



ECOLOGICAL IMPACT ASSESSMENT

Land at The Crows Nest, Small Dole, West Sussex

On Behalf of: Mr Steve Campbell

Client:	Mr Steve Campbell			
Project:	Land at The Crows Nest, Small Dole, West Sussex			
Reference:	LLD3852-ECO-REP-001-00			
Revision:	Date:	Author	Proof	Approved
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Validity:

This report is valid for 18 months from the date of the site visit. If works have not commenced by this date, an updated site visit should be carried out by a suitably qualified ecologist to assess any changes in the habitats present on site, and to inform a review of the conclusions and recommendations made.



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SUMMARY

Lizard Landscape Design and Ecology (LLDE) has been commissioned by Mr Steve Campbell to undertake an Ecological Impact Assessment of the proposed development of Land at The Crows Nest, Small Dole, West Sussex (*Grid Reference*: TQ 21286 13361 – *hereafter referred to as 'the site'*). A Preliminary Ecological Appraisal of the site was undertaken on the 21st April 2026. No further assessment for protected species was recommended. An assessment of the ecological impact of the proposals was then undertaken using this baseline data.

The main body of the site was dominated by modified grassland, a habitat of low ecological value that is broadly suitable for development. Higher value habitat of individual trees was noted scattered across the site. This habitat should be retained and protected where possible.

No designated sites or priority habitats were identified within or adjacent to the site and proposals are unlikely to impact local designated sites. All construction should be undertaken in accordance with best practice guidelines with regards to control of dust, noise, and other emissions.

The site also offers some limited suitable habitat within the boundary vegetation for commuting and foraging bats, common invertebrates, reptiles, amphibians and breeding birds. Habitats within the construction zone are mostly unsuitable for protected species and avoidance and mitigation measures have been built into the design to avoid potential impacts in accordance with the mitigation hierarchy and BS42020: 2013. Furthermore, opportunities for ecological enhancement have been provided to allow the ecological value of the site to be maximised. The proposals are for a self-build development and is exempt from Biodiversity Net Gain requirements.

1.0 INTRODUCTION

- 1.1 Lizard Landscape Design and Ecology has been commissioned by Mr Steve Campbell to undertake an Ecological Impact Assessment of the proposed development of Land at The Crows Nest, Small Dole, West Sussex (*Grid Reference: TQ 21286 13361 – hereafter referred to as ‘the site’*).
- 1.2 The scope of this assessment has been determined with consideration of best-practice guidance provided by the Chartered Institute of Ecology and Environmental Management (CIEEM, 2018) and the Biodiversity: Code of practice for planning and development published by the British Standards Institute (BS 42020:2013).
- 1.3 An initial Preliminary Ecological Appraisal of the site was undertaken on the 21st April 2026.
- 1.4 A summary of the potential impacts of the proposals, and details of avoidance, mitigation and compensation measures have been detailed within this report. Residual impacts are then discussed once all mitigation and compensation measures have been considered.

Site Information

- 1.5 The site covers an area of c. 0.33 hectare and consists of a residential property within the village of Small Dole in West Sussex. The site was found to be dominated by modified grassland with some scattered trees and ornamental planting concentrated along the site boundaries. Multiple structures were identified including the main dwelling and associated garden storage. The site abuts a cattery to the west, New Hall Lane to the south, residential development and a disused plant nursery to the east and grassland to the north. The soil is described as slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils.

Surrounding Landscape

- 1.6 The immediate surrounds are suburban with the developed area of Small Dole to the east and southeast of the site and the wider surrounds are rural, dominated by farmland and other open greenspace including scattered woodland parcels. The River Adur was noted c. 1.1km to the west of the site.

Development Proposals

- 1.7 It is understood that the proposals are for the construction of a self-built dwelling within an area of grassland.

Biodiversity Gain Statement

- 1.8 The proposals are for a self-build development and is exempt from Biodiversity Net Gain requirements.

Report Aims

- 1.9 The aim of the baseline surveys and Ecological Impact Assessment has been:
- *To describe baseline conditions at the site;*
 - *To determine the importance of features which may be impacted by the scheme;*
 - *To identify impacts of the proposed development and set out appropriate avoidance, mitigation and compensation measures;*
 - *To identify any residual impacts;*
 - *To provide details of enhancements to be incorporated into the scheme;*
and
 - *To provide sufficient information to determine whether the project accords with relevant nature conservation policies and legislation, and where appropriate, to allow conditions or obligations to be proposed by the relevant authority.*

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; and
- The Environment Act 2021.

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) 2024 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.

