Preliminary Ecological Assessment

Land at Brooklands

New Hall Lane,

Small Dole

West Sussex

BN5 9YH

NGR: TQ 21171 13209

8th May 2024

Sylvatica Ecology Ltd

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Tables and Figures

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In order to, minimise the likelihood of adverse effects on protected animal species over time, it is accepted good practice, in accordance with Natural England (NE) (formerly English Nature) guidance for ecological surveys to be repeated should works be deferred for over 12 - 18 months from the date of initial survey.

It is the duty of the landowner, developer and operations managers to act responsibly and to comply with current environmental legislation if protected species are suspected or found prior to, or during works.

The recommendations and information contained within this report are based on the information provided on the development works prior to the surveys being carried out. Should the development proposals change then the findings and recommendations contained within would potentially require revision.

The findings within this report do not constitute legal advice. Should this be required, then a suitably qualified professional practitioner should be contacted.

Approved by	Signed	Contact
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1 SUMMARY

1.1 This report presents the findings of a Preliminary Ecological Assessment survey of land at the rear of Brooklands, New Hall Lane, Small Dole, West Sussex, BN5 9YH NGR: TQ 21171 13209. . A planning application is to be made for the construction of two detached residential houses within the grounds of the existing residential property known as Brooklands.

1.2 The site was located within a relatively rural location approximately 2.4km to the south of the Henfield. There were other residential properties, arable, pasture and small woodland copses present within the wider area.

1.3 The development site is not subject to any statutory designations and the closest statutory designated sites are approximately 0.5km away and the closest ancient woodland is approximately 0.5km away. Given the small scale of the proposals it is not anticipated that there will be any impacts to these sites or valuable habitat subject to best practice construction and pollution measures being adhered to during construction.

1.4 There were no buildings as such on site only a chicken coop, children's play equipment and a caravan present. These structures had no features suitable for roosting bats and were assessed as having ***negligible*** suitability to support roosting bats. An oak tree present on site was assessed as having a PRF-I feature for roosting bats and should be retained where possible or subject to a check for bats and soft felling techniques prior to removal. No further surveys in relation to bats are recommended prior to determination.

1.5 The habitats present on site had limited potential to support protected species and no further surveys are recommended. However, precautionary mitigation measures are recommended to ensure there are no negative impacts on protected species.

1.6 To help achieve a score of 10% or greater of biodiversity net gain planting of species rich hedgerow (the length of which are yet to be determined), retention of trees, tree planting and used of native species rich planting within the landscaping scheme.

2 INTRODUCTION

2.1 This report presents the findings of a Preliminary Ecological Assessment survey of land at Brooklands, New Hall Lane, Small Dole, West Sussex, BN5 9YH NGR: TQ 21171 13209. A planning application is to be made for the construction of two detached residential houses within the grounds of the existing residential property known as Brooklands.

2.2 ***Figure 1: Site Survey Location (Red Line Boundary)***

Site Location

2.3 The site was located within a relatively rural location approximately 2.4km to the south of Henfield and on the western side of the A2037 with the larger part of Small Dole village to the east. The redline boundary is located to the south of the existing residential property and gardens where there is currently a caravan and chicken coop within the grounds. In the wider area there are large detached properties set within large mature grounds along with pasture and arable fields and woodland copses.

Aim of this Study

2.4 The aim of this habitat survey was to assess the habitats present on and adjacent to the property and to evaluate the potential for protected species to be present. Recommendations on any further survey requirements, actions to preserve the habitats present and enhancements have been made, as a result, of the findings of this habitat survey. These findings should be used within the design phase of the proposals, to minimise the impacts for biodiversity, through careful design to avoid negative effects where possible. The survey findings then enable a prediction of the potential impacts of any ecological receptors present to be made in each specific case.

3 METHODOLOGY

Ecological Survey

3.1 A preliminary ecological survey walkover was carried out at the Site on the 8th April 2024. The habitats were assessed in accordance with BS 42020 Biodiversity – Code of Practice for Planning and Development and broadly followed the 'Extended Phase 1' methodology as set out in the Chartered Institute of Ecology and Environmental Management (CIEEM) Guidelines for Baseline Ecological Assessment and the Handbook for Phase 1 Habitat Survey. This method of survey provides information on the habitats in the survey area and assesses the potential for legally protected species to occur on or adjacent to the Site. The habitats were classified according to the UK Habitat Classification system (Butcher *et al*. 2023).

3.2 Any faunal species identified during the survey were noted. Any evidence for the presence of, or potential for, protected species was also noted. In particular: amphibians, bats, reptiles, mammals, and birds were included.

3.3 A search was carried out for evidence of the presence of invasive plants listed on Schedule 9 of the Wildlife and Countryside Act 1981 which are subject to strict legal control. The list of invasive plant species included on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) is extensive and these plants are found in a range of different habitats.

3.4 An assessment of the potential of the property to support roosting and foraging bats was made and categorised according to ***Table 1*** (BCT 2023).

