LIZARD
Landscape Design and Ecology

ECOLOGICAL IMPACT ASSESSMENT

Crosswinds, Hampers Lane, Storrington, West Sussex

On Behalf of: Mark Alford Design Limited

Planning Issue

Client:	Mark Alford Design Limited			
Project:	Crosswinds, Hampers Lane, Storrington, West Sussex			
Reference:	LLD3413-ECO-REP-006-00-EcIA			
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 Mark Alford Design Limited to undertake an Ecological Impact Assessment of the proposed development of Crosswinds, Hampers Lane, Storrington, West Sussex (*Grid Reference:* TQ 10769 14316 – *hereafter referred to as 'the site'*). A Preliminary Ecological Appraisal of the site was undertaken on the 13th of December 2024. Bat emergence surveys, further inspection of a tree for bat roosts, great crested newt environmental DNA (GCN eDNA) surveys, and reptile population surveys were recommended and subsequently undertaken from April to June 2025. An assessment of the ecological impact of the proposals was then undertaken using this baseline data.

The site encompasses a c. 0.34 hectare (Ha) plot, dominated by bracken, a habitat of broadly low ecological value. Higher value habitat was noted in the on-site individual trees scattered mostly along the site boundary, and UK priority habitat Deciduous Woodland located off-site adjacent to the north. Many of the individual trees and the entire adjacent woodland would be retained and protected throughout construction and operation. To that end, appropriate mitigation measures have been proposed herein.

Low value potential habitat for nesting birds, hedgehogs, [redacted], invertebrates and commuting and foraging bats was identified on site. Avoidance, mitigation and compensation measures with regard to these species have been built into the scheme in accordance with the mitigation hierarchy and BS42020: 2013.

Bat emergence surveys carried out in May and June 2025 focused on the three buildings on site. Bat activity across the surveys was high with several common and widespread species of bats foraging around and commuting across the site. The eucalyptus tree T01 was noted to contain a significant cavity and so was subject to a total of 3no. inspections with an endoscope. No emergences were recorded from buildings and no direct signs of bats were noted within tree T01, and so the site is considered highly unlikely to support any active bat roosts.

The site was found to support a low population of slow worm with a peak count of 2no. slow worms on 2no. of the 7no. visits, and no reptiles found on 2no of the visits. Given the limited use of the site by a single reptile species, it is recommended that controlled and supervised vegetation clearance alongside retention and enhancement of a section of the site would be suitable to protect reptiles from harm and ensure retention of suitable reptile habitat for the long-term.

GCN eDNA analysis of water samples taken from local ponds P1 and P2 in April 2025 provided a positive result at P1 and suggests the presence of this species in the local area. To allow works to proceed it is recommended that the site is entered into the District Level Licence (DLL) scheme administered by NatureSpace. The site is located within the red zone and as such mitigation measures will be required, although these would be reduced in comparison with traditional licencing. No further survey is required to enter into DLL. Naturespace have been contacted and have identified the site and proposals as 'low impact' and following payment of the one-time fee, NatureSpace will issue a certificate and impact plan detailing the mitigation requirements. The certificate must be issued to the local authority and all mitigation works completed prior to commencement of works.

Development proposals do not appear to meet the criteria which would require the LPA to consult with Natural England regarding potential impacts to any SSSI, however the site is within the 12km Wider Conservation Area of The Mens SAC. The site is also located within the Sussex North Water Supply Zone and as such shall need to demonstrate water neutrality to ensure adverse impacts upon Arun Valley SAC are avoided.

Once avoidance, mitigation, and compensation measures have been taken into account, the impacts of the planned development upon biodiversity will be **negligible and non-significant**.

1.0 INTRODUCTION

1.1 Lizard Landscape Design and Ecology has been commissioned by Mark Alford Design Limited to undertake an Ecological Impact Assessment of the proposed development of Crosswinds, Hampers Lane, Storrington, West Sussex (*Grid Reference: TQ 10769 14316– 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 13th of December 2024. The following phase 2 survey work was recommended and subsequently undertaken:

- 2no. Bat emergence surveys of building B1
- 1no. Bat emergence survey of building B2
- Further inspection of tree T01
- eDNA analysis of ponds within 250m of the site
- Reptile population estimate survey

1.4 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. Residual impacts are then discussed once all mitigation and compensation measures have been taken into account.

Site Information

1.5 The site covers an area of c. 0.34ha and consists of an L-shaped residential plot with 1no dwelling and 2no. outbuildings. The site is situated in a suburban area and surrounded by further residential development on all sides, although the land adjacent to the north of the site is densely wooded. The boundary of the South Downs National Park is located c. 400m east and 600 south of the site. The soil on site is described as freely draining very acid sandy and loamy soils.

Surrounding Landscape

1.6 The site is located on the edge of Storrington in an area known as Heath Common. The surroundings are rural, with extensive agricultural grazing pasture and well-connected hedgerows extending in all directions. The chalk escarpment which characterises the South Downs National Park is located approximately 1.8k south and extends to the east and west from that point. Several settlements are located in all directions, most notably Worthing which is approximately 8.5km south. The A24 runs north to south approximately 1.5km to the east and a sand quarry is located approximately 300m to the southwest.

Development Proposals

1.7 It is understood that the proposals are for the demolition of the existing dwelling and associated outbuildings and subsequent redevelopment of the site including 2no. new homes, 2no. garages and associated access and soft landscaping.

Report Aims

1.8 The aim of the baseline surveys and Ecological Impact Assessment has been to:

- *Describe baseline conditions at the site;*
- *Determine the importance of features which may be impacted by the scheme;*
- *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;*
- *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.*

Biodiversity Gain Statement

1.9 The proposed development does not qualify for any relevant exemption. As of 12th of February 2024, Biodiversity Net Gain is mandatory under Schedule 7A of the Town and Country Planning Act 1990 (as inserted by Schedule 14 of the Environment Act 2021). As such, the scheme shall be subject to the standard biodiversity gain planning condition.

2.0 METHODOLOGY

2.1 Desk Study

2.1.1 The Multi-Agency Geographic Information for the Countryside (*MAGIC*) was consulted for all designated sites within a practicable zone of influence of the site. This included Local Nature Reserves (LNRs), National Nature Reserves (NNR) and Sites of Special Scientific Interest (SSSIs) within a 2.0 km radius of the site, and international statutory designated sites including Special Areas of Conservation (SACs), Special Protection Areas (SPAs) and Ramsars (Wetlands of International Importance) within a 10.0 km radius of the site. Where SACs designated for their bat interest are present this ZoI has been extended to 12.0 km in accordance with recent guidance (SDNP, 2020).

2.1.2 MAGIC was also used to provide information on all Priority Habitats within a 2.0 km radius of the site, and all records of granted European Protected Species Mitigation licences within a 1.0 km radius of the site.

2.1.3 All protected / notable species records within a 2.0km radius of the site were provided by Sussex Biodiversity Records Centre (SxBRC) on the 20th of January 2025.

2.2 Preliminary Ecological Appraisal

2.2.1 The initial field survey was undertaken on the 13th of December 2024 by a Suitably Qualified Ecologist (Sam Hall; Consultant Ecologist; Lizard Landscape Design and Ecology). Weather conditions were cold (c.5°C), with a light wind (Beaufort Scale 2), 80% cloud cover and no rain.

2.2.2 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 (UK Habs Ltd., 2023). A minimum mapping unit of 25.0 m^2 was used and habitats were identified to at least level 4 wherever practicable.

2.2.3 A list of plant species was compiled, together with an estimate of abundance (*Table No. 13*).

2.2.4 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 that presented in the *Herpetofauna Workers' Manual (Gent and Gibson, 2003)* and *Bat Surveys for Professional Ecologists: Good Practice Guidelines (Collins (4th ed.), 2023*).

2.3 Preliminary Bat Roost Assessment

2.3.1 A Daytime Bat Walkover (DBW) survey was undertaken on the 13th of December 2024 by a suitably experienced surveyor (Sam Hall - Accredited Agent Under; Louise Barker (Bat Level 2 Class Licence; 2023-11422-CL18-BAT).

2.3.2 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.

2.3.3 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

2.3.4 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. 01 – 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.

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

Table No. 02 – 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.

Potential Suitability	Description
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.

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

Table No. 03 – 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.

[redacted] [redacted]

[redacted]

[redacted] [redacted]

[redacted] [redacted]

- [redacted]
- [redacted]
- [redacted]
- [redacted]
- [redacted]
- [redacted]
- [redacted]

[redacted] [redacted]

2.5 Bat Emergence and Endoscope Inspection Surveys

2.5.1 In accordance with current best practice guidelines (BCT, 2023), two bat emergence surveys of were completed on the 19th of May and 17th of June 2025 to ascertain the presence / likely absence of a roost within the buildings.

2.5.2 3no. bat surveyors were assigned a point each to adequately cover all potential roost features of B1. 1no. bat surveyors were assigned a point each to adequately cover all potential roost features of B2. 1no. bat surveyor was assigned a point to adequately cover all potential roost features of B3. 5 no. infra-red cameras with additional illuminators were also used to aid the survey (*Refer to Figure No. 01 – Location of Survey Points*).

2.5.3 The survey started 15 minutes before sunset and terminated approximately 1.5 hours after sunset. Data including species, behaviour and general patterns of activity were recorded throughout the survey. Details of the survey visits can be found in *Table No. 03*.