3.0 METHODOLOGY

3.1 Desk Study

- 3.1.1 The Multi-Agency Geographical Information Centre (*MAGIC*) website was consulted for information regarding the location of waterbodies, priority habitats, statutory designated sites and existing wildlife mitigation licences, within a potential zone of influence of the site. Additionally, the Local Planning Authority (LPA) website was consulted for information regarding the location of non-statutory designated areas, and satellite imagery and historic mapping was used to inform an assessment of the recent land use changes and habitat types within the area. The following potential zones of Influence's have been used for the following potential ecological receptors during the desk study assessment:

Table No. 01 – Zones of Influences for Ecological Receptors

Potential Zone of Influence	Type of Record / Designation/s / Ecological Receptor
0.5km	• Ponds, ditches and other water bodies.
2.0km	• Priority Habitats (UKBAP) (NERC, 2006); • European Protected Species Mitigation Licences (EPSMLs); • Local Nature Reserves (LNRs); • National Nature Reserves; • Sites of Special Scientific Interest (SSSIs); and • Local Wildlife Sites (LWS) / Site of Nature Conservation Interest (SNCI).
10.0km	• Special Protection Areas (SPAs); • potential Special Protection Areas (pSPAs); • Ramsars (Wetlands of International Importance); • proposed Ramsars (pRamsar); • Special Areas of Conservation (SACs); and • possible Special Areas of Conservation (pSACs).
12.0km	• Special Areas of Conservation (SACs) and possible Special Areas of Conservation (pSACs) designated for supporting Annex II bat species.

- 3.1.2 Given the quantum of development proposed / broad low ecological value of the site and the surrounding area, a local biological records centre search has not been provided. This is an approach in line with current guidance (CIEEM, 2020). This is appropriate for low impact proposals, low value habitats and small sites.
- 3.1.3 The Local Planning Authority website was also consulted to inform of additional relevant information to this assessment, including any Local Nature Recovery Strategies, Nature Improvement Areas (NIAs) and Biodiversity Opportunity Areas (BOAs) etc.
- 3.1.4 In accordance with Natural England's GCN Mitigation Guidelines (English Nature, 2001) a desktop search was undertaken to identify ponds within 500m and 250m of the site, which may have the potential to support breeding great crested newts (GCN) *Triturus cristatus*, using Ordnance Survey mapping, the *MAGIC* database and aerial photography.

3.2 Preliminary Ecological Appraisal

- 3.2.1 The initial field survey was undertaken on the 21st April 2026 by a Suitably Qualified Ecologist (Sam Hall, Consultant Ecologist, Lizard Landscape Design & Ecology).
- 3.2.2 The field survey comprised a walkover inspection of the site and immediately adjacent land and boundaries features, in which ecological features were noted and mapped in accordance with principles of the UKHabs-Professional Classification System (Butcher *et al*, 2023). A minimum mapping unit of 25m² was used and habitats were identified to at least level 4 wherever practicable.
- 3.2.3 A list of plant species noted was compiled, together with an estimate of relative abundance made according to the DAFOR scale. In addition, Target Notes were used to provide supplementary information where necessary on any features encountered which were notable, relevant to the assessment or too small to map.

- 3.2.4 The survey methodology was extended to provide more detail in relation to the sites potential to support rare or protected fauna, as described by the *Chartered Institute of Ecology and Environmental Management's Guidelines for Preliminary Ecological Appraisal* (CIEEM, 2017). The assessment of habitat suitability for protected, rare or priority species is based on current good practice guidance such as those laid out in the table below. The possible presence of each taxon was summarised as either negligible, low, moderate, high or confirmed.

Table No. 02 – Habitat Suitability Assessment References

Fauna	Relevant Best Practice Guidance
Great Crested Newts	<i>Great Crested Newt Conservation Handbook</i> (Langton <i>et al</i> , 2001) & <i>Evaluating the Suitability of Habitat for the Great Crested Newt</i> (Oldham <i>et al</i> , 2000)
Reptiles	<i>Herpetofauna Workers' Manual</i> (Gent and Gibson, 2003)
Bats	<i>Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edition)</i> (Collins, 2023)
Dormice	<i>The Dormice Conservation Handbook</i> (English Nature, 2006)
Water Vole	<i>The Water Vole Mitigation Handbook</i> (Dean <i>et al</i> , 2016)
Birds	<i>Guidance for Bird Surveys in Relation to Development</i> (NE, 2022)
Invertebrates	<i>Considering Terrestrial Invertebrates in Preliminary Ecological Appraisals</i> (Jukes, 2021) and <i>Organising Surveys to Determine Site Quality for Invertebrates</i> (English Nature, 2005)

- 3.2.5 Photographs were taken as evidence and to illustrate any notable ecological features on site. These have been provided within the body of the relevant parts of the Baseline Ecological Condition section, where appropriate.

3.3 Daytime Bat Walkover Survey

- 3.3.1 A Daytime Bat Walkover (DBW) survey was undertaken on the 21st April 2026 by a suitably experienced surveyor (Sam Hall Accredited Agent Under; Louise Barker (Bat Level 2 Class Licence; 2023-11422-CL18-BAT)).