3.5 ***Table 1: Bat Roost and Foraging Potential of Buildings and Trees (BCT 2023)***

Category	Roosting Habitat	Commuting and Foraging Habitat
Known Roost	Evidence of bat present (*e.g.*) droppings, live or dead bats and/ or desk study results	N/A
High/ PRF-M	Building 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 habitats.	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees and woodland edge. High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland. Site is close to and connected to known roosts.
Moderate/ PRF-M	Building or tree with one or more potential roosting features that could be used by several bats due to their size, shelter, protection, conditions and surrounding habitats, but unlikely to support a roost of high conservation concern.	Continuous habitat connected to the wider landscape that could be used by bats for commuting such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
Low/ PRF-I	Building or tree with one of more potential roost features that could be used by individual bats opportunistically. However, there	Habitat that could be used by small numbers of commuting bats for example, a fragmented hedgerow or un-vegetated stream, but isolated, i.e.

	potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/ or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats. (*i.e.* unlikely to be suitable for maternity or hibernation)	not very well connected to the surrounding landscape by other habitat. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.
Negligible	Building or tree with no potential to support any bats	Negligible habitat features on site likely to be used by commuting or foraging bats

Designated Sites and Biological Records

3.6 A 2.0km radius biological records search was carried out using the National Biodiversity Network This checked for protected and notable species records within 2.0km of the application site.

3.7 Records of internationally designated statutory sites within the 5.0km of the Site and nationally designated sites within 2.0km of the Site were searched for using the Multi-Agency Geographic Information for the Countryside website (MAGIC) http://www.magic.gov.uk.

3.8 MAGIC was also searched for previously granted Natural England licence applications, which may give an indication of the presence of protected species in the local area.

Habitat Mapping and Condition Assessment Methods

3.9 Each specific habitat was assessed according to the condition assessment characteristics on the Statutory Biodiversity Net Gain Metric 4.0 Technical Annex 1. This provides specific criteria for each habitat classification utilising the United Kingdom Habitat Classification System. The mapping was carried out using QGIS V 3 3.28.5-Firenze for Windows 11. Habitat areas and pond distances from site were calculated using this QGIS software. A check of historical maps is also made using Google Earth, which gives an indication of the age of the habitats present onsite and surrounding.

Qualification of Author

3.10 The survey work and reporting has been led by Nadine Clark BSc MSc MCIEEM. Nadine has been undertaking ecological survey work within the last 17 years on many different locations throughout the United Kingdom, for a variety of protected species, including bats (Class 2 2015-14593-CLS-CLS), reptiles, amphibians including great crested newt (*Triturus cristatus*)

(Class 1 2016-20221-CLS-CLS) and terrestrial mammals including dormice (*Muscardinus avellanarius*) (Class 1 2023-20767-CLS-CLS) and birds.

4 RESULTS

4.1 This section describes the habitats identified during the habitat survey. All the plant species names follow the nomenclature of Stace (1997); a map detailing the locations of the habitats described can be found in Appendix A, habitat condition assessments in Appendix B, locations of water bodies close to the property in Appendix C and photographs of the property taken at the time of the survey can be found in Appendix D. A summary of the protected species and habitats legislation for England and Wales can be found in Appendix E.

Designated Sites

4.2 There are three nationally statutory designated sites within 2km which are discussed in more detail below in ***Table 2***.

4.3 ***Table 2: Statutory Designated Sites***

Site Name	***Location***	***Nature Conservation Interest***
Brighton and Lewes Downs Biosphere Reserve	0.5km to the east	Located on the eastern boundary of Small Dole this large biosphere reserve is designated in part due to the chalk habitats including cliffs and chalk grassland, woodland, subtidal chalk reefs, and riverine habitats.
Tottington Wood Local Nature Reserve (LNR)	0.5km to the southeast	This LNR is an area of semi natural ancient woodland with mature oak and supporting a bird assemblage.
Horton Clay Pit Special Scientific Interest (SSSI)	0.6km to the south	This SSSI is designated for its geological interest rather than biodiversity interest.

4.4 There are three statutory designated sites located approximately at least 0.5km from the development site and the site falls within a SSSI impact zone which requires any new development that requires connection with a public water supply to a HRA screening by the LPA in relation to groundwater abstraction. There are small copses of ancient woodland within the wider area with the closest located approximately 0.5km to the east of the proposed development boundary.

Biological Records Search

4.5 Within 2.0km of the proposed development there were records for eight species of bat held by the NBN atlas database.

4.6 ***Table 3: Bat Records within 2.0km radius***

Latin Name	Common Name	Number of Records
Eptesicus serotinus	Serotine	4
Barbastella barbastellus	Barbastelle	1
Myotis nattereri	Natterer's	6
Myotis daubentonii	Daubenton's	2
Nyctalus noctula	Noctule	4
Pipistrellus pipistrellus	Common pipistrelle	8
Pipistrellus pygmaeus	Soprano pipistrelle	3
Pipistrellus nathusii	Nathusius' pipistrelle	1

4.7 ***Table 4: Amphibian and Reptile Records***

Latin Name	Common Name	Number of Records
Anguis fragilis	Slow Worm	14
Natrix helvetica	Grass snake	20
Vipera berus	Adder	13
Zootoca vivipara	Common Lizard	13
Lissotriton vulgaris	Smooth Newt	6
Lissotriton helveticus	Palmate Newt	2
Triturus cristatus	Great Crested Newt	10
Pelophylax ridibundus	Marsh Frog	1
Rana temporaria	Common Frog	17
Bufo bufo	Common Toad	11

4.8 There were four reptile species present within the search radius, which were the slow worm, grass snake, adder and common lizard and there were six species of amphibian present including five native species including common toad, common frog, palmate newt, great crested newt and smooth newt.

4.9 ***Table 5: Terrestrial and Riparian Mammal Records***

Latin Name	Common Name	Number of Records
Erinaceus europaeus	Hedgehog	11
[redacted]	[redacted]	[redacted]
Lepus europaeus	Brown Hare	3
Arvicola amphibius	Water Vole	1
Lutra lutra	Otter	1

4.10 There were eleven records of hedgehog within the 2.0km historical search radius, [redacted] three records of brown hare and a single record of otter and water vole.