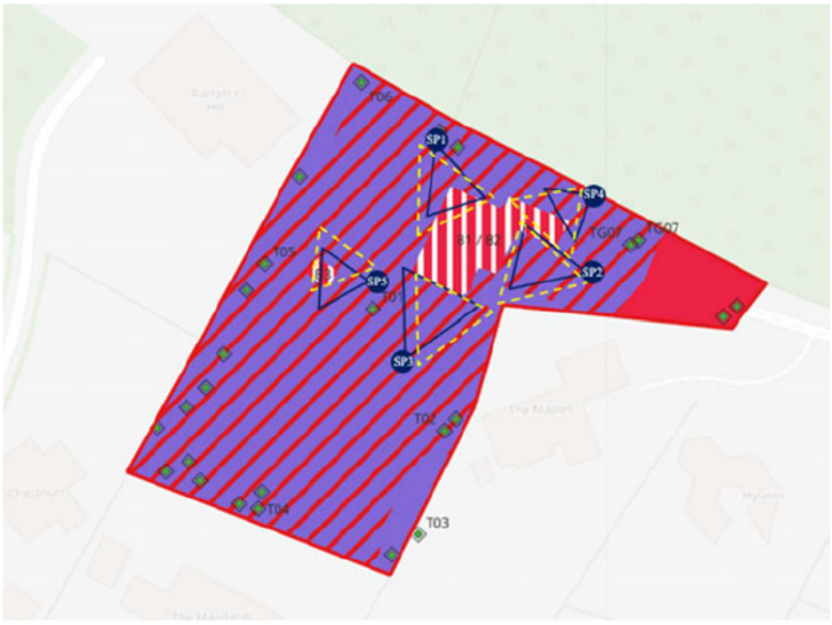


Figure No. 01 - Location of Survey Points (SP) and IR camera views illustrated with a yellow dotted line.

Table No. 03 – Bat Emergence Survey Details

Date	19/05/2025 B1	17/06/2025 B1	17/06/2025 B2	17/06/2025 B3
Survey Type	Dusk	Dusk	Dusk	Dusk
Surveyors	RE OB AC	CO SH JP	HC	AC
Weather	16ºC, WF 0, 10% cloud, dry	18ºC, WF1, 10% cloud, dry	18ºC, WF1, 10% cloud, dry	18ºC, WF1, 10% cloud, dry
Sunset	20:51:00	21:19:00	21:19:00	21:19:00
Start	20:36:00	21:04:00	21:04:00	21:04:00
Finish	22:21:00	22:49:00	22:49:00	22:49:00

Data Analysis

2.5.4 Bats were identified using Echo Meter Touch Pro 2 and Peersonic RPA3 full spectrum bat detectors. Sonogram analysis was undertaken using the Kaleidoscope programme.

Aerial Inspection of Tree

2.5.5 In accordance with current best practise guidelines (BCT, 2023), tree T01 was inspected with an endoscope on 7th of May, 28th of May and 17th of June 2025 to ascertain the presence / likely absence of a roost within the tree. These inspections were carried out by a suitably experienced surveyor (Sam Hall - Accredited Agent Under; Louise Barker (Bat Level 2 Class Licence; 2023-11422-CL18-BAT).

2.6 Reptile survey

2.6.1 20 no. artificial reptile refugia (roofing felt; 1.0 x 0.50 m) were laid out in all suitable on-site habitats on the 1st of April 2025. Refugia were allowed to bed-in for 14 days prior to survey visits beginning on the 15th of April 2025. The locations of artificial reptile refugia are detailed within *Figure No. 02.*

Figure No. 02 – Location of Reptile Refugia. Red squares indicate the locations of slow worm sightings.

2.6.2 7no. site visits were conducted, where the number, species, age and sex of the reptile's present were recorded. Debris piles on-site considered suitable as reptile refugia were checked during the surveys, and repeated walkovers of the site were used to search for active reptiles.

2.6.3 Surveys were undertaken during recommended times *(08:30 – 11:00 and 16:00 – 18:30)* with suitable weather conditions for surveying reptiles wherever possible *(guidelines recommend temperatures 9-18°C).*

Table No. 04 – Weather Conditions During Reptile Surveys

Survey	Date of Visit	Time	Temp.	Weather Conditions
1	15/04/2024	16:00	14ºC	Dry, WF2, 30% cloud
2	22/04/2025	09:15	12ºC	Dry, WF1, 50% cloud
3	28/04/2025	08:45	12ºC	Dry , WF1, 0% cloud
4	02/05/2025	09:15	17ºC	Dry, WF0, 0% cloud
5	07/05/2025	09:00	14ºC	Dry, WF1, 30% cloud
6	13/05/2025	09:40	17ºC	Dry, WF1, 10% cloud
7	19/05/2025	10:00	15ºC	Dry, WF1, 40% cloud

Population Assessment

2.6.4 Reptile populations were assessed in accordance with population level criteria as stated for the Key Reptile Site Register (*Froglife, 1999*). This system classifies populations of individual reptile species into three population categories assessing the importance of the population. These categories are based on the total number of adult animals observed during individual survey occasions and based upon a survey density of 10/Ha.

Table No. 05 – Reptile Population Size Assessment

Species	Low Population	Good Population	Exceptional Population
Slow Worm	<5	5-20	>20
Common Lizard	<5	5-20	>20
Grass Snake	<5	5-10	>10
Adder	<5	5-10	>10

2.7 GCN survey

Desk Study

2.7.1 The Multi-Agency Geographical Information Centre (*MAGIC*) was consulted for information regarding granted EPS licences within 2.0km, and location of ponds within 500.0m radius of the proposed construction site.

HSI Assessment

2.7.2 All waterbodies tested were subject to a HSI assessment in April 2025.

2.7.3 The *Habitat Suitability Index (HSI)* was developed by *Oldham et al (2000)* as a way of providing a numerical index allowing a direct comparison to be made between different water bodies. This index assesses ponds against ten different criteria, each of which have a bearing on the likelihood of great crested newts (*GCN*) being present in the pond under consideration.

2.7.4 The ten attributes against which ponds are assessed are:

- *Geographic Location.*
- *Pond Area (at its highest water level).*
- *Permanence.*
- *Water Quality.*
- *Perimeter Shading.*
- *Numbers of Wildfowl.*
- *Numbers of Fish Present.*
- *Pond Count (within a 1.0km radius).*
- *Terrestrial Habitat (within 250.00m).*
- *Macrophyte Coverage.*

2.7.5 The HSI results in a score between 1 and 0; with 1 being optimal conditions and 0 being unlikely to support a population. However, the index merely gives an indication as to whether a pond has the potential to support GCNs and is not a substitute for more detailed presence / absence surveys for protected species of amphibian. The evaluation criteria is shown in *Table No. 01* below.

Table No. 06 – HSI Evaluation Criteria

HSI Score	*Pond Suitability*
<0.5	Poor
0.5-0.59	Below Average
0.6-0.69	Average
0.7-0.79	Good
>0.8	Excellent

eDNA Survey

2.7.6 An eDNA survey of accessible ponds within 250m of the site was completed on the 15th of April 2025.

2.7.7 20no. water samples were collected from the margin of each pond, with samples spaced as evenly as possible to collect a representative sample. All samples were collected using a sterile sampling kit as supplied by SureScreen Scientifics.

2.7.8 Each sample was stored in a refrigerator before return to SureScreen Scientifics for analysis. The results of the survey indicate the presence of absence of great crested newt environmental DNA within the water body.

2.8 Ecological Impact Assessment

2.8.1 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.

2.8.2 The CIEEM guidelines (2018) 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:

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

2.8.3 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, such as Habitats of Principal Importance (NERC 2006);*
- *The presence (or potential presence) of species of conservation significance such as Species of Principal Importance (NERC 2006);*
- *The presence of other protected species such as those protected under The Wildlife and Countryside Act 1981;*
- *The sites social and economic value.*

2.8.4 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.

2.8.5 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.

2.9 Constraints and Limitations

2.9.1 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.

2.9.2 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.

3.0 BASELINE ECOLOGICAL CONDITIONS

3.1 Designated Sites

Statutory Protected Sites

3.1.1 The following statutory protected sites are noted within the likely zone of influence of the proposed site:

Table No. 07 – Statutory Designated Sites

Site	Description	Location
International Statutory Designated Sites within a Potential Zone of Influence		
Arun Valley SAC / SPA / Ramsar	The site is of outstanding ornithological importance for wintering waterfowl and breeding waders. It supports seven wetland invertebrate species that are listed as threatened in Britain, one of which is endangered, and there are four nationally rare and four nationally scarce plant species. Annex II species that are a primary reason for the SAC selection of this site: • Ramshorn snail *Anisus vorticulus* RAMSAR and SPA classified as it is used regularly by >1% of the UK population of Bewick's Swan *Cygnus columbianus bewickii* and is used by >20,000 waterfowl.	c. 6.2km west
National Statutory Designated Sites within 2.0km		
Sullington Warren SSSI	An area of lowland dwarf shrub heath mainly comprised of *Calluna vulgaris* with patches of *Erica cinerea,* and healthy bryophyte and lichen cover.	c. 0.8km west
Chantry Mill SSSI	Former quarry and earth heritage area.	c. 1.2km southwest

3.1.2 Development proposals do not appear to meet the criteria which would require the LPA to consult with Natural England regarding potential impacts; however, the site is within the 12km Wider Conservation Area of The Mens SAC. The site is also located within the Sussex North Water Supply Zone.

Non-Statutory Protected Areas

3.1.3 The following non-statutory designated areas (Local Wildlife Sites) were identified within 2.0km of the site:

Table No. 08 – Non-Statutory Designated Areas

Site	Location
Heath Common	100m W
Sullington Hill	1.6km S

3.1.4 The site is comprised of distinctly different habitat to that of the above *Non-Statutory Protected Sites*, the site area provides no supporting habitat, and proposals would have no impact upon these areas due to the intervening distance.

Pond Study

3.1.5 No ponds were identified within 500m of the site.

Priority Habitat

3.1.6 In accordance with the MAGIC dataset, within a 2.0km search radius of the site there were UKBAP Priority Habitats (NERC, 2006) of Wood pasture and Parkland, Traditional Orchards, Lowland Mixed Deciduous Woodland (some of which is categorised as ancient), Lowland Heathland, Lowland Dry Acid Grassland and Lowland Calcareous Grassland.