- 3.3.2 The Daytime Bat Walkover (DBW) survey entailed a slow walkover of the site, during which time the surveyor identified any structures, trees and other features that could be suitable for bats to roost in, and any habitats which could be suitable for bats to commute, forage or swarm in.
- 3.3.3 During this survey any direct evidence of bats was searched for and recorded, such as grease marks, urine stains, bat droppings, feeding remains and dead / live bats. Furthermore, any structures or trees which offered features with the potential to support bats were noted. For trees this included the identification of features such as, but not limited to, cracks, crevices and holes naturally formed by trees. For structures this included the identification of features such as, but not limited to, slipped, missing or uneven tiles, gaps around the soffit / barge board, raised flashing.

Evaluation Criteria

- 3.3.4 All suitable bat habitat was assessed in accordance best practice criteria (Collins, 2023), which is outlined herein. During the survey all trees within and immediately adjacent to the site were assessed using the following criteria:

Table No. 03 – Criteria for Assessing the Bat Roosting Suitability of Trees

Suitability	Description
None	Either no potential roosting features in the tree, or highly unlikely to be any.
FAR	Further assessment required to establish if potential roosting features are present in the tree.
PRF	A tree with at least one potential roosting feature present.

- 3.3.5 If it was possible to adequately assess a Potential Roosting Feature (PRF) from ground level then this was completed, and the feature classified as either:
- **PRF-I:** Feature only suitable for individual or very small numbers of bats, either due to size or lack of suitable surrounding habitat; or
 - **PRF-M:** PRF is suitable for multiple bats and therefore has the potential to be used by a maternity colony.

- 3.3.6 Furthermore, all structures were assessed externally, and internally wherever possible for their potential to support bats, using the following criteria:

Table No. 04 – Criteria for Assessing the Bat Roosting Suitability of Structures

Potential Suitability	Description
None	No habitat features on site likely to be used by any roosting bats at any time of year.
Negligible	No obvious habitat features on site likely to be used by roosting bats. However, some small uncertainty remains, as bats can use small and apparently unsuitable features occasionally.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of year. However, these do not provide enough shelter, space, protection, appropriate conditions or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats.
Moderate	A structure with one of more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat, but unlikely to support a roost of high conservation status, irrespective of species conservation status.
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 and surrounding habitat, with the potential to support high conservation status roosts irrespective of species conservation status.
Confirmed	Direct evidence of bats identified.

3.3.7 Finally, an assessment of the winter hibernation potential of the structures was made, in accordance with the following criteria:

Table No. 05 – Criteria for Assessing the Winter Bat Roosting Suitability of Structures and Trees

Potential Suitability	Description
Low	No or very limited potential winter roosting habitat
Moderate	Non classic site
High	'Classic sites', which offer stable humidity and consistent temperatures throughout the winter period, such as underground sites, cellars, tunnels etc.

Category	Percentage
Category 1	~45%
Category 2	~15%
Category 3	~90%
Category 4	~98%
Category 5	~88%
Category 6	100%
Category 7	~5%
Category 8	~10%
Category 9	~15%
Category 10	~25%
Category 11	~65%
Category 12	~65%
Category 13	~45%
Category 14	~30%
Category 15	100%
Category 16	~35%

3.5 Ecological Impact Assessment

- 3.5.1 The methodology for Ecological Impact Assessment (EclA) 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 The CIEEM guidelines (2024) state that ecological features should be considered within a 'defined geographical context'. The geographical frame of reference used to determine ecological importance in this assessment is detailed below.

Table No. 06 – Likely Importance Assessment Criteria

Likely Importance Categories	Likely Importance Criteria
Negligible	Of no notable ecological value.
Site	Ecologically valuable within the context of the site
Local	Ecologically valuable within the context of the immediate surrounds, i.e., c. 1km ²
District	Ecologically valuable within the context of the wider surrounds / LPA district, i.e., c. 10km ²
County	Ecologically valuable within the context of the wider county, i.e., c. 100km ²
Regional	Of ecological value within the region, i.e., south east, south west, midlands etc.
National	Of ecological value within the context of the United Kingdom, such as a SSSIs, NNR's etc.
International	Ecological value of global significance, such as SACs, SPAs etc.

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). When describing impacts the assessment refers to characteristics such as the extent; magnitude; duration; frequency; and, reversibility of the impact in order to provide justification for any conclusions about the nature and likelihood of the impact described.

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

3.6 Constraints and Limitations

- 3.6.1 Due to the field survey consisting of only one site visit, certain species, particularly some of the flowering plants, may not have been visible and hence overlooked. These are accepted constraints associated with the standard Survey Methodology.
- 3.6.2 No other limitations were encountered, or assumptions made during either the desk study or the field survey and it is considered that with the access gained and recording undertaken an accurate assessment of the site's ecological value has been made.