Granted Mitigation Licences

4.11 ***Table 6: Natural England Mitigation Licences***

Licence Number	Distance and Direction	Species	Type	Date	NGR
2020-46082-EPS-MIT	0.8km to the southeast	Common pipistrelle, soprano pipistrelle and whiskered bat	Destruction of a Breeding Site and a Resting Place.	03/09/2020 to 31/08/2030	TQ 2139 1240
EPSM2009-1258	1.1km northeast	Great crested newt	Destruction of a Breeding Site and a Resting Place	30/04/2010 to 29/04/2012	TQ 2159 1429

4.12 There were two granted Natural England mitigation licences within the 2.0km search radius with one for bats and one granted for great crested newts. The bat species licenced for were common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle (*Pipistrellus pygmaeus*) and whiskered bat (*Myotis mystacinus*). All the granted licences were at least 1.0km from the proposed development.

Summary of Habitats Present on Site

4.13 The site survey area consisted of modified grassland, scattered trees, hedgerow/treelines and hardstanding. There was an access track from New Hall Lane leading to the site with sections

of hardstanding. There was hardstanding present within the centre of the site forming an area for the caravan and as an access track (***Appendix A***). The majority of the site was formed of lawn and had scattered trees present.

Habitat Types

4.13 ***Modified Grassland (0.233ha) –*** This habitat area comprised of lawn that appeared regularly mown to a short sward. The grassland was predominantly fairly species rich for a lawn and was assessed being in moderate condition. The small area of grassland in the northern section of the site was more species poor with few forbs present and appeared to have been either turfed or seeded in the past. Species noted included meadow buttercup (*Ranunculus acris*), self heal (*Prunella vulgaris*), cats-ear (*Hypochaeris radicata*), daisy (*Bellis perennis*), white clover (*Trifolium repens*), ribwort plantain (*Plantago lanceolata*), broadleaf plantain (*Plantago major*) common sorrel (*Rumex acetosa*), lawn moss (*Rhytidiadelphus squarrosus*), ragwort (*Senecio jacobaea*) and creeping buttercup (*Ranunculus repens*). This habitat passed four of the criteria on the condition assessment and was therefore classified as Moderate.

4.14 ***Developed Land (buildings and hardstanding) (0.049ha) –*** This habitat consisted entirely of hardstanding access tracks and the foundation of a partially constructed building in the western section as well as the chicken coop. These areas had generally not been encroached by vegetation.

4.15 ***Individual Trees*** – There were a number of non-native and native trees present within the site. These included a mature oaks (*Quercus robur*) present in the eastern section of the site, along with ash (*Fraxinus excelsior*), cherry (*Prunus avium*), goat willow (*Salix caprea*) and corkscrew willow (*Salix matsudana*) trees scattered throughout the grounds. These trees were predominantly mature and semi-mature. These trees were a mix of good and moderate condition.

4.16 ***Treelines-*** In addition to the scattered individual trees there was also a treeline present on the southern section of the main part of the site which consisted of hornbeam (*Carpinus betulus*) that was approximately (88.0m in length) which was in a moderate condition. There were some common privet (*Ligustrum vulgare*) underneath the trees along the length.

4.17 ***Non-native Hedgerow*** (39m in length)- On the western, eastern and part of the southern boundary of the garden was a non-native hedgerow dominated by cherry laurel (*Prunus laurocerasus*) present which was considered to have a poor baseline condition.

5 POTENTIAL FOR PROTECTED SPECIES

Birds

5.1 Common birds species were seen around the site including blue tit (*Cyanistes caeruleus*), robin (*Erithacus rubecula*) and mistle thrush (*Turdus viscivorus*) and great tit (*Parus major*). The hedgerows and trees present all provided suitable nesting opportunities for common bird species.

Bats

5.2 There were no buildings present within the redline boundary as such although there was a chicken coop and run, children's swing and slide set and a caravan present within the redline boundary. The chicken coop was of a timber construction with shiplap cladding and similar to a garden shed with a gabled bitumen felt roof and no enclosed roof space. The coop was in good condition with no gaps or crevices noted which could be used by roosting bats. The wooden play structure and caravan also had no features that could be utilised by roosting bats and all the structures on site were assessed as having negligible potential to support roosting bats.

5.3 There were a number of mature trees present within the redline boundary or in close proximity. One of the trees, an oak on the southern boundary adjacent to where the access track led to the site had a rot hole present in a branch which could potentially support individual roosting bats as the rot hole was not deep or extensive. This tree was assessed as PRF-I. The location of this trees is shown in Appendix A as Target Note- T1.

5.10 The habitat present on site was of had some value for foraging and commuting bats. The mature oak trees present within the eastern section of the site and the line of hornbeam present on the southern boundary likely to provide foraging opportunities and the site is connected to treelines and woodland to the south in the wider. The habitat on site can be considered as low to moderate value bat foraging habitat.

Reptiles and Amphibians

5.11 There were records of reptile and amphibian within the 2km search radius. However, the habitats present on Site were of limited value consisting of short grassland which appeared to be mown regularly as part of a lawn. The lack of habitats present that provided limited foraging and sheltering opportunities indicates that there is a very low risk of encountering reptiles and the site is not suitable to support a population of reptiles.

5.12 There were records of great crested newt within the 2.0km search radius and the closest record appears to have been from Wood Mills Nature Reserve which is located approximately 800m to the northeast of the site. There was one waterbody present within 250m of the site and this is located approximately 190m to the north at the closest point but at least 245m away from the works area where the new houses are proposed. This pond appeared to have suitability to support great crested newts. However, given the habitats present on site which provided suboptimal foraging opportunities and lack of sheltering opportunities it is unlikely that great crested newts are accessing the proposed development site even if great crested newts are present within the wider area.

