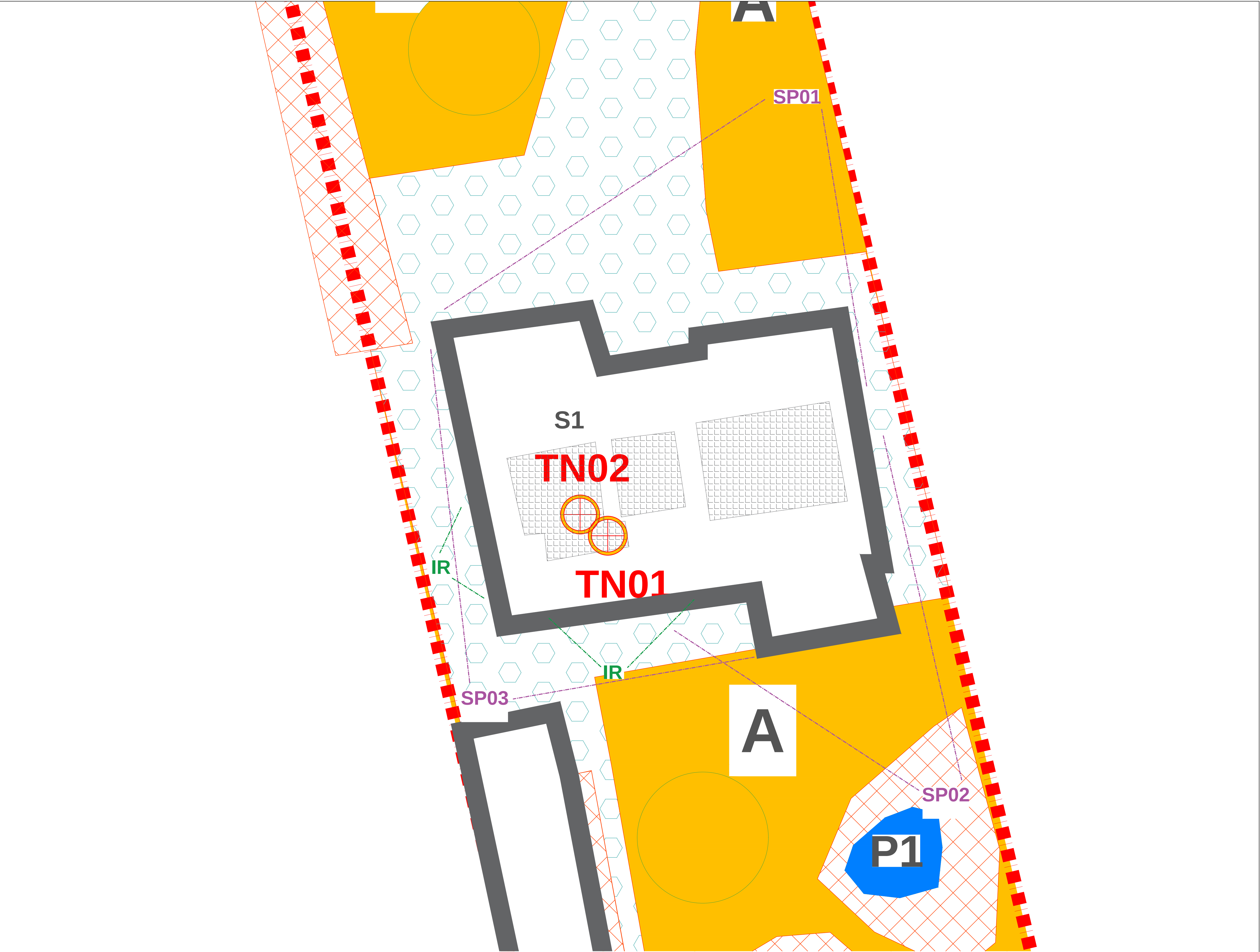
-  Development Site Boundary.
-  Target Notes.
-  Existing Buildings.
-  Hard/ Bare Ground.
-  Amenity Grassland.
-  Introduced Shrub.
-  Scattered Trees.
-  Pond.

Planning Issue

Rev	Description	Date	Initials
00	Planning Issue	23.06.21	GS



Client			
Mr Morgan			
Project Title and Location			
286a Nine Mile Ride			
Wokingham			
Drawing Title			
Figure No.1 - Site Habitat Plan			
Scale	Drawn	Approved	Date
1:200@A1	GS	CO	23.06.21
Drawing No			Revision
LLD2174-ECO-FIG-001			00



Legend

SP01

Survey Points
(with Line of
Sight).

IR

Infrared Camera
Location and Line of
Site (Survey 2 Only).

Dustsheets Left in Loft
11/06/21 - 18/06/21.

S1

Static Detector
Left in Loft
11/06/21 - 18/06/21.

Planning Issue

Rev	Description	Date	Initials
00	Planning Issue	23.06.21	GS

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<i>Client</i> Mr Morgan			
<i>Project Title and Location</i> 286a Nine Mile Ride Wokingham			
<i>Drawing Title</i> Figure No.2 - Bat Survey Results			
<i>Scale</i> 1:50@A1	<i>Drawn</i> GS	<i>Approved</i> CO	<i>Date</i> 23.06.21
<i>Drawing No</i> LLD2174-ECO-FIG-002	<i>Revision</i> 00		

Figure No.2 - Bat Survey Results
286a Nine Mile Ride, Wokingham