4.0 BASELINE ECOLOGICAL CONDITIONS

4.1 Designated Sites

Statutory Protected Sites

- 4.1.1 No international statutory designated sites were noted within the likely zone of influence. The following national statutory protected sites are noted within the likely zone of influence of the proposed site:

Table No. 07 – Statutory Protected Sites

Site	Description	Location
National Statutory Designated Sites within 2.0km		
Tottington Wood LNR	A good example of semi-ancient woodland containing a notable veteran oak. Wildlife and flora noted here includes roe deer, woodpeckers, blue tits, butterflies, bats, bluebells and wood anemones.	c. 540m SE
Horton Clay Pit SSSI	This site is designated for geological interest.	c. 700m S

- 4.1.2 The site is located within the Impact Risk Zone of Beeding Hill to Newtimber Hill SSSI which is located c. 2.2km southeast of the site. The current development proposals do not meet the requirements whereby the LPA would be required to consult with Natural England.

Non-Statutory Protected Areas

- 4.1.3 The following non-statutory designated areas (Sites of Nature Conservation Importance) were identified within 2.0km of the site.

Table No. 08 – Non-Statutory Designated Areas

Site	Location
Hoe Wood	270m NE
Tottington Wood (The LNR forms part of this wider site)	530m SE
Oreham Common	950m NE
River Adur Water Meadows and Wyckham Wood	1.1km W
Broadmere Common	1.5km NNE

Priority Habitat

- 4.1.4 In accordance with the MAGIC dataset, within a 2.0km search radius of the site there were UKBAP Priority Habitats (NERC, 2006) of Coastal and Floodplain Grazing Marsh, Lowland Calcareous Grassland, Lowland Meadows, Reedbeds, Lowland Fens, Traditional Orchard and Lowland Mixed Deciduous Woodland (much of which was categorised as ancient woodland).

Pond Study

- 4.1.5 2no. ponds were identified within 500m of the site, located c. 120m northeast (P1) and 300m north (P2) of the site. P1 and P2 are relatively large ponds, c. 1,500m² and 800m², respectively and associated with residential properties. Drainage ditches were also noted c. 270m southwest and 310m northwest of the site.

4.2 Existing Habitat Assessment

- 4.2.1 Habitats within and adjacent to the site include:

- Modified Grassland
- Developed Land; Sealed Surface
- Introduced shrubs
- Individual Trees
- Non-native and Ornamental Hedgerow

Modified Grassland

- 4.2.2 Most of the site was occupied by modified grassland that is maintained as a low sward. There was scattered small patches of overgrown or disturbed ground with some increased diversity, but these areas were not large enough to map nor of a species diversity that would qualify another grassland habitat type. Perennial ryegrass *Lolium perenne* dominated this habitat with frequent clover *Trifolium repens* and occasional daisy *Bellis perennis* and plantain *Plantago major*. Species such as annual meadowgrass *Poa annua* and creeping thistle *Cirsium arvense* were noted in disturbed areas and smaller cats'-tail *Phleum bertolonii*, field forget-me-not *Myosotis arvensis* and primrose *Primula vulgaris* were noted in overgrown areas. Large areas of bare ground were also noted within this habitat which has been assessed as of **site level** value.



Photograph No. 01 – View northeast across the main grassland area.

Developed Land; Sealed Surface

- 4.2.3 Sealed surfacing was noted at the site entrance from New Hall Lane that provides parking and extends along the east of the main dwelling. Buildings included the main dwelling, currently undergoing construction works, garden sheds and a storage unit. This habitat is of **negligible** value, and the buildings are discussed further with regards bat roosting potential within section 4.3.7.

Introduced Shrubs

- 4.2.4 Dense scrub was noted along the site boundaries characterised by ornamental species such as leatherleaf viburnum *Viburnum rhytidophyllum*, Japanese laurel *Aucuba japonica*, cherry laurel *Prunus laurocerasus* and young sycamore *Acer pseudoplatanus*. Native species were also noted interspersed in this habitat such as elder *Sambucus nigra* and hawthorn *Crataegus monogyna*. This habitat is of **site level** value.

Individual Trees

- 4.2.5 Individual trees were noted scattered throughout the site and adjacent to the site boundary. Many of the trees were found to be ornamental species such as a *Ginkgo biloba* at the front of the property and Acer species *Acer* spp. and holm oak *Quercus ilex* (considered naturalised) within the grassland area. Mature pedunculate oaks *Quercus robur* were noted within neighbouring gardens. This habitat is of **site** value.

Non-native and Ornamental Hedgerow

- 4.2.6 An ornamental beech *Fagus sylvatica* hedge was noted along the east site boundary. The hedge was noted to include a continuous line of beech with a layer of other species such as young sycamore, bramble *Rubus fruticosus* agg. and a rhododendron species *Rhododendron* sp. growing along its western aspect. This habitat is of **site** value.

Invasive Species

- 4.2.7 Rhododendron species were noted within the site and are Schedule 9 invasive species. Cherry laurel is also recognised as Sussex Invasive Non-Native Species (INNS) by the Sussex Biodiversity Records Centre. Given the residential context of the site, no targeted removal of these species has been recommended.