Terrestrial and Riparian Mammals

[redacted]

5.14 Records of hedgehog were present within the 2.0km search area although the habitat present within the development site had limited foraging opportunities. The site had a low potential to support hedgehogs.

5.15 There are no records of dormice within 2.0km of the proposed development. The habitats present on site were of limited value to dormice even if they were present within the wider area. The hedgerows present were non-native cherry laurel and, overall, the site was considered to have very low potential to support the species.

Invasive and Non-Native Species

5.16 No invasive species were noted during the survey.

6 DISCUSSION AND RECOMMENDATIONS

Designated Sites and Habitats

6.1 There are three statutory designated sites approximately 500-600m away from the site and the closest ancient woodland is 500m from the site. As the proposals are small scale and given the distance from these designated and valuable habitats it is not anticipated that the proposals will result in any impact to these areas. However, standard best practice pollution prevention measures should be followed during the construction process as a precaution.

Birds

6.2 Breeding birds are protected, making it an offence to intentionally (or recklessly) kill, injure or take any wild bird, and to take, damage or destroy the nest of any wild bird while that nest is in use or being built, or take or destroy an egg of any wild bird. As a result, any vegetation clearance or demolition of the stables should avoid the breeding season (March to August inclusive).

6.3 If this were not possible, a suitably experienced ecologist would be required to check areas of vegetation or the buildings immediately prior to works being carried out (within 24hrs). If birds were found to be breeding at this time in these locations, clearance works would not be permitted to proceed until the young had fledged the nest and at least a 10m works exclusion zone be placed around the nest. If any vegetation is cleared outside of the bird nesting season, then all resultant brash should be removed from site to ensure that it does not provide suitable nesting habitat.

Roosting Bats

6.4 The potential presence of bat roosts within a proposed development site has to be considered as all eighteen of the UK's bat species are protected under Section 9 of the Wildlife and Countryside Act (WCA) 1981 (as amended). The WCA states that '*a person is guilty of an offence if intentionally or recklessly they disturb [a bat] while it is occupying a structure or place which it uses for shelter or protection; or he obstructs access to any structure or place which [a bat] uses for shelter or protection'.*

6.5 None of the structures present within the redline boundary are suitable to support roosting bats and were assessed as having ***negligible*** potential to support roosting bats. No further surveys are required on any of the structures.

6.6 An oak (***Target Note 1, Figure 1, Appendix A***) present on site had a PRF-I feature and should be maintained within the development proposals where possible. Where this is not possible then it is recommended that soft felling techniques are used and the rot hole should be inspected immediately prior to any works taking place.

Bats and Lighting

6.7 Bat species have been recorded within the 2.0km historical records search and the habitats present onsite and in the immediate surroundings can be considered as having low to moderate foraging habitat. Any lighting installed as a result of this development will conform to the specifications which are outlined within BCT Guidance Note (2023). This will reduce any light pollution that could impact nocturnal activity of fauna, namely bat species, some of which

are extremely sensitive to light pollution. Light spill into adjacent habitats will be reduced and avoided by the following:

- *All luminaries will lack UV elements; metal halide and fluorescent sources will be avoided,*
- *A warm white light spectrum on external lighting will be adopted (<2700kelvin) to reduce the blue light component,*
- *LED luminaries will be used where a sharp cut off is required to avoid light spill into adjacent habitat,*
- *External luminaries will feature wavelengths higher that 550nm to avoid the component of light most disturbing to bats,*
- *Column heights of external lighting will be limited,*
- *Luminaries will be mounted on the horizontal plane, with no upwards tilt,*
- *Security lighting will be set on motion sensors and on short timers (<1min).*

Terrestrial Mammals

6.8 Hedgehog have seen their number decline significantly over the last 13 years by around 66%. There were records for hedgehog within 2.0km. The habitats present on site were of limited value to hedgehog [redacted]

6.9 During the construction phase any deep trenches or excavations should be covered overnight to ensure any animals including hedgehogs, do not become trapped. [redacted]

6.10 To enhance the site for hedgehog post-development the planting of native trees, shrubs and hedgerows and the provision of gaps of at least 15cm by 15cm under any fences will ensure this species continues to have access to the site and can use the site for foraging, commuting and shelter.

Dormice

6.11 It is considered highly unlikely that dormice are present within the development site given the poor quality habitat present and poor connectivity of the hedgerows to habitats which maybe able to support a population of dormice. No further surveys or mitigation measures are therefore recommended.

Great Crested Newt

6.12 The great crested newt receives full protection under the Wildlife and Countryside Act 1982 (as amended). This prohibits the intentional or reckless killing, injuring or taking (capture, *etc*); possession; intentional or accidental disturbance whilst occupying a 'place used for shelter or protection' and intentional or reckless destruction of these places; sale, barter, exchange, transporting for sale and advertising to sell or buy.