3.2 Existing Habitat Assessment

3.2.1 Habitats within and adjacent to the site include:

- Bracken / bramble scrub
- Introduced shrubs
- Developed land; sealed surface
- Bare ground
- Individual trees

Bracken / bramble scrub

3.2.2 The site had been recently cleared at the time of the site visit with cleared vegetation piled up at various points across the site. It was clear that most of the site was dominated by bracken *Pteridium aquilinum,* with bramble *Rubus fruticosus* noted as frequent and gorse *Ulex europaeus*, broom *Cytisus sp.* and rhododendron *Rhododendron sp*. as occasional. Limited floral species were noted within the ground layer including rare occurrences of foxglove *Digitalis purpurea* and a clematis species *Clematis sp.* This habitat is of **site level value.**

Introduced shrubs

3.2.3 Dense stands of bamboo *Bambusoideae sp.* were noted along the eastern site boundary and of Rhododendron at the northern corner of the site, encroaching from adjacent gardens. Bamboo is a grass and not a shrub but this habitat type was selected as most suitable to capture the ecological value of these areas.

Image No. 01/02 – To the left, a view of the northwest corner, showing rhododendron encroachment. To the right, a view from the northwest corner looking east, showing piled up cleared vegetation.

Developed land; sealed surface

3.2.4 The site featured a single dwelling with 2no. associated outbuildings. Significant ivy coverage was noted over the dwelling and the larger of the outbuildings as well as bramble covering much of the existing patio area to the south aspect of the dwelling. This habitat is of **site level value**.

Image No. 03 – A view from the north of the dwelling to the right and the larger outbuilding (garage) to the left.

Individual Trees

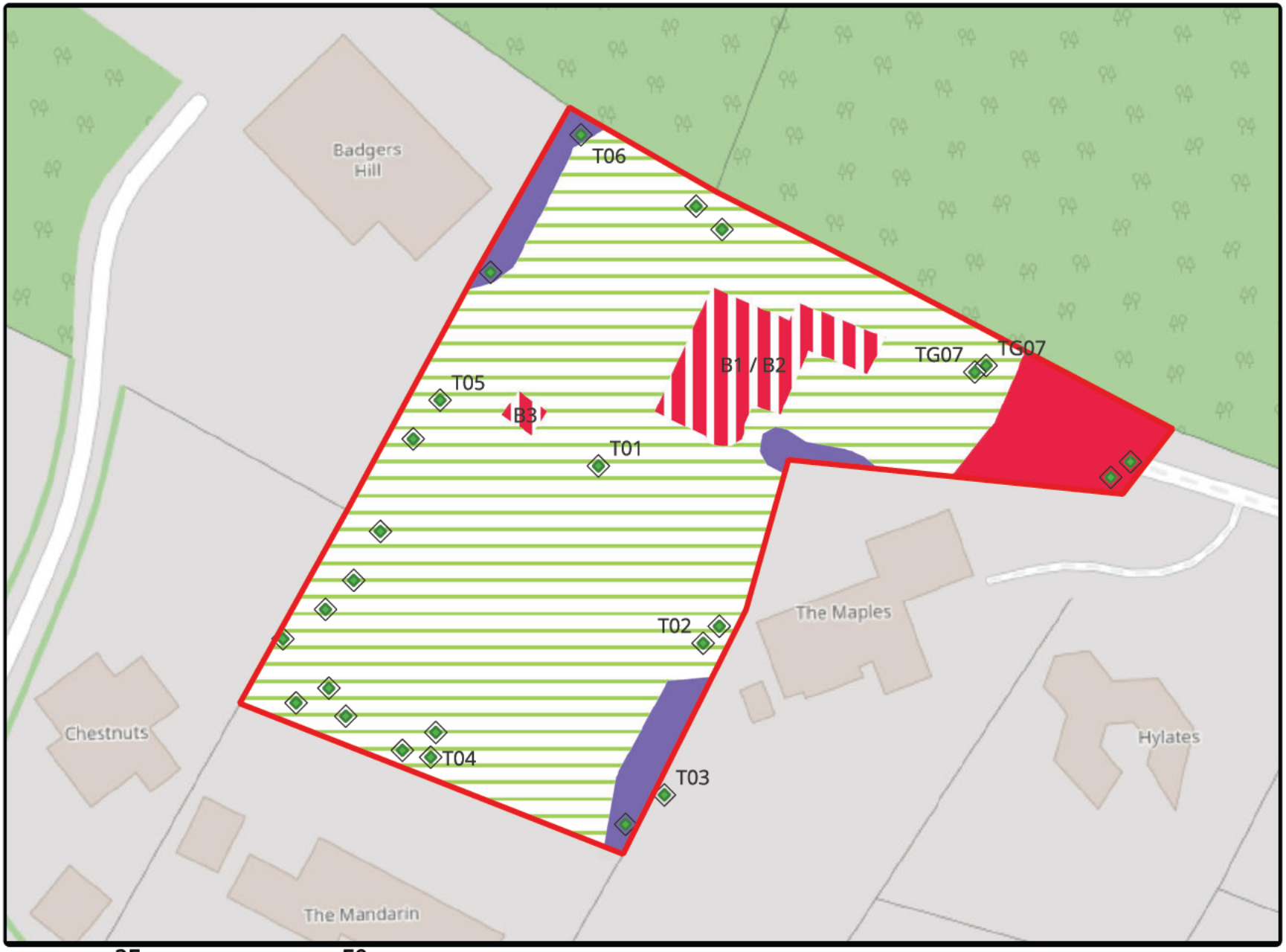
3.2.5 Several scattered individual trees were noted predominantly concentrated along the site boundaries. Trees ranged in maturity, but most were semi and early mature. Spruce *Picea sp.* was most abundant and silver birch *Betula pendula* and oak *Quercus robur* also made significant contributions to the species composition. Broadly, the trees did not appear to be subject to regular management and retained much of their expected canopies, but some moderate pruning was noted on some individuals. This habitat is of **site level value**.

Bare ground

3.2.6 Bare ground was noted at the site entrance. The area was characterised by an inundation of leaf litter with sparse scattered ground flora including moss species *Bryophyta sp.* and common sedge *Carex nigra*. This habitat is of **negligible value.**

Invasive Species

3.2.7 Rhododendron was noted within the cleared vegetation and remained intact scattered along the west and north site boundaries. Rhododendron is listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended). Stands of bamboo were noted on site and whilst bamboo is not listed locally or nationally as invasive it is known to aggressively spread when untended, so its presence is worth note.



Legend

- Red Line Boundary
- Individual Tree (locations and count are indicative only)
- Bracken / Bramble Scrub
- Developed land; sealed surface
- Introduced shrub
- Bare ground

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Client
Mark Alford Design Limited

Project Title & Location
Crosswinds, Hampers Lane
Storrington

Drawn by	Approved by	Rev	Date
SH	COR	00	01/08/25

Figure No. 03 - Site Habitat Plan

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3.3 Protected Species Assessment

Amphibians

Desk Study

3.3.1 The desk study returned 18no. records for great crested newt *Triturus cristatus* from within the search area, the closest of which was located c. 150m southwest of the site (the grid reference for this record was accurate to 100m). Records for common frog *Rana temporaria,* common toad *Bufo bufo* and cmooth newt *Lissotriton vulgaris* were also returned within the search area.

Site Assessment

3.3.2 A disused swimming pool (c. 40m^2) and a small concrete pit (c. 2.0m^2) were noted on site. These features were entirely overgrown with bramble scrub and held no water at the time of the initial visit and so unlikely to hold any water during the GCN breeding season.

3.3.3 The HSI assessment found P1 and P2 to offer good habitat suitability. The HSI assessment of these ponds is summarised below.

Table No. 09 – Summary of HSI Results

HSI Criteria	**P1**		**P2**	
Location	1	Zone A	1	Zone A
Pond Area	0.95	c. 1,000m^2	0.83	c. 1,800 m^2
Permanence	0.9	Never dries	0.9	Never dries
Water Quality	0.67	Moderate	0.67	Moderate
Shade	0.4	90%	1	60%
Waterfowl	0.67	Minor (but banks damaged by dogs and walkers)	0.67	Minor
Fish	0.33	Some fish seen	0.33	Some fish seen
Pond Count	1	6.4/km^2	1	6.4/km^2
Terrestrial Habitat	1	Good terrestrial habitat	1	Good terrestrial habitat
Macrophyte	0.35	<10%	0.35	<10%
HSI Score	**0.54**	**Average**		**Good**

3.3.4 It is accepted that, unless connected by highly suitable habitat, great crested newts are likely to stay within 250m of breeding ponds (Langton *et al.*, 2001). The pond study identified 14no. ponds within 500m of the site, including 4no. within 250m of the site. Many of these ponds were located within woodland and functionally connected to the site by further woodland and suburban gardens. Moreover, the site itself was dominated by low value suitable terrestrial habitat.

3.3.5 GCN eDNA analysis of water samples taken from ponds P1 and P2 located within 250m of the site gave a positive result for P1 and so GCN should be assumed to be present within the site.

Reptiles

Desk Study

3.3.6 The desk study returned numerous records for four species of reptiles, including 31no. records for adder *Vipera berus*, 74no. records for grass snake *Natrix fragilis,* 57no. records for slow worm *anguis fragilis,* and 19no. records for common lizard *Zootoca vivipara*. Records were particularly concentrated within Sullington Warren SSSI.

Site Assessment

3.3.6 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 floral species composition noted on the site was limited and with the site recently cleared, it is not clear whether open areas were present alongside the dense scrub that was evidently present. Furthermore, the soil was noted as sandy which is preferred by reptiles. Bracken and gorse were also present and are often associated with various reptile species.

Reptile Survey

3.3.7 The results of the further reptile surveys recorded a peak count of 2no. adult slow worm on site. The results indicate a low population of slow worm. Reptiles were scattered along the north and southwest boundaries. No other reptile species were recorded during the surveys. A summary of each visit is detailed below:

Table No. 10 – Summary of Reptile Results (adults only)

Survey	Date of Visit	Results
1	15/04/2024	No records
2	22/04/2025	2no. slow worm
3	28/04/2025	2no. slow worm
4	02/05/2025	1no. slow worm
5	07/05/2025	No records
6	13/05/2025	1no. slow worm
7	19/05/2025	1no. slow worm

Bats

Desk Study

3.3.8 The desk study returned a total of 163no. bat species records, including records for common pipistrelle *Pipistrellus pipistrellus,* soprano pipistrelle *Pipistrellus pygmaeus*, barbastelle *Barbastella barbastellus,* serotine *Eptesicus serotinus,* Daubenton's *Myotis daubentonii,* whiskered *Myotis mystacinus*, Natterer's *Myotis nattereri,* Leisler's *Nyctalus leisleri,* noctule *Nyctalus noctule* and Brown long eared bat.