4.3 Protected Species Assessment

Amphibians

Desk Study

- 4.3.1 The desk study returned records for various common and widespread amphibian species as well as great crested newt (GCN) *Triturus cristatus* from within the search area. The closest GCN records were c. 600m northeast and 800m west of the site.

Site Assessment

- 4.3.2 No standing water was identified on site and the broadly ornamental garden habitats offer limited potential habitat for amphibians including GCN. Given the regularly mown sward the central site area is of **negligible value** for GCN and the boundary vegetation offers **low value** potential terrestrial habitat.

Reptiles

Desk Study

- 4.3.3 Local records for reptile species within 2.0km of the site included records of slow worm *Anguis fragilis*, grass snake *Natrix helvetica* and common lizard *Zootoca vivipara*, most of which were associated with the woodland habitat located c. 30m east of the site.

Site Assessment

- 4.3.4 Reptiles require a mosaic of habitats to persist in a landscape, including vegetative cover for refuge opportunities, open areas for basking and a diverse flora to support viable invertebrate prey throughout the year. The suitable habitat was limited to boundary vegetation. Given the dominance of farmland in the surrounds, and limited shelter opportunities within the boundaries the site is of **low value** to this species group.

Bats

Desk Study

- 4.3.5 The desk study returned records for common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelle *Pipistrellus pygmaeus*, Natterer's *Myotis nattereri*, serotine *Cnephaeus serotinus*, Noctule *Nyctalus noctule*, brown long-eared *Plecotus auritus*, Daubenton's *Myotis daubentonii*, barbastelle *Barbastella barbastellus* and Bechsteni's bat *Myotis bechstenii* within 2.0km of the site.

Daytime Bat Walkover - Trees

- 4.3.6 No tree within the site was found to offer any level of bat roost suitability. Two mature oaks (T01 and T02) were identified within a neighbouring garden to the west of the site. No PRFs were noted but these trees were of a size that might be expected to contain PRFs and a view of their western aspect was not possible. The tree reference numbers have been illustrated on *Figure No. 01 – Site Habitat Plan*.

Daytime Bat Walkover - Buildings

- 4.3.7 A total of 5no. buildings were noted within the bounds of the site. B01 was under construction with all roof tiles and soffit boxes well sealed. The remaining buildings were wooden garden shed and a metal storage container; some minor potential ingress points were noted however, the buildings are all less than 5no years old and unlikely to provide stable temperatures suitable for roosting bats. Therefore, all buildings have been assessed as of negligible suitability for roosting bats.

Foraging and Commuting Suitability

- 4.3.8 The site was dominated by managed grassland, a habitat of little value to any bat species. The boundary vegetation does offer some potential value, although this is limited by the relatively small extent of the site and the abundance of non-native species within the species composition. Given the rural wider surrounds the site has been assessed as offering **low** suitability for most UK bat species.

Winter Roosting Potential

- 4.3.9 Given the results of the preliminary roost assessment and in consideration of the likely absence of hibernation features, it was determined that the site offered **negligible** winter roosting potential.

*Dormouse**Desk Study*

- 4.3.10 No records of dormouse *Muscardinus avellanarius* were identified from within the search area.

Site Assessment

- 4.3.11 Some suitable floral species were noted in the boundary vegetation, however given the limited extent of those areas and lack of local records, the site is of **negligible value** for this species, and they are unlikely to be present.

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*Birds**Desk Study*

- 4.3.14 Numerous species of birds have been recorded within the search area. This included records for species listed on Schedule 1 (Wildlife and Countryside Act, 1981) (as amended), as well as records for species of birds listed on the Birds of Conservation Concern (BoCC) Red List (Stanbury *et al*, 2021). This includes records for birds associated with grassland, woodland and scrub habitat, such as skylark *Alauda arvensis* and cuckoo *Cuculus canorus*.

Site Assessment

- 4.3.15 The site was found to be regularly managed with a low sward, dense vegetation to the boundaries and species diversity across all of the habitats present was low. The site has been assessed as offering **low** suitability for this species group and it is unlikely to support any notable species.

Invertebrates*Desk Study*

- 4.3.16 The desk study returned records for species of protected / notable invertebrates from within the search area, including records for purple emperor *Apatura iris*.

Site Assessment

- 4.3.17 The habitats and individually recorded floral species on site are common and widespread within the local area and surrounding landscape and are unlikely to support any notable assemblage of invertebrate species. The site is of **low** suitability for common and widespread invertebrates only.

Water Vole*Desk Study*

- 4.4.18 A single record of water vole *Arvicola amphibius*, located c. 300m northeast of the site, was returned from within the search area.

Site Assessment

- 4.4.19 No suitable habitat was identified on site. The site is therefore of **negligible** value to this species.