6.13 The habitats present on site were of very limited value for great crested newts and as it predominantly consisted of short sward grassland providing no suitable cover along with areas of hardstanding. There were records of great crested newts recorded within 2.0km of the proposed development and only one pond was present within 250m which appeared suitable for great crested newts. Given there is potential for great crested newts to be present within the wider area and pond 1 was considered suitable for great crested newts, precautionary measures should be considered. The Natural England Great Crested Newt European Protected Species Mitigation Licence method statement contains a rapid risk assessment calculator. This was used to determine how likely an offence would be to occur and assess whether it is likely that a licence would be required to allow the works to be carried out with no risk of an offence. The results of the risk assessment tool is provided below in Table 7. There will be hard surfaces from the new buildings, parking, and access which will total less than 0.1Ha of land . When this loss of habitat is added to the risk assessment the loss is shown to be unlikely to cause an offence on its own. Taking into account the suboptimal habitats currently on site and the no negative impact on dispersal of newts, this seems a reasonable conclusion of no impact.

6.14 **Table 8: Rapid Risk Assessment for Great Crested Newt (Natural England)**

Component	**Likely effect** (select one for each component; select the most harmful option if more than one is likely; lists are in order of harm, top to bottom)	**Notional offence probability score**
Great crested newt breeding pond(s)	No effect	0
Land within 100m of any breeding pond(s)	No effect	0
Land 100-250m from any breeding pond(s)	0.01 - 0.1 ha lost or damaged	0.01
Land >250m from any breeding pond(s)	No effect	0
Individual great crested newts	No effect	0
	Maximum:	0.01
Rapid risk assessment result:	**GREEN: OFFENCE HIGHLY UNLIKELY**	

6.15 Whilst the changes to the habitats site post development will be unlikely to have a negative impact on great crested newts as the habitat is of very low value, there may still be minor risks to individual newts. However, as there is limited sheltering opportunities and no hibernation potential on site and the habitat on site is suboptimal terrestrial habitat with short sward grassland dominating the risk of individual newts being present within the site during works is

considered to be low. The risk to individual newts during works which could result in an offence occurring can be reduced to near negligible through the provision and adhering to methods outlined in a Reasonable Avoidance Measures (RAMs) document. The RAMs documentation could be secured through a suitably worded planning condition. Precautionary measures could include measures such as timing of works to when newts are not likely to be present on site for example during winter, keeping the grassland short sward through continued mowing until development can start to ensure that the site does not become more suitable and ensuring building material are stored in a way to not attract newts to use them as a refuge.

6.16 Given the results of the desk study, field study and the risk assessment it is considered that great crested newts might be present within the wider landscape but that the scale of the works, given the suboptimal habitats present on site and, through the use, of precautionary measures, that an offence in relation to great crested newts can be avoided. If plans change and an offence is likely to occur, then it will be necessary to obtain a European Protected Species Mitigation (EPSM) Licence from Natural England or register for a District Level Licence (DLL).

Reptiles

6.14 The habitats present on site were not suitable to support a population of reptiles, however, individuals. may occasionally access the site if they are present within the wider area. The mitigation measures outlined above in relation to great crested newts will ensure there is no harm to individual reptiles. Additional surveys are not required given the suboptimal habitat on site which provides little cover or shelter.

7 RECOMMENDATIONS FOR BIODIVERSITY ENHANCEMENT AND NETGAIN

7.1 Development plans should maximise opportunities for enhancement, in order, to achieve a net increase in biodiversity. In addition, the design should look to minimise the vegetation loss through for example the retention of trees where possible on site as these are likely to form a significant percentage of the value on site. The measures outlined below provide the means to achieve this enhancement. Additional measures may be required depending on the landscaping proposed and what trees can be retained as part of the proposals.

7.2 To help achieve a score of 10% or greater of biodiversity net gain planting of native, species rich hedgerow (the length of which are yet to be determined). In addition, any planting as part of the landscaping scheme should look to include native species as part of the mix particularly through the use of berry bearing species and flowering plants able to provide a nectar and pollen source for invertebrates at the start or end of the flowering season.

7.3 The hedgerow planting would, ideally, conform to the following criteria once the specific length of time for suitable management has passed (5 to 10 years):

- *Height and Width: Greater than 1.5m average height and width along entire length,*
- *Gap – Hedge Base: Gap between ground and base of canopy less than 0.5m for greater tan 90% of the length,*
- *Gap – Hedge Canopy: Gaps make up less than 10% of total length, and no canopy gaps of greater than 5m.*
- *Ground Level Vegetation: greater than 1m of undisturbed ground with perennial herbaceous vegetation for greater than 90% of the total length. These would be measured from the outer edge of the hedgerow and would be present on, at least, one side of the hedgerow,*
- *Nutrient Enrichment: Plant species indicative of nutrient enrichment comprise less than 20% of the area of undisturbed ground,*
- *Invasive Species: Greater than 90% of the hedgerow and undisturbed ground is free of invasive species and recently introduced species.*
- *Current Damage: Greater than 90% of the hedgerow or undisturbed ground is free of damage caused by human activities.*

7.4 As part of the scheme, it is recommended to install bird and bat boxes. These would provide an ecological enhancement by providing suitable roosting and nesting locations for these protected species. These bird nest boxes and bat boxes could be placed around the site on retained mature trees or integrated within the new buildings. The location of the new boxes should avoid over exposure to sunlight during the summer months and be located away from light sources.

7.5 Tree and shrub planting of native species would provide and contribute to the improvement of the habitat present replacing some of the less ecologically viable habitat currently present within the site. The planting of trees within the scheme is recommended if any trees cannot be retained and will be lost to accommodate the development. Native herbaceous and grassland species could also be planted into newly landscape areas, providing a valuable nectar source for invertebrate species. These would enable an improved score on the habitat condition assessment criteria to be achieved.

8 REFERENCES

BCT (2023) Bat Survey Guidelines for Professional Ecologists – Good Practice Guidelines 4th Edition.