3.3.9 The closest bat species result was c. 380m north-northeast, with records evenly spread in all directions within the search area.

Daytime Bat Walkover - Trees

3.3.10 Various trees were identified as offering some level of bat roost suitability during the ground level assessment. A summary of these features is illustrated in the table below. The tree reference numbers are illustrated on *Figure No. 03 – Site Habitat Plan.*

Table No. 11 – Preliminary Bat Roost Assessment Results - Trees

Tree Ref	Description	Category
T01	Semi-mature eucalyptus with a large trunk hole (PRF-M) at c. 1.0m on the NE aspect. Located centrally in the site. Will require further inspection visits.	PRF-M
T02	Mature oak with moderate deadwood throughout and a small knot hole at c. 2.5m on the NE aspect where 2no. secondary leaders join.	PRF-I
T03	Mature oak located offsite, close to the east site boundary with a canopy that extends into the site. Full assessment impossible, so FAR should it require tree surgery works.	FAR
T04	Semi-mature silver birch tree with tear out of secondary leader at c. 3.0m. Difficult to assess from the ground, so FAR should it require tree surgery works.	FAR
T05	Mature scots pine with crown held to NE and major deadwood throughout. A large section of deadwood was noted on the north aspect with multiple woodpecker holes at c. 5.0m. FAR should it require tree surgery works.	FAR
T06	Mature silver birch located at the NW corner of the site. Small tear out noted at c. 3.0m on E aspect unlikely to be suitable for a large number of bats.	PRF-I
TG07	2no. mature conifer species with moderate deadwood and loose bark throughout the stems offering multiple small PRF-I.	PRF-I

3.3.11 All buildings within the site were assessed internally and externally for bats. A summary of this assessment is provided in the table below. Building reference numbers are illustrated on *Figure No. 03 – Site Habitat Plan*.

Table No. 12 – Preliminary Bat Roost Assessment Results - Buildings

Building Ref	External assessment	Internal assessment	Overall result
B1	Small two storey brick-built cottage now used as office space. The roof was pitched with clay roof and hanging tiles and dormer windows on the southern aspect. A number of slipped tiles, missing tiles and gaps between tiles were noted throughout.	The internal living areas now converted for office use were in use by school staff. The loft has been converted into office space, leaving only a very small loft space. No direct evidence of bats was recorded.	**Moderate**
B2	Brick built squash court with a flat felted roof. Significant ivy coverage was noted on the north corner, obscuring a large portion of the walls and roof.	Ground floor squash court with first floor mezzanine.	**Low**
B3	Single storey wooden shed considered unlikely to provide thermoregulatory conditions suitable for roosting bats.	Internal inspection assessed as unnecessary.	**Negligible**
B4 + B5	Single storey concrete sheds considered unlikely to provide thermoregulatory conditions suitable for roosting bats.	Internal inspection assessed as unnecessary.	**Negligible**

Bat emergence Surveys

3.3.12 Bat emergence surveys were carried out in May and June 2025, and focused on the three buildings on site which were assessed to offer some potential roosting suitability. Bat activity across the surveys was high with several common and widespread species of bats foraging around and commuting across the site. No emergences were recorded from on-site buildings.

Bat Emergence Survey – B1, 19.05.25

3.3.13 During the first survey between 21:37 and 22:23, common and soprano pipistrelles were observed commuting and foraging around Building B1. Serotine activity was particularly high at this location, with multiple individuals seen commuting and foraging locally. Further detail can be found within Appendix B – Protected Species Survey Reports.

Bat Emergence Survey – B1, 17.06.25

3.3.14 Multiple bats were observed commuting and foraging between 21:36 and 22:29, including common and soprano pipistrelle, serotine, and a noctule seen at 21:45. A Myotis species was heard but not seen at 22:09, and a long-eared species was heard at 22:29. A noctule was heard simultaneously by two surveyors at 22:39.

Bat Emergence Survey – B2, 17.06.25

3.3.15 Moderate activity was recorded between 21:44 and 22:40, with a mix of species heard but not seen. These included soprano and common pipistrelle, serotine, a long-eared species (heard at 21:44), and a noctule (heard between 22:39 and 22:40).

Bat Emergence Survey – B3, 17.06.25

3.3.16 Activity was high between 21:44 and 22:45, with several species heard and observed commuting and foraging. Common and soprano pipistrelle, serotine, a faint Daubenton's bat (heard at 22:37), and a lesser noctule (heard but not seen at 22:39) were all recorded.

Aerial Inspection of Trees

3.3.17 The eucalyptus tree T01 was noted to contain a significant cavity and so was subject to a total of 3no. inspections with an endoscope on 7th of May, 28th of May and 17th of June 2025. No signs of bats were noted.

3.3.18 The results of the above surveys indicates a likely absence of roosting bats.

Foraging and Commuting Suitability

3.3.19 The site is located in a suburban setting with rural surrounds and is dominated by bracken, bramble scrub and numerous individual trees. Further to this, the site is well connected with further woodland and other semi natural habitat in the local landscape. Floral diversity is low on site but native species such as oak, silver birch and bramble provide suitable foraging opportunities for various bat species. Given the small scale of the site, and incidental activity observed on further bat emergence surveys, the site provides a significant resource to common and widespread foraging bat species, significant at the **site level.** It is noteworthy that preferable habitat such as woodland is abundant in the surrounds.

Winter Roosting Potential

3.3.20 Given the results of the preliminary roost assessment and in consideration of the presence or classic / non-classic hibernation features, the suitability of the surrounding habitat for commuting and foraging, and the presence / absence of known roosts, it was determined that the site offered **low** winter roosting potential.

Dormouse

Desk Study

3.3.21 The desk study returned 15no. records of dormouse *Muscardinus avellanarius* from within the search area. The closest record was c. 250m northeast of the site.

Site Assessment

3.3.22 The trees present on site were not dense nor was a shrub layer present, although bracken and bramble scrub had been recently cleared across the site. The woodland adjacent to the north of the site is categorised as UK priority habitat Deciduous Woodland although during the site visit rhododendron was noted to dominate its shrub layer likely diminishing its suitability for dormouse. Cleared of much of almost all dense vegetation, the site is unlikely to support dormouse and so has been assessed as **negligible** for this species, however, development proposals should be mindful of their potential presence within the woodland adjacent to the north of the site.

[redacted]

[redacted]

Hedgehog

Desk Study

3.3.25 The desk study returned multiple records for hedgehog *Erinaceous europaeus* from within the search area.

Site Assessment

3.3.26 The shrubs offer low value opportunities for dispersal, foraging and nest building for hedgehogs likely diminished by the dominance of bracken. Overall, hedgehogs have a **low** potential to utilise the site occasionally.

Birds

Desk Study

3.3.27 The desk study returned records for numerous species of birds from within the search area. This included records for species listed on Schedule 1 (Wildlife and Countryside Act, 1981) (as amended), and the Birds of Conservation Concern (BoCC) Red List (Stanbury *et al*, 2021). This included records for bird associated with woodland habitat, such as Marsh tit *Poecile palustris* and Cuckoo *Cuculus canorus,* as well as ground nesting species such as skylark *Alauda arvensis.*

Site Assessment

3.3.28 The individual trees mostly concentrated along the site boundaries represent some moderate nesting opportunities for passerine birds, and the suburban nature of this site is likely to limit potential species to more common and widespread species that are tolerant of human disturbance. The scrub habitat across the site offers potential low value ground nesting opportunities, although this is likely diminished by the limited extent of the site and the adjacent residential properties. The site is of **site level value** to local birds.

Water Vole

Desk Study

3.3.29 SxBRC returned 15no. record for water vole within the search area.

Site Assessment

3.3.30 No ditches or areas of wetland were present on site, and the bracken dominance across is unlikely to provide opportunities for this species. Therefore, it was considered that this area offers **negligible** potential to support water voles.

Invertebrates

Desk Study

3.3.31 SxBRC returned records for various species of protected / notable invertebrates from within the search area, including 122no. records for Stag beetle *Lucanus cervus* and 46 records for Cinabbar moth *Tyria jacobaeae.*

Site Assessment

3.3.32 The lack of diversity noted in the floral species composition and range of habitats / microhabitats, suggests that the site is unlikely to support a notable assemblage of invertebrate species. However, surrounding woodland habitats are likely to be highly suitable for species such as stag beetle given the abundance of deadwood.

Others

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

4.0 ASSESSMENT OF EFFECTS

4.0.1 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).

4.0.2 Protected species for which the construction zone offers negligible suitability have been scoped out of further assessment.

4.1 Designated Sites

Potential Impacts

4.1.1 Development proposals do not appear to meet the criteria which would require the LPA to consult with Natural England regarding potential impacts to any SSSI, however the site is within the 12km Wider Conservation Area of The Mens SAC. The site is also located within the Sussex North Water Supply Zone.

4.1.2 At c. 11.3km from The Mens SAC the site is located within the 'wider conservation area' for this site and 'significant impacts or severance to flightlines [are] to be considered'. Proposals do not involve any significant vegetation removal that could impact flightlines. Any eternal lighting could impact the use of retained and adjacent habitats by commuting bats.

4.1.3 The closest designated sites are Sullington Warren (0.8km) and Arun Valley SAC / SPA / RAMSAR (6.2km). Due to the intervening distances, existing habitats on site and small scale of the development, no impacts upon these sites are expected to occur.

4.1.4 Several nationally and locally designated areas were identified within a potential zone of influence of the site. A Local Wildlife Site, Heath Common was identified 100m from the site boundary. Construction on site has the potential to impact upon this site through pollution such as dust.