Others

- 4.4.20 Considering the suburban setting, proposals should also be mindful of the potential presence of hedgehogs.

5.0 ASSESSMENT OF EFFECTS

5.0.1 Using the Guidelines for Ecological Impact Assessment (IEEM, 2006 & updated by CIEEM, 2018), the assessment set out below considers the potential impacts of the scheme prior to mitigation. Detailed avoidance, mitigation and compensation measures are then discussed, with residual impact identified once these measures have been taken into account. Wherever possible mitigation measures have been designed into the scheme as this gives greater certainty over deliverability and ensures the correct application of the 'Mitigation Hierarchy' (as advocated by BS42020:2013, Defra 2019 and CIEEM, CIRIA & IEMA 2016).

5.0.2 Protected species for which the site offers negligible suitability have been scoped out of further assessment.

5.1 Designated Sites

Potential Impacts

5.1.1 The site is located within the Impact Risk Zone of Beeding Hill to Newtimber Hill SSSI which is located c. 2.2km southeast of the site. The current development proposals do not meet the requirements whereby the LPA would be required to consult with Natural England.

5.1.2 Given the small scale of the proposals, impacts to local statutory and non-statutory sites are not expected to occur as a result of the proposed development.

Mitigation and Compensation

5.1.3 As a precaution, all construction should be undertaken in accordance with best practice guidelines with regards to control of dust, noise, and any other potential emissions.

Residual Impacts

5.1.4 Once mitigation measures have been considered, there shall be **no likely significant effect** upon any designated site as a result of this development.

5.2 Habitats

Potential Impacts

- 5.2.1 Development proposals will predominantly result in the loss of modified grassland. This habitat is of low ecological value, the loss of which would be of minor impact magnitude.
- 5.2.2 Construction traffic and other activities could impact the adjacent garden habitats and retained boundary vegetation through physical damage and / or pollution events.

Mitigation and Compensation

- 5.2.3 The construction zone shall be fenced to preclude construction workers access to boundary vegetation, ensuring its retention and protection in line with BS 5837:2012 *Trees in relation to design, demolition and construction: Recommendations*.
- 5.2.4 Works during the construction phase will be undertaken in accordance with best practise guidelines to control any excess dust creation and other potential pollution events which may impact retained and adjacent habitats. Measures should include but not be limited to dampening down of dust with water sprays in dry weather and limiting the height of load tipping. All re-fuelling and chemical storage shall take place in a bunded enclosure with appropriate containment measures in place and spill kits available.
- 5.2.5 In order to compensate the loss of habitat scheduled for removal, all new areas of soft landscaping will be designed to maximise the biodiversity value of the site, where possible. This will be achieved through selection of native species and where non-natives are chosen, they will be species of known wildlife value such as those listed on the HRS Plants for Pollinators Lists.

Residual Impacts

- 5.2.6 Provided mitigation and protection measures are followed, no priority or other important habitats or plant species will be substantially affected by this development, the impact of which is **not significant**.

5.3 Reptiles and Amphibians

Potential Impacts

- 5.3.1 The proposed construction zone within the central grassland is unlikely to support reptiles and/or amphibians. Therefore, future development here would be unlikely to impact reptiles or amphibians.

Mitigation and Compensation

- 5.3.2 As a precautionary approach, the central grassland should be kept short and any boundary vegetation that requires removal shall be cut using hand tools only such as strimmers. In the unlikely event that a reptile or newt species is discovered, all works shall cease, and the project ecologist contacted.

Residual Impacts

- 5.3.3 Once mitigation measures are considered, the impact of the scheme shall be **negligible**.

5.4 Bats

Potential Impacts

- 5.4.1 In the absence of mitigation impacts could include the disruption of commuting corridors and foraging/roosting habitat through inappropriate lighting. Due to the low suitability of the site, impacts would be of minor significance and unlikely to occur.
- 5.4.2 A full assessment of trees T01 and T02 was not possible. Any works to these trees shall be limited to branches overhanging the site. Should works to the stem of the tree be proposed then further assessment would be required to identify any PRF that might be present on the western aspect of the trees.

Mitigation and Compensation

- 5.4.3 Artificial light spill upon adjacent garden habitats shall be avoided throughout construction and within the scheme design to allow the use of this area as a foraging/roosting resource and commuting route for bats. Any external lighting designs should comply with best practice standards in regard to external lighting and bats (BCT & ILP, 2023).

Residual Impacts

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

5.5 [REDACTED] Hedgehog

Potential Impacts

- 5.5.1 In the absence of mitigation, impacts could include the trapping of [REDACTED] hedgehogs in footings / trenches, fragmentation of habitat, and disruption of commuting corridors. Future impacts would be of low significance but likely to occur.