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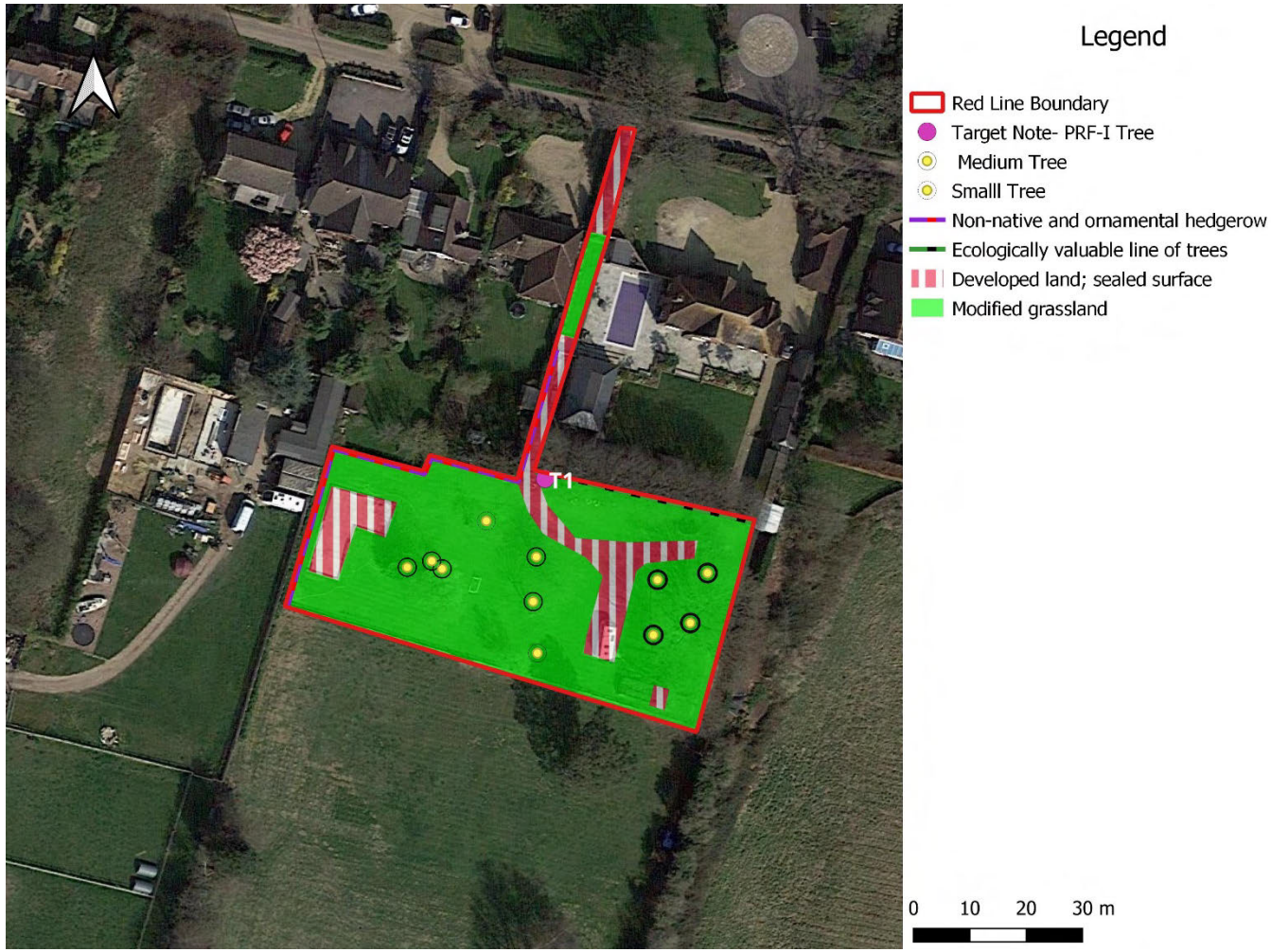
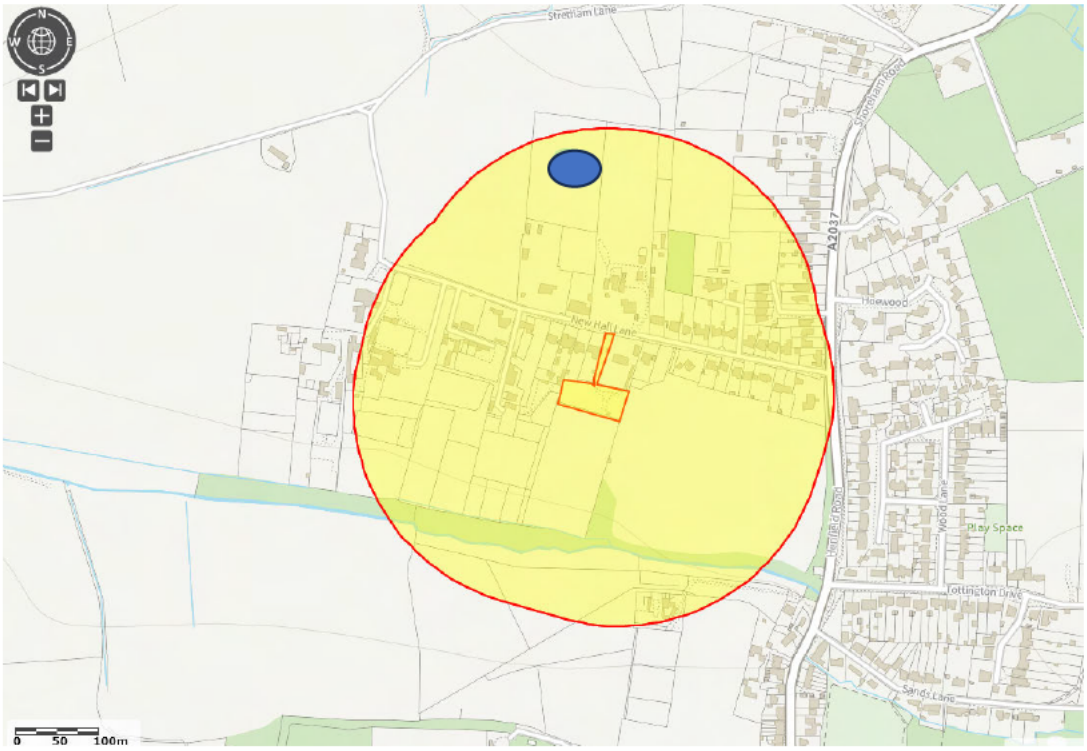
APPENDIX A: PRELIMINARY ECOLOGICAL WALKOVER SURVEY HABITAT MAP