Mitigation and Compensation

4.1.5 All construction should be undertaken in accordance with best practice guidelines with regards to control of dust, noise, and any other potential emissions. Also, the external lighting design for the project should avoid nocturnal lighting wherever possible and should always avoid any new lighting directed at retained trees and adjacent habitats. Furthermore, any external lighting designs should be assessed by a suitably qualified ecologist to advise on their adherence to best practice standards regarding external lighting and bats (BCT & ILP, 2023) wherever possible.

Residual Impacts

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

4.2 Habitats

Potential Impacts

4.2.1 Development proposals will result in the loss of areas of bracken, bramble scrub, introduced shrub and individual trees (some of which are non-native species). These habitats are of broadly low ecological value, the loss of which would be of minor impact magnitude.

Mitigation and Compensation

4.2.2 Works during the construction phase shall be undertaken in accordance with best practice guidelines to control any excess dust and noise creation which may impact retained and adjacent habitats. Protection measures should also be provided for the retained trees in accordance with *BS5837:2012 - Trees in Relation to Design, Demolition, and Construction.*

4.2.3 Proposals would require the loss of trees on site, compensatory planting should replace those trees with a preference for native species.

Residual Impacts

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

4.3 Bats

Potential Impacts

4.3.1 In the absence of mitigation impacts could include the disruption of commuting corridors and foraging habitat through inappropriate lighting and loss of vegetated habitats on site. Due to the broadly low suitability of the habitats and suburban surrounds, impacts would be of minor significance and likely to occur.

4.3.2 Bat emergence surveys carried out in May / June 2025 did not records any emergences. Furthermore, endoscope inspection of tree T01 did not provide any evidence of a bat roost in that tree. It is considered therefore highly unlikely that the site supports roosting bats.

Mitigation and Compensation

4.3.3 Artificial light spill upon retained habitats should be avoided to allow the use of these areas as a foraging resource and commuting route for bats. Existing trees and adjacent vegetation should be retained where possible to support commuting routes. Please see section 4.1.5.

Residual Impacts

4.3.4 The overall impact of the scheme will be **negligible**.

4.4 [redacted] Hedgehog

Potential Impacts

4.4.1 In the absence of mitigation, impacts could include the trapping of [redacted] hedgehogs in footings / trenches, fragmentation of habitat, and disruption of commuting corridors. Impacts would be of low impact magnitude and likely to occur.

Mitigation and Compensation

4.4.2 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]

Residual Impacts

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

4.5 Breeding Birds

Potential Impacts

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

Mitigation and Compensation

4.5.2 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. To compensate for the loss of suitable nesting habitat bird boxes shall be fitted to the northern side of trees and integrated into the northern aspect of the proposed building during construction where practicable. Native planting should also be provided within the soft landscape scheme for the site to provide an enhanced range of foraging and nesting opportunities for birds.

Residual Impacts

4.5.3 The overall impact of the scheme will be **negligible.**

4.6 Great Crested Newts

Potential Impacts

4.6.1 Proposals may result in the removal of an area of suitable terrestrial habitat and therefore works could result in the killing or injuring of individual great crested newts; as well as potential degradation of surrounding terrestrial habitat. This would contravene the protection afforded great crested newts under The Conservation of Habitats and Species Regulations 2017 (as amended).

Mitigation and Compensation

4.6.2 To allow works to proceed it is recommended that the site is entered into the District Level Licence scheme administered by NatureSpace. The site is located within the red zone and as such mitigation measures will be required, although these would be reduced in comparison with traditional licencing. No further survey is required to enter into DLL. Naturespace have been contacted and have identified the site and proposals as 'low impact' and following payment of the one-time fee, NatureSpace will issue a certificate and impact plan detailing the mitigation requirements. The certificate must be issued to the local authority and all mitigation works completed prior to commencement of works.

4.7 Reptiles

Potential Impacts

4.7.1 The records collected suggest that reptiles favour the north and south of the site and much of the suitable habitat across the site would be lost during enabling and construction works.

Mitigation and Compensation

4.7.2 To ensure that works proceed in accordance with the protection afforded reptiles under The Wildlife and Countryside Act 1981 (as amended), the following methodology is recommended:

- An area of retained habitat within the east of the site shall be improved with appropriate native seed and management and with the provision of at least one hibernaculum.
- Site vegetation should be cleared from west to east towards the retained habitat.
- Site vegetation shall be cut in a phased approach, the first cut no lower than 500mm.
- The following day, the 2nd cut shall take the vegetation down to ground level, which should be maintained throughout the construction zone during the construction phase to avoid recolonisation of those areas.

- The phased vegetation cuts should be carried out with hand tools only such as strimmers, during the active reptile season (March-October) and in suitable weather conditions.
- Please note that other mitigation measures may be required as part of the district level licence for GCN at this site.

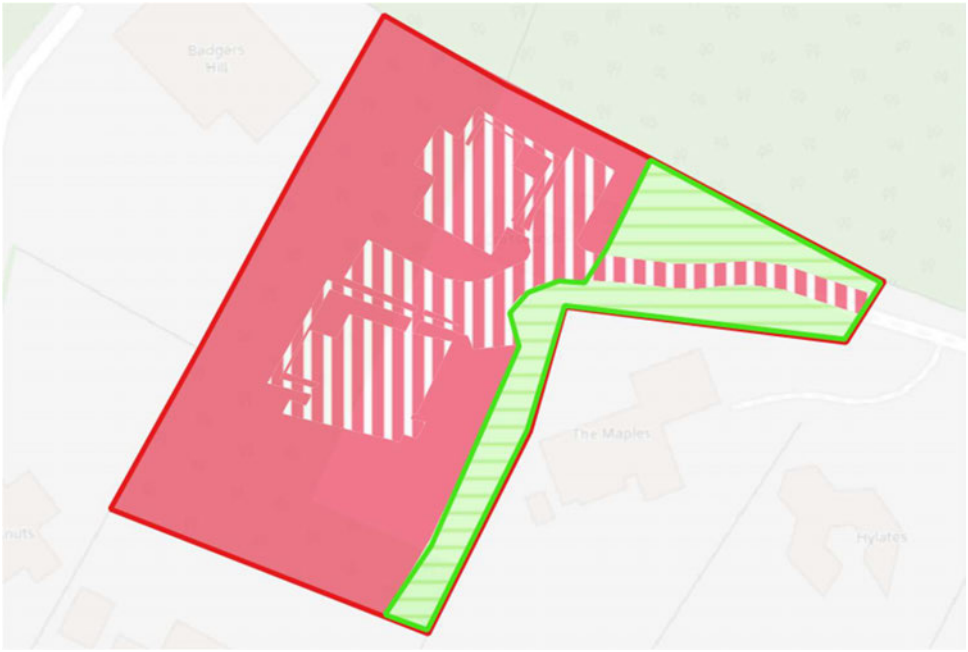

Figure No. 04 - Recommended retained and enhanced reptile habitat highlighted with a green outline.

4.8 Invertebrates

Potential Impacts

4.8.1 In the absence of mitigation, small areas of suitable habitat for common widespread invertebrates would be lost. The impacts would be of minor impact magnitude but certain to occur.

Mitigation and Compensation

4.8.2 The proposed landscape scheme shall include compensatory areas of native planting. Where non-native species are specified a focus on plants with a recognised wildlife value such as those on the RHS Plants for Pollinators lists. Many of the plant species used within the scheme shall have

Residual Impacts

4.8.3 The overall impact of the scheme will be **negligible**.

5.0 ECOLOGICAL ENHANCEMENTS

5.1 The design of the proposed development includes ecological enhancements for the benefit of wildlife to assist with compliance with *Local Planning Policy* and the *Environment Act 2021* which mandates a minimum 10% net gain in biodiversity across all development sites. Ecological enhancements which should be included as part of development proposals include.

- *The use of flowering plants with a recognised wildlife value within the soft landscape scheme to provide year-round interest for invertebrates;*
- *The use of seed and fruit bearing tree species such as cherry, rowan, birch, and crab apple within the scheme to provide a foraging resource for birds and invertebrates;*
- *Incorporation of bird boxes suitable for a range of species within the retained trees and to the northern aspect of the proposed buildings and / or trees;*
- *Bat boxes suitable for a range of species to be incorporated into the southern aspect of the proposed buildings and / or trees;*
- *Installation of invertebrate boxes suitable for a range of invertebrates to south facing walls / trees and in more sheltered areas in vegetation to provide for a range of species; and*
- *Creation of log piles within retained and enhanced grassland to the east of the site.*

6.0 CONCLUSIONS

6.1 The main body of the site is dominated by bracken and bramble scrub, habitats of broadly low ecological value. The mature trees across the site are of higher value and many would be retained and protected within the scheme.

6.2 Development proposals do not appear to meet the criteria which would require the LPA to consult with Natural England regarding potential impacts, however the site is within the 12km Wider Conservation Area of The Mens SAC. The site is also located within the Sussex North Water Supply Zone. The closest designated site is located c. 0.8km from 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 Further phase 2 surveys have been carried out from April to June 2025. Bat emergence surveys focused on the buildings and endoscope inspection focused on the tree T01 indicated a likely absence of roosting bats within the site area. Reptile surveys found that the site supports a low population of slow worms with a peak count of 2 adults. Precautionary vegetation clearance measures have been described herein and details of the enhancement of the receptor area should be provided to the local planning authority within a detailed reptile mitigation strategy, secured via condition. GCN eDNA analysis of water samples taken from ponds P1 and P2 located within 250m of the site gave a positive result for P1 and so GCN should be assumed to be present within the site. To allow works to proceed it is recommended that the site is entered into the District Level Licence (DLL) scheme administered by NatureSpace. The site is located within the red zone and as such mitigation measures will be required.

6.4 Habitats within the construction zone offer low value potential suitable habitat for hedgehogs, [redacted] invertebrates, commuting and foraging bats and breeding birds. Avoidance and mitigation measures have been built into the design of the scheme in accordance with the mitigation hierarchy and BS42020: 2013.