Mitigation and Compensation

- 5.5.2 In order to ensure that potential impacts to [REDACTED] hedgehogs are avoided, the following Reasonable Avoidance Measures (RAMs) shall be incorporated into the construction phase as follows:

- All contractors should be given a toolbox talk to make them aware of the potential presence of these species in the area;
- All trenches and / or excavations should be covered overnight or have a broad and shallow ramp installed to prevent [REDACTED] mammals becoming trapped;

■ [REDACTED]
[REDACTED]

■ [REDACTED]
[REDACTED]
[REDACTED]

- Short-term stockpiles should be checked daily for any signs of digging and fenced if appropriate.

Residual Impacts

- 5.5.3 Once mitigation measures are taken into account, the overall impact of the scheme will be **negligible**.

5.6 Breeding Birds*Potential Impacts*

- 5.6.1 In the absence of avoidance / mitigation, the development could result in the damage / destruction of a bird nest.

Mitigation and Compensation

- 5.6.2 Any dense scrub, or trees scheduled for removal will be removed outside the nesting season (*season: March-August, although pigeons may nest all year*) or shall be checked prior to removal by a suitably qualified ecologist. Native tree / shrub species should be selected within the scheme to provide a foraging resource for birds and invertebrates.

Residual Impacts

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

5.7 Invertebrates*Potential Impacts*

- 5.7.1 In the absence of mitigation, small areas of suitable habitat for common widespread invertebrates would be lost. Due to the common and widespread floral species and current levels of management on site, the impacts would be of minor impact magnitude but certain to occur.

Mitigation and Compensation

- 5.7.2 Opportunities within soft landscaping should be maximised for their suitability for UK wildlife including invertebrate species.

Residual Impacts

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

6.0 CONCLUSIONS

- 6.1 The grassland that occupies most of the site is of broadly low ecological value and suitable for development. The boundary vegetation is of higher value, much of which will be retained, protected and enhanced.
- 6.2 No designated sites were identified within or adjacent to the site and due to the nature and size of the proposed development, impacts upon designated sites are not expected to occur. Precautionary measures have been recommended for the construction phase.
- 6.3 The boundary vegetation offers some suitable low value habitat for bats, reptiles, amphibians, [REDACTED] hedgehogs, common invertebrates and breeding birds. Habitats within the construction zone are broadly unsuitable for protected species and avoidance and mitigation measures have been built into the design to avoid potential, unlikely impacts of the scheme in accordance with the mitigation hierarchy and BS42020: 2013.
- 6.4 Opportunities for ecological enhancement have been provided to allow the ecological value to the site to be maximised. As a self-build development, the application is exempt from BNG.

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Table No. 09 – Species Lists for Habitat Parcels**Modified grassland**

Common Name	Scientific Name	DAFOR
Creeping thistle	<i>Cirsium arvense</i>	O
Broadleaf plantain	<i>Plantago major</i>	O
Cocks foot	<i>Dactylis glomerata</i>	R
Common nettle	<i>Urtica dioica</i>	O
Common sorrel	<i>Rumex acetosa</i>	O
Cleavers	<i>Galium aparine</i>	O
Clover	<i>Trifolium repens</i>	F
Creeping buttercup	<i>Ranunculus repens</i>	O
Daisy	<i>Bellis perennis</i>	O
Dandelion	<i>Taraxacum officinale</i> agg.	O
Field forget-me-not	<i>Myosotis arvensis</i>	O
Pendulous sedge	<i>Carex pendula</i>	O
Perennial ryegrass	<i>Lolium perenne</i>	D
Primrose	<i>Primula vulgaris</i>	O
Red fescue	<i>Festuca rubra</i>	F
Smaller cat's-tail	<i>Phleum bertolonii</i>	R
Soft rush	<i>Juncus effusus</i>	R
Yorkshire fog	<i>Holcus lanatus</i>	O

Introduced shrub

Common Name	Scientific Name	DAFOR
Bramble	<i>Rubus fruticosus</i> agg.	O
Cherry laurel	<i>Prunus laurocerasus</i>	O
Elder	<i>Sambucus nigra</i>	R
hawthorn	<i>Crataegus monogyna</i>	O
Japanese laurel	<i>Aucuba japonica</i>	R
Japanese red-cedar	<i>Cryptomeria japonica</i>	R
Lawsons cypress	<i>Chamaecyparis lawsoniana</i>	R
Leatherleaf viburnum	<i>Viburnum rhytidophyllum</i>	R
Sycamore	<i>Acer pseudoplatanus</i>	O

Individual trees

Common Name	Scientific Name	DAFOR
Acer	<i>Acer sp</i>	F
Cherry	<i>Prunus sp</i>	R
Eucalyptus	<i>Eucalyptus sp</i>	R
Ginkgo	<i>Ginkgo biloba</i>	R
Holm oak	<i>Quercus ilex</i>	F
Pedunculate oak	<i>Quercus robur</i>	O