APPENDIX B: HABITAT DISTINCTIVENESS AND CONDITION ASSESSMENT

Habitat Type	Total Habitat Area (ha) or length (km)		Distinctiveness	Score	Habitat Condition	Condition Assessment Scoring
Modified Grassland	0.233ha		Low	2	Good	3
	Species Present	Meadow buttercup (*Ranunculus acris),* self heal (*Prunella vulgaris*), cats-ear (*Hypochaeris radicata*), daisy (*Bellis perennis*), white clover (*Trifolium repens*), ribwort plantain (*Plantago lanceolata*), broadleaf plantain (*Plantago major*) common sorrel (*Rumex acetosa*), lawn moss (*Rhytidiadelphus squarrosus*), ragwort (*Senecio jacobaea*) and creeping buttercup (*Ranunculus repens*).				
Hardstanding	0.049ha		Very Low	N/A	N/A	0
Treeline	0.088km		Medium	4	Moderate	2
	Species Present	Hornbeam (*Carpinus betulus*) with some privet (*Ligustrum vulgare*)				
Non Native Hedgerow	0.076km		Very Low	1	Poor	1
	Species Present	Cherry laurel (*Prunus laurocerasus*) and privet				

APPENDIX C: LOCATION OF WATERBODIES WITHIN 250M (Magic Map, 2024)



APPENDIX D: PHOTOS OF THE SITE

Plate 1: View of modified grassland looking north up the site	*Plate 2: Short modified grassland present in the southern part of the site*
	
Plate 3: View of site looking west towards the boundary cherry laurel hedgerow	*Plate 4: Treeline of predominantly hornbeam*
	
Plate 5: Chicken coop with negligible potential to support roosting bats	*Plate 6: Scattered oak trees in the eastern section of the site with caravan and children's play equipment.*
	
Plate 7: View of hardstanding access track looking south.	*Plate 8: Oak tree with PRF-I present (Target Note 1)*
	

APPENDIX E: PROTECTED SPECIES AND DESIGNATED SITE LEGISLATION SUMMARY (ENGLAND AND WALES)

Species	Legislation (England & Wales)	Offences	Licensing procedures (England & Wales)
Bats European protected species	Conservation of Habitats and Species Regulations 2017	Deliberately[1] capture, injure or kill a bat; deliberate disturbance[2] of bats; or damage or destroy a breeding site or resting place used by a bat. [The protection of bat roosts is considered to apply regardless of whether bats are present.]	A Natural England (NE) licence in respect of development is required in England. European Protected Species: Mitigation Licensing- How to get a licence (NE 2010) Bat Mitigation Guidelines (English Nature 2004) Bat Workers Manual (JNCC 2004) BCT Survey Guidelines (2016)
	Wildlife and Countryside Act 1981 (as amended) S.9	Intentionally or recklessly obstruct access to any structure or place used for shelter or protection or disturb a bat in such a place.	Licence from NE is required for surveys (scientific purposes) that would involve disturbance of bats or entering a known or suspected roost site.
Great Crested Newt European protected species	Conservation of Habitats and Species Regulations 2017	Deliberately[1] capture, injure or kill a great crested newt; deliberate disturbance[2] of a great crested newt; deliberately take or destroy its eggs; or damage or destroy a breeding site or resting place used by a great crested newt.	Licences issued for development by Natural England. European Protected Species: Mitigation Licensing- How to get a licence (NE 2010) Great Crested Newt Mitigation Guidelines (English Nature 2001)
	Wildlife and Countryside Act 1981 (as amended) S.9	Intentionally or recklessly obstruct access to any structure or place used for shelter or protection or disturb a great crested newt in such a place.	Licences issued for science (survey), education and conservation by Natural England.
Dormice European protected species	Conservation of Habitats and Species Regulations 2017	Deliberately[1] capture, injure or kill a dormouse; deliberate disturbance[2] of dormouse; or damage or destroy a breeding site or resting place used by a dormouse.	A Natural England (NE) licence in respect of development is required in England. European Protected Species: Mitigation Licensing- How to get a licence (NE 2010)
	Wildlife and Countryside Act 1981 (as amended) S.9	Intentionally or recklessly obstruct access to any structure or place used for shelter or protection or disturb a bat in such a place.	Licence from NE is required for surveys (scientific purposes) that would involve disturbance of bats or entering a known or suspected roost site.