6.5 Opportunities for ecological enhancement have been provided to allow the ecological value to the site to be maximised. As a full planning application with no BNG exemptions, the development proposals shall be subject to the standard Biodiversity Gain Condition. A full Biodiversity Net Gain assessment of the site, and proposed habitat creation measures should accompany this application.

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Table No. 13 – Species List for Habitat Parcels

Bracken / Bramble Scrub

Common Name	Scientific Name	DAFOR
Bracken	*Pteridium aquilinum*	**F**
Bramble	*Rubus fruticosus agg.*	**D**
Broom species	*Cytisus sp.*	**O**
Clematis species	*Clematis sp.*	**R**
Foxglove	*Digitalis purpurea*	**R**
Gorse	*Ulex europaeus*	**O**
Moss species	*Bryophyta species*	**R**
Red fescue	*Festuca rubra*	**R**
Rhododendron species	*Rhododendron sp.*	**O**
Yorkshire fog	*Holcus lanatus*	**R**

Individual Trees

Common Name	Scientific Name	DAFOR
Common spruce	*Picea abies*	**A**
Cupressus species	*Cupressus sp.*	**O**
Eucalyptus species	*Eucalyptus sp.*	**O**
Holly	*Ilex aquifolium*	**O**
Oak	*Quercus robur*	**F**
Scots pine	*Pinus sylvestris*	**O**
Silver birch	*Betula pendula*	**O**

Introduced Shrubs

Common Name	Scientific Name	DAFOR
Bamboo species	*Bambusoideae sp.*	**D**

Bare Ground

Common Name	Scientific Name	DAFOR
Common sedge	*Carex nigra*	**O**
Greater plantain	*Plantago major*	**R**
Moss species	*Bryophyta species*	**O**
Yorkshire fog	*Holcus lanatus*	**R**

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

Appendix A – Planning Policy and Legislation

Legislation

Legislation relating to wildlife and biodiversity of particular relevance to this EcIA 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.*

This above legislation has been addressed, as appropriate, in the production of this report. Further details of legislation relating to the protection of particular ecological receptors are provided in the table below:

Ecological Constraint	Rationale
SACs (Special Area of Conservation), SPAs (Special Protection Areas) and Ramsars (Wetlands of International Importance)	Under the Conservation of Habitats and Species Regulations 2017 places a duty on the competent authority to maintain the favourable conservation status of designated SAC, SPA and Ramsar sites. Therefore, where it appears to the appropriate nature conservation body that a notice of a proposal relates to an operation which is, or forms, part of a plan or project which is likely to have a significant effect on a European site (either alone or in-combination with other plans or projects), and (b) is not directly connected with or necessary to the management of that site, it must make an appropriate assessment of the implications for that site in view of that site's conservation objectives. In the light of the conclusions of the assessment, it may give consent for the operation only after having ascertained that the plan or project will not adversely affect the integrity of the site.
European protected species (bats, otters, dormice, water voles, great crested newts)	It is an offence under the Conservation of Habitats and Species Regulations 2017 to deliberately kill or injure a European protected species, to destroy breeding/resting sites, or to deliberately disturb these species and affect their ability to survive, rear young, breed, or hibernate.
Nationally protected species (bats, water vole, otter)	It is an offence under the Wildlife and Countryside Act 1981 (as amended) to intentionally or recklessly disturb a species listed on Schedule 5 whilst it is in a place of shelter, or to obstruct access to a place for shelter.
Nationally protected species (reptiles)	It is an offence under the Wildlife and Countryside Act 1981 (as amended) to kill or injure common species of reptiles.

Ecological Constraint	Rationale
National conservation priority species (white-clawed crayfish, fish, common toad, reptiles, noctule, water vole, otter, hedgehog), i.e., UKBAPs	Section 41 of the NERC Act 2006 requires the Secretary of State to publish a list of species and habitats that are of principal importance for the conservation of biodiversity, and to take, and promote others to take, such steps to further the conservation of these habitats and species. These species and habitats will be considered by Planning Authorities in regard to the National Planning Policy Framework (Ministry of Housing, Communities & Local Government, 2021) to conserve and enhance the natural environment.
Badgers	It is an offence under the Protection of Badgers Act 1992 to damage or destroy a badger sett; obstruct any entrance of a badger sett; and disturb a badger whilst it is occupying a badger sett.
Wild mammals (rabbits, foxes, water vole, otter, hedgehog, badger)	It is an offence under the Wild Mammals (Protection) Act 1996 to inflict unnecessary suffering to any wild mammal with intent.
Nesting birds	It is an offence under the Wildlife and Countryside Act 1981 (as amended) to damage or destroy a bird's nest whilst it is in use, and to kill or injure a bird or destroy an egg.
Non-statutory designated sites (SNCI's, LWS, LNR's, etc.)	LNRs are designated under Section 21 of the National Parks and Access to the Countryside Act 1949, which was amended by the Natural Environment and Rural Communities Act 2006. The value for biodiversity of LNRs and LWSs are recognised, and the sites and surrounding buffers are protected by the Local Plan.
Biodiversity	Section 40 of the NERC Act 2006 states that each 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." This legislation makes it clear that planning authorities should consider impacts to biodiversity when determining planning applications. Chapter 15 of the National Planning Policy Framework (Ministry of Housing, Communities & Local Government, 2021) states that the planning system and policies should minimise impacts on and provide net gains for biodiversity, and that, if significant harm to biodiversity would result from a development, then development should be avoided (through locating on alternative sites with less harmful impacts).
Irreplaceable habitats (ancient woodland, veteran trees, lowland meadows)	Chapter 15 of the National Planning Policy Framework (Ministry of Housing, Communities & Local Government, 2021) states that development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists.

Local Planning Policy

The Horsham District Planning Framework (HDC, 2015) sets out the planning policies for development in the district in relation to biodiversity. Those of potential relevance to this assessment are highlighted in the table below:

eference	ext
1: Green Infrastructure and Biodiversity	Development will be supported where it can demonstrate that it maintains or enhances the existing network of green infrastructure. Proposals that would result in the loss of existing green infrastructure will be resisted unless it can be demonstrated that new opportunities will be provided that mitigates or compensates for this loss, and ensures that the ecosystem services of the area are retained. Development proposals will be required to contribute to the enhancement of existing biodiversity, and should create and manage new habitats where appropriate. The Council will support new development which retains and / or enhances significant features of nature conservation on development sites. The Council will also support development which makes a positive contribution to biodiversity through the creation of green spaces, and linkages between habitats to create local and regional ecological networks. Where felling of protected trees is necessary, replacement planting with a suitable species will be required. a) Particular consideration will be given to the hierarchy of sites and habitats in the district as follows: Special Protection Area (SPA) and Special Areas of Conservation (SAC) Sites of Special Scientific Interest (SSSI) and National Nature Reserves (NNRs) Sites of Nature Conservation Importance (SNCIs), Local Nature Reserves (LNRs) and any areas of Ancient woodland, local geodiversity or other irreplaceable habitats not already identified in i & ii above. e development is anticipated to have a direct or indirect adverse impact on sites or features for biodiversity, development will be refused unless it can be demonstrated that: ason for the development clearly outweighs the need to protect the value of the site; and, ppropriate mitigation and compensation measures are provided. Any development with the potential to impact Arun Valley SPA or the Mens SAC will be subject to a HRA to determine the need for an Appropriate Assessment. In addition, development will be required to be in accordance with the necessary mitigation measures for development set out in the HRA of this plan.

Appendix B – Protected Species Survey Reports

LIZARD
Landscape Design and Ecology

REPTILE SURVEY REPORT

Crosswinds, Hampers Lane, Storrington, West Sussex

On behalf of: Mark Alford Design Limited

Client:	Mark Alford Design Limited			
Project:	Crosswinds, Hampers Lane, Storrington, West Sussex			
Reference:	LLD3413-ECO-REP-003-00-Reptile			
Revision:	**Date:**	**Author**	**Proof**	**Approved**
00	01/08/25	Sam Hall BSc (Hons) MSc	Max Day MSci (Hons)	Catherine O'Reilly MCIEEM

Disclaimer:

The information provided within this report has been prepared and provided in accordance with the Chartered Institute of Ecology and Environmental Management's (CIEEM) Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bona fide opinions.

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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 has been commissioned by Mark Alford Design Limited to complete a reptile presence / absence and population assessment of Crosswinds, Hampers Lane, Storrington, West Sussex (*Central Grid Reference:* TQ 10769 14316 – *hereafter referred to as 'the site'*).

20no. artificial reptile refugia *(roofing felt; 1.0 x 0.50 m)* were laid out in all suitable habitat on the 1st of April 2025. Refugia were allowed to bed-in for 14 days prior to survey visits beginning on the 15th of April 2025.

The results of the survey recorded a peak count of 2no. adult slow worm *Anguis fragilis* on site. Small numbers of juvenile slow worm were also recorded during the surveys.

To ensure the protection of reptile species on site, careful, controlled and supervised vegetation clearance should be used to encourage the low numbers of reptiles into retained habitat. The retained habitat should be subject to a long-term management plan to ensure that its suitability for reptiles is maintained in perpetuity. The implementation of these mitigation measures will ensure that that no reptiles are harmed and the development proceeds in accordance with The Wildlife and Countryside Act 1981 (as amended).

1.0 INTRODUCTION

1.1 Lizard Landscape Design and Ecology has been commissioned by Mark Alford Design Limited to complete a reptile presence / absence and population assessment of Crosswinds, Hampers Lane, Storrington, West Sussex (*Central Grid Reference:* TQ 10769 14316 – *hereafter referred to as 'the site'*).

1.2 The site was subject to a Preliminary Ecological Appraisal in December 2024 which found suitable reptile habitat on site in the form of bracken and scrub. As much of this habitat shall require removal to facilitate proposals a full reptile survey was recommended to assess the presence / absence of reptiles on site.

1.3 This report has been compiled in accordance with current guidelines, including British Standard 42020:2013 Biodiversity. Code of Practice for Planning and Development, 2013 and CIEEM, 2017 and 2018.