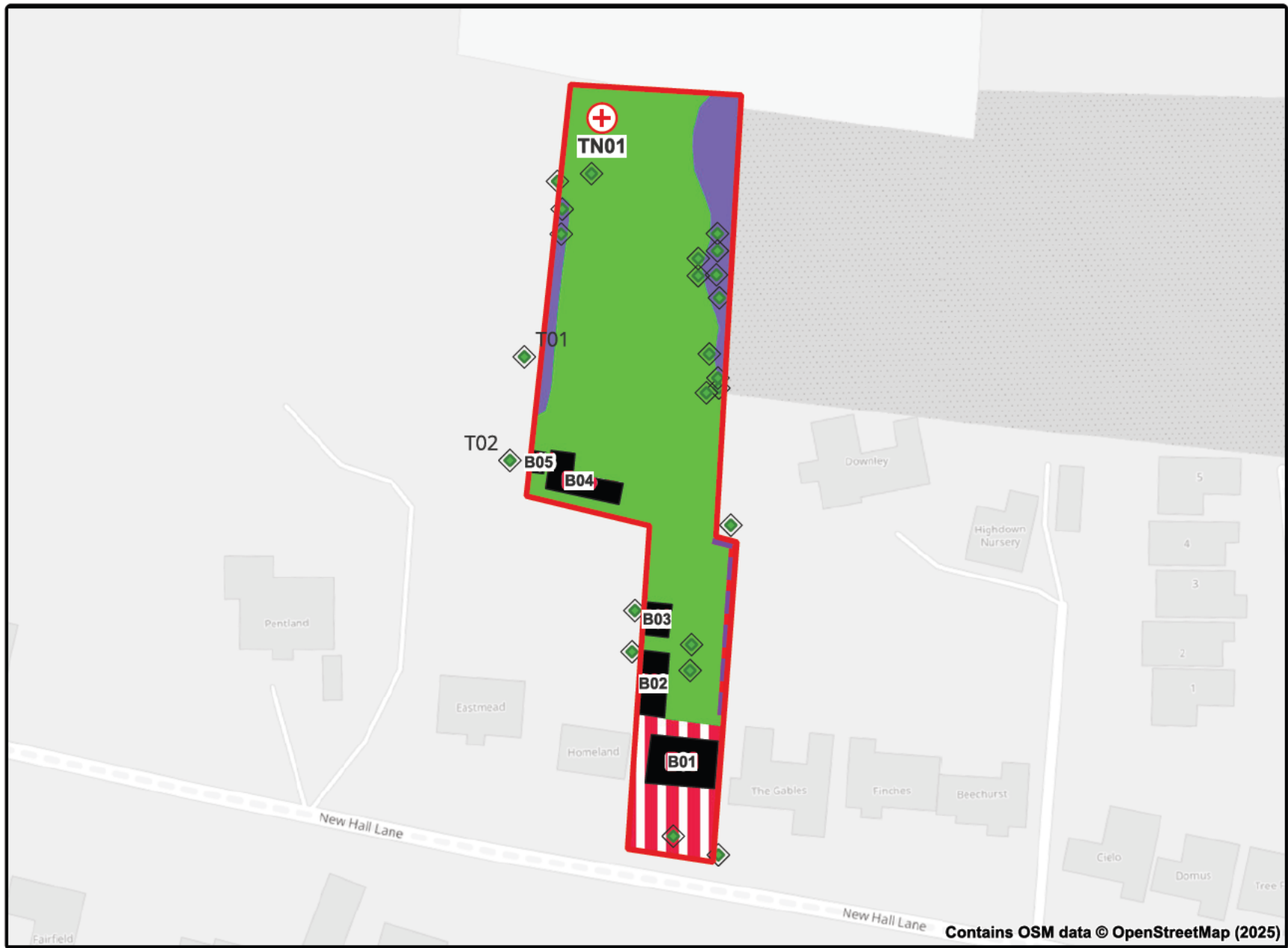
Non-native and ornamental hedgerow

Common Name	Scientific Name	DAFOR
Common beech	<i>Fagus sylvatica</i>	D
Beaked hazel	<i>Corylus cornuta</i>	R
Bramble	<i>Rubus fruticosus</i>	O
Crab apple	<i>Malus sylvestris</i>	R
Holly	<i>Ilex aquifolium</i>	R
Japanese mahonia	<i>Mahonia japonica</i>	R
Mexican orange blossom	<i>Choisya ternata</i>	R
Sycamore	<i>Acer pseudoplatanus</i>	O
Rhododendron	<i>Rhododendron</i> sp.	R

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

Table No. 10 – Target Notes

Ref	Feature	Description
TN01	Chicken coop	Area of the site fenced off for chickens



Legend

- Red Line Boundary
- + Existing Individual Tree
- Non-native and ornamental hedgerow
- Developed land; sealed surface
- Introduced shrub
- Modified grassland



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Client

Mr Steve Campbell

Project Title & Location

Land at The Crows Nest,
Small Dole, West Sussex

Drawn by	Approved by	Rev	Date
SH	COR	00	23/04/26