Species	Legislation (England & Wales)	Offences	Licensing procedures (England & Wales)
Badger	Protection of Badgers Act 1992	Wilfully kill, injure or take a badger; or intentionally or recklessly damage, destroy or obstruct access to a badger sett or disturb a badger in its sett. [It is not illegal to carry out disturbance activities in the vicinity of setts that are not occupied.]	Where required, licences for development activities involving disturbance or sett interference or closure are issued by Natural England (NE). Licences for activities involving watercourse maintenance, drainage works or flood defences are issued under a separate process. Licences are normally not granted from December to June inclusive because cubs may be present within setts. Badgers & Development (NE 2007)
Birds	Wildlife and Countryside Act 1981 (as amended) S.1	Intentionally kill, injure or take any wild bird; intentionally take, damage or destroy the nest of any wild bird while that nest is in use or being built; intentionally take or destroy the nest or eggs of any wild bird. [Special penalties are liable for these offences involving birds on Schedule 1 (e.g. most birds of prey, kingfisher, barn owl, black redstart, and little ringed plover).] Intentionally or recklessly disturb a Schedule 1 species while it is building a nest or is in, on or near a nest containing eggs or young; intentionally or recklessly disturb dependent young of such a species.	No licences are available to disturb any birds in regard to development. Licences are available in certain circumstances to damage or destroy nests, but these only apply to the list of licensable activities in the Act and do not cover development. General licences are available in respect of 'pest species' but only for certain very specific purposes e.g. public health, public safety, air safety.
Adder **Common lizard** **Grass snake** **Slow worm**	Wildlife and Countryside Act 1981 S.9(1) (part); S.9(5)	Intentionally kill or injure any common reptile species.	No licence is required in England. However, an assessment for the potential of a site to support reptiles should be undertaken prior to any development works which have potential to affect these animals.
Rabbits, foxes and other wild mammals	Wild Mammals (Protection) Act 1996	Intentionally inflict unnecessary suffering to any wild mammal.	Natural England provides guidance in relation to rabbits (TIN003, Rabbits- management options for preventing damage, July 2007) and foxes (which are also protected under the Wildlife and Countryside Act 1981 from live baits and decoys, see TAN43 April 2005 and TAN08 April 2005) as well as other wild mammals; see Natural England's website for the list of 'Regulatory Guidance, Best Practice and Information'.

Site Designation	Legislation (England & Wales)	Protection	Guidance
Site of Special Scientific Interest (SSSI)	Wildlife and Countryside Act 1981 (as amended)	It is an offence to carry out or permit to be carried out any potentially damaging operation. SSSIs are given protection through policies in the Local Development Plan.	Owners, occupiers, public bodies and statutory undertakers must give notice and obtain the appropriate consent under S.28 before undertaking operations likely to damage a SSSI. S.28G places a duty on all public bodies to further the conservation and enhancement of SSSIs. Planning Policy Statement 9: Biodiversity and Geological Conservation (ODPM 2005) for England or Technical Advice Note 5 in Wales.
Locally Designated Sites	There is no statutory designation for these	Sites are given protection through policies in the Local Development Plan.	Development proposals that would potentially affect these would need to provide a detailed justification for the work, an assessment of likely impacts, together with proposals for mitigation and restoration of habitats lost or damaged.

Site Designation	Legislation (England & Wales)	Protection	Guidance
Special Area of Conservation (SAC) **Special Protection Area (SPA)** **Wetland of International Importance (Ramsar site)**	Conservation of Habitats and Species Regulations 2010 EC Directive on the conservation of natural habitats and of wild fauna and flora (92/42/EEC). EC Directive on the conservation of wild birds (79/409/EEC). Convention on Wetlands of International Importance especially as Waterfowl Habitat 1971 (the Ramsar Convention).	Planning controls are effected through Part 2 of the Conservation of Habitats and Species regulations 2010 (Reg 21) and Part 6 (Regs 61-67). The legislation for the Site of Special Scientific Interest which will underpin each designation also applies. These sites are given protection through policies in the Local Development Plan.	Formal Appropriate Assessment is required before undertaking, or giving consent, permission or other authorisation for a plan or project which is likely to have a significant effect on such a site. Planning Policy Statement 9: Biodiversity and Geological Conservation (ODPM 2005) and the accompanying joint Circular (ODPM Circular 6/2005 & Defra Circular 01/2005) for England or Technical Advice Note 5 in Wales.
Site of Special Scientific Interest (SSSI)	Wildlife and Countryside Act 1981 (as amended)	It is an offence to carry out or permit to be carried out any potentially damaging operation. SSSIs are given protection through policies in the Local Development Plan.	Owners, occupiers, public bodies and statutory undertakers must give notice and obtain the appropriate consent under S.28 before undertaking operations likely to damage a SSSI. S.28G places a duty on all public bodies to further the conservation and enhancement of SSSIs. Planning Policy Statement 9: Biodiversity and Geological Conservation (ODPM 2005) for England or Technical Advice Note 5 in Wales.
Local Nature Reserve (LNR)	National Parks and Access to the Countryside Act 1949 S.21	LNRs are given protection through policies in the Local Development Plan.	LNRs are generally owned and managed by local authorities. Development proposals that would potentially affect a LNR would need to provide a detailed justification for the work, an assessment of likely impacts, together with proposals for mitigation and restoration of habitats lost or damaged. Planning Policy Statement 9: Biodiversity and Geological Conservation (ODPM 2005) for England or Technical Advice Note 5 in Wales.
Locally Designated Sites	There is no statutory designation for these	Sites are given protection through policies in the Local Development Plan.	Development proposals that would potentially affect these would need to provide a detailed justification for the work, an assessment of likely impacts, together with proposals for mitigation and restoration of habitats lost or damaged.