Site Information

1.4 The site covers an area of c. 0.34ha and consists of an L-shaped residential plot with 1no dwelling and 2no. outbuildings. The site is situated in a suburban area and surrounded by further residential development on all sides, although the land adjacent to the north of the site is densely wooded. The boundary of the South Downs National Park is located c. 400m east and 600 south of the site. The soil on site is described as freely draining very acid sandy and loamy soils.

Surrounding Landscape

1.5 The site is located on the edge of Storrington in an area known as Heath Common. The surroundings are rural, with extensive agricultural grazing pasture and well-connected hedgerows extending in all directions. The chalk escarpment which characterises the South Downs National Park is located approximately 1.8k south and extends to the east and west from that point. Several settlements are located in all directions, most notably Worthing which is approximately 8.5km south. The A24 runs north to south approximately 1.5km to the east and a sand quarry is located approximately 300m to the southwest.

1.6 The surrounding landscape is suitable for common UK reptile species, however no suitable habitat for sand lizard *Lacerta agilis* or smooth snake *Coronella austriaca* exists in the vicinity.

Development Proposals

1.7 It is understood that the proposals are for the demolition of the existing dwelling and associated outbuildings and subsequent redevelopment of the site including 2no. new homes, 2no. garages and associated access and soft landscaping.

Scope of the Survey

1.8 The aim of the reptile survey has been to:

- Determine whether reptiles exist on site;
- Provide an assessment of the distribution and population of reptiles within the site, if present; and
- Provide a mitigation strategy to ensure reckless killing / injury of reptiles is avoided, such that works would comply with *The Wildlife and Countryside Act (1981) (as amended)* and net gains for reptiles are achieved.

2.0 LEGISLATION

2.1 All species of UK reptile are listed under Schedule 5 Wildlife and Countryside Act 1981 (as amended). Reptiles are afforded protection under section 9(1) and section 9(5) against intentional killing or injuring, offering for sale, transport for sale or advertisement of any live or dead reptile. All UK reptile species are also recognised as species of principal importance under Section 41 of the Natural Environment and Rural Communities Act 2006, meaning that local authorities must take into account the conservation of reptiles when assessing a planning application.

2.2 Smooth Snake *Coronella austriaca* and Sand Lizard *Lacerta agilis* receive additional protection under The Conservation of Habitats and Species Regulations 2017 (as amended) which makes it an offence to kill, injure, capture or disturb them; damage or destroy their habitat; or to possess or trade in them.

Licensing

2.3 If a site is found to support Smooth Snake or Sand Lizard and disturbance or removal or habitat is unavoidable, a licence will be required from Natural England to allow work to proceed.

2.4 A licence must show that there is no satisfactory alternative to the works proposed, and that they are for reasons of health and safety or overriding reasons of public interest. Licenses are only issued once planning permission has been granted.

2.5 There is no formal licensing requirement for sites which support only common UK reptile species (slow worm *Anguis fragilis*, common lizard *Zootoca vivipara*, adder *Vipera berus* or grass snake *Natrix helvetica*).

3.0 METHODOLOGY

3.1 Field Survey

3.1.1 20 no. artificial reptile refugia (roofing felt; 1.0 x 0.50 m) were laid out in all suitable habitat on the 1st of April 2025. Refugia were allowed to bed-in for 14 days prior to survey visits beginning on the 15th of April 2025. The locations of artificial reptile refugia are detailed within *Figure No. 01.*

Figure No. 01 – Location of Reptile Refugia. Red squares indicate the locations of slow worm sightings.

3.1.2 7no. site visits were conducted, where the number, species, age and sex of the reptile's present were recorded. Debris piles on-site considered suitable as reptile refugia were checked during the surveys, and repeated walkovers of the site were used to search for active reptiles.

3.1.3 Surveys were undertaken during recommended times *(08:00 – 11:00 and 16:00 – 18:30)* with suitable weather conditions for surveying reptiles wherever possible *(guidelines recommend temperatures 9-18°C)*.

Table No. 01 – Weather Conditions during Surveys

Survey	Date of Visit	Time	Temp.	Weather Conditions
1	15/04/2024	16:00	14°C	Dry, WF2, 30% cloud
2	22/04/2025	09:15	12°C	Dry, WF1, 50% cloud
3	28/04/2025	08:45	12°C	Dry , WF1, 0% cloud
4	02/05/2025	09:15	17°C	Dry, WF0, 0% cloud
5	07/05/2025	09:00	14°C	Dry, WF1, 30% cloud
6	13/05/2025	09:40	17°C	Dry, WF1, 10% cloud
7	19/05/2025	10:00	15°C	Dry, WF1, 40% cloud

3.2 Population Assessment

3.2.1 Reptile populations were assessed in accordance with population level criteria as stated for the Key Reptile Site Register (*Froglife, 1999*). This system classifies populations of individual reptile species into three population categories assessing the importance of the population. These categories are based on the total number of adult animals observed during individual survey occasions and based upon a survey density of 10/Ha.

Table No. 02 – Population Size Assessment

Species	Low Population	Good Population	Exceptional Population
Slow Worm	<5	5-20	>20
Common Lizard	<5	5-20	>20
Grass Snake	<5	5-10	>10
Adder	<5	5-10	>10

3.3 Details of Surveyors

3.3.1 The reptile survey was undertaken by the following ecologists, all of which have extensive experience undertaking both reptile surveys and reptile translocation:

- Catherine O'Reilly – Principal Ecologist, 11 years experience.
- Sam Hall – Consultant Ecologist, 4 years' experience.
- Max Day – Consultant Ecologist, 2 years' experience.
- Owen Beesley – Assistant Ecologist, 1 years' experience.
- Ben Lapham – Assistant Ecologist, 1 years' experience.

3.4 Constraints and Limitations

3.4.1 No constraints were recorded during the survey period.

4.0 RESULTS

4.1 The results of the survey recorded a peak count of 2no. adult slow worm on site. No other reptile species were recorded during the surveys. A summary of each visit is detailed below:

Table No. 03 – Summary of Results (adults only)

Survey	*Date of Visit*	*Results*
1	15/04/2024	No records
2	22/04/2025	2no. slow worm
3	28/04/2025	2no. slow worm
4	02/05/2025	1no. slow worm
5	07/05/2025	No records
6	13/05/2025	1no. slow worm
7	19/05/2025	1no. slow worm

4.2 The results indicate a low population of slow worm. Reptiles were scattered along the north and southwest boundaries.

4.3 A single juvenile slow worm was encountered on the 7th visit, indicative of a small breeding population.

5.0 EVALUATION AND RECOMMENDATIONS

5.1 Impacts

5.1.1 Without some form of mitigation there is a risk that development could result in the killing or injuring of reptiles, contrary to The Wildlife and Countryside Act 1981 (*as amended),* and loss of areas of suitable reptile habitat.

5.2 Mitigation

5.2.1 The records collected suggest that reptiles favour the north and south of the site and much of the suitable habitat across the site would be lost during enabling and construction works. To ensure that works proceed in accordance with the protection afforded reptiles under The Wildlife and Countryside Act 1981 (as amended), the following methodology is recommended:

- An area of retained habitat within the east of the site shall be improved with appropriate native seed and management and with the provision of at least one hibernaculum.
- Site vegetation should be cleared from west to east towards the retained habitat.
- Site vegetation shall be cut in a phased approach, the first cut no lower than 500mm.
- The following day, the 2nd cut shall take the vegetation down to ground level, which should be maintained throughout the construction zone during the construction phase to avoid recolonisation of those areas.
- The phased vegetation cuts should be carried out with hand tools only such as strimmers, during the active reptile season (March-October) and in suitable weather conditions.
- Please note that other mitigation measures may be required as part of the district level licence for GCN at this site.

5.2.2 The retained habitat should be prepared and seeded with an appropriate wildflower seed mix and left to grow into tussocks. Enhancement of this area should also include a log pile or hibernaculum to provide additional niches for the benefit of reptiles.

5.2.3 Full details of the off-site receptor area should be provided to the local planning authority within a detailed reptile mitigation strategy, secured via condition.

5.4 Management

5.4.1 A suitable management plan should be in place to ensure the retention of suitable habitat within any identified off-site receptor area in perpetuity. Management should include rotational cutting of the grassland on a two-year cycle to prevent scrub encroachment whilst ensuring that areas of suitable habitat always remain present on site.

6.0 CONCLUSION

6.1 The site supports a low population of slow worm. A low number of juveniles were also recorded, indicative of a small breeding population of slow worm.

6.2 The proposals shall require the removal of reptile habitat to facilitate the scheme. The implementation of the above mitigation measures will ensure that no reptiles are harmed and the development proceeds in accordance with The Wildlife and Countryside Act 1981 (as amended).

6.3 Subject to identification of a suitable off-site receptor area and long-term management plan, the scheme shall have no significant impact upon the local reptile population.

7.0 REFERENCES

Froglife (1999) *Reptile Survey: an introduction to planning, conducting and interpreting surveys for snake and lizard conservation. Froglife Advice Sheet 10*. Froglife: Halesworth

Herpetofauna Groups Of Britain And Ireland (1998) *Evaluating local mitigation/translocation programmes: Maintaining Best Practice and lawful standards.* HGBI advisory notes for Amphibian and Reptile Groups (ARGs). HGBI, c/o Froglife: Halesworth.

Joint Nature Conservation Committee (1998) *Herpetofauna Worker's Manual* (Gent, T. and Gibson, S. eds) JNCC: Peterborough

LIZARD
Landscape Design and Ecology

BAT EMERGENCE SURVEY REPORT

Crosswinds, Hampers Lane, Storrington, West Sussex

On behalf of: Mark Alford Design Limited

Client:	Mark Alford Design Limited			
Project:	Crosswinds, Hampers Lane, Storrington, West Sussex			
Reference:	LLD3413-ECO-REP-004-00-BES			
Revision:	**Date:**	**Author**	**Proof**	**Approved**
00	01/08/2025	William Brand	Sam Hall MSc, BSc (Hons)	Sam Hall MSc, BSc (Hons)

Disclaimer:

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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 has been commissioned to undertake a bat emergence survey of Crosswinds, Hampers Lane, Storrington, West Sussex (*Grid Reference: TQ 10769 14316 – hereafter referred to as 'the site'*).

The existing buildings on site were categorised as offering 'moderate', 'low' and 'negligible' bat roost suitability respectively for B1, B2 and B3 during the Preliminary Roost Assessment undertaken on the 13th of December 2024. 2no. dusk bat emergence surveys were completed on the 19th of May and 17th of June 2025 for B1 and 1 dusk bat survey on the 17th of June for B2 to ascertain the presence / likely absence of a roost within the building. A single surveyor was also focused on B3 on the 17th of June as a precautionary approach.

No bats were seen to emerge from the buildings at any time during the survey period.

Bat activity was high during the surveys. During the first survey multiple species were seen, these included common pipistrelle, soprano pipistrelle, serotine, brown-longed eared bat and Leisler's. Serotine were highly active and observed commuting, and foraging throughout the survey. During the second survey for B1 Multiple bat species were observed and heard, these included the same species as before and also noctule, a long-eared species and a myotis species.

During the survey of B2 there was moderate activity with many bats heard but not seen, some were observed foraging and commuting, mostly foraging, these were common and soprano pipistrelle, serotine, a long-eared species and one noctule.

During the survey of B3 activity was high with multiple species heard and observed commuting, travelling and foraging, these included common and soprano pipistrelle, serotine, a daubenton's and a leisler's.

The results of the survey strongly suggest the likely absence of a bat roost within the site. No further survey visits or any mitigation measures are required; the scheme is considered highly unlikely to contravene the protection afforded bats under The Conservation of Habitats and Species Regulations 2017 (as amended).

1.0 INTRODUCTION

1.1 Lizard Landscape Design and Ecology has been commissioned to undertake a bat emergence survey of Crosswinds, Hampers Lane, Storrington, West Sussex (*Grid Reference: TQ 10769 14316– hereafter referred to as 'the site'*).

1.2 The existing buildings on site were categorised as offering 'moderate', 'low' and 'negligible' bat roost suitability respectively for B1, B2 and B3 during the Preliminary Roost Assessment undertaken on the 13th of December 2024. The purpose of the survey and this report is to establish the presence or absence of a bat roost within the buildings and allow the full impact of the proposed development to be established.

1.3 This report has been compiled in accordance with current guidelines, including British Standard 42020:2013 Biodiversity. Code of Practice for Planning and Development, 2013 and Bat Conservation Trust Best Practise Guidelines 2016.

Site Information

1.4 The site covers an area of c. 0.34ha and consists of an L-shaped residential plot with 1no dwelling and 2no. outbuildings. The site is situated in a suburban area and surrounded by further residential development on all sides, although the land adjacent to the north of the site is densely wooded. The boundary of the South Downs National Park is located c. 400m east and 600 south of the site. The soil on site is described as freely draining very acid sandy and loamy soils.

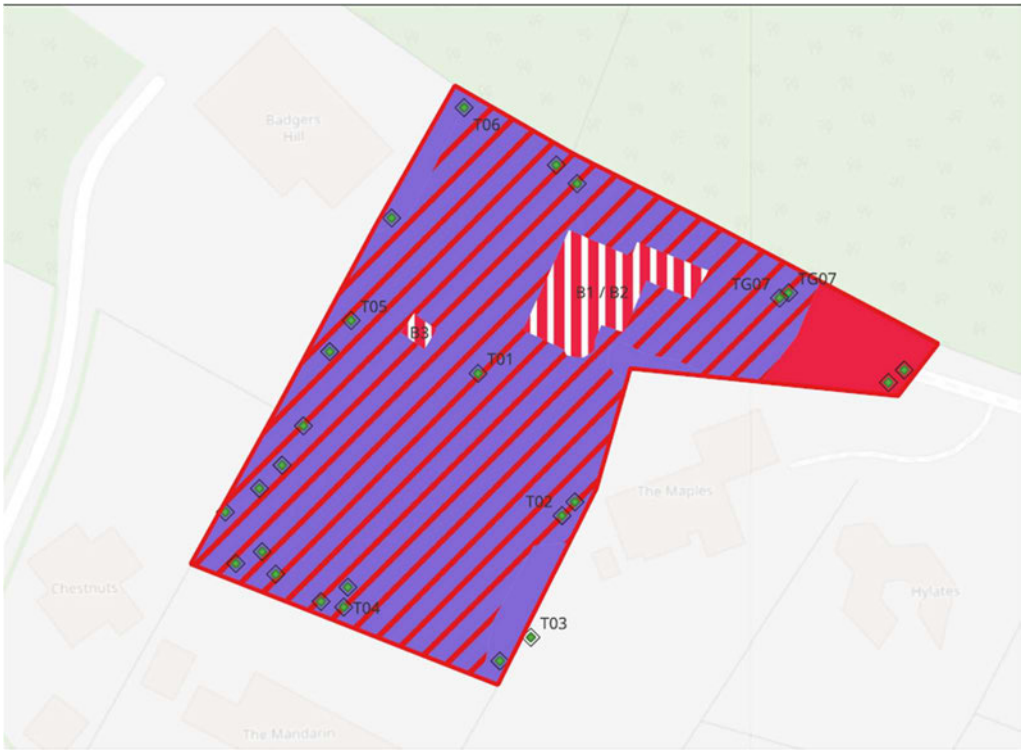

Figure No. 01 – Site Location

Surrounding Landscape

1.5 The site is located on the edge of Storrington in an area known as Heath Common. The surroundings are rural, with extensive agricultural grazing pasture and well-connected hedgerows extending in all directions. The chalk escarpment which characterises the South Downs National Park is located approximately 1.8k south and extends to the east and west from that point. Several settlements are located in all directions, most notably Worthing which is approximately 8.5km south. The A24 runs north to south approximately 1.5km to the east and a sand quarry is located approximately 300m to the southwest.

1.6 The surrounding landscape is relatively open and as such is suitable for generalist species such as common pipistrelle and aerial hawkers such as noctule. Due to the open nature of the surrounding land, the site is considered to be unsuitable for woodland dwelling Annex I species such as Bechsteins' or barbastelle.

Development Proposals

1.7 It is understood that the proposals are for the demolition of the existing dwelling and associated outbuildings and subsequent redevelopment of the site including 2no. new homes, 2no. garages and associated access and soft landscaping.

2.0 SCOPE OF THE SURVEY

2.1 The aim of the survey has been:

- To assess the buildings for signs of current use by bats;
- To establish the location of any roosts if present;
- To establish the numbers and species of bats present;
- To identify access points and flight lines to and from the building;
- To provide suitable mitigation measures if required.

3.0 METHODOLOGY

3.1 Bat Emergence Surveys

3.1.1 In accordance with current best practise guidelines (BCT, 2023), two bat emergence surveys of were completed on the 19th of May and 17th of June 2025 to ascertain the presence / likely absence of a roost within the buildings.

3.1.2 3no. bat surveyors were assigned a point each to adequately cover all potential roost features of B1. 1no. bat surveyors were assigned a point each to adequately cover all potential roost features of B2. 1no. bat surveyor was assigned a point to adequately cover all potential roost features of B3. 5 no. infra-red cameras with additional illuminators were also used to aid the survey (*Refer to Figure No. 02 – Location of Survey Points*).

3.1.3 The survey started 15 minutes before sunset and terminated approximately 1.5 hours after sunset. Data including species, behaviour and general patterns of activity were recorded throughout the survey. Details of the survey visits can be found in *Table No. 01*.

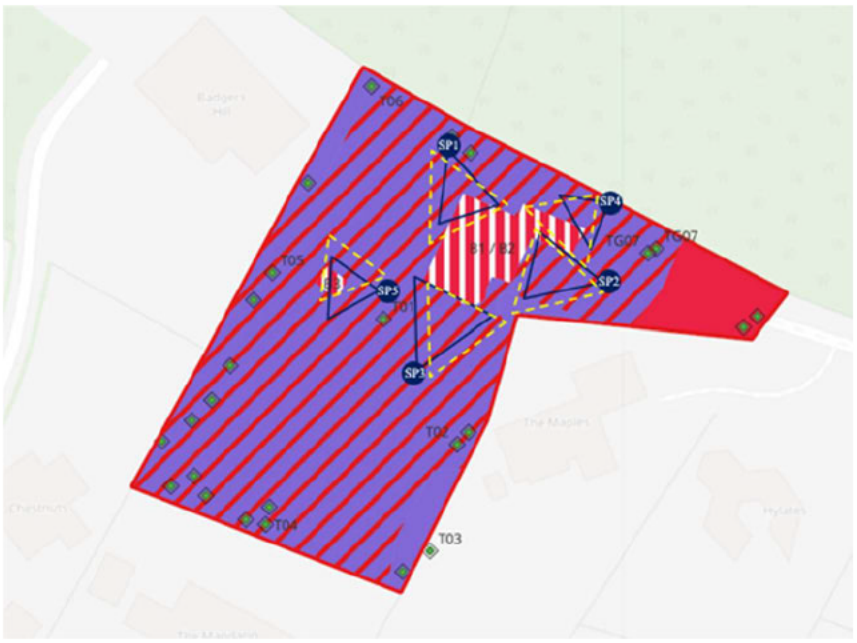

Figure No. 02 - Location of Survey Points (SP) and IR camera views illustrated with a yellow dotted line.

Table No. 01 – Bat Emergence Survey Details

Date	19/05/2025 B1	17/06/2025 B1	17/06/2025 B2	17/06/2025 B3
Survey Type	Dusk	Dusk	Dusk	Dusk
Surveyors	RE OB AC	CO SH JP	HC	AC
Weather	16ºC, WF 0, 10% cloud, dry	18ºC, WF1, 10% cloud, dry	18ºC, WF1, 10% cloud, dry	18ºC, WF1, 10% cloud, dry
Sunset	20:51:00	21:19:00	21:19:00	21:19:00
Start	20:36:00	21:04:00	21:04:00	21:04:00
Finish	22:21:00	22:49:00	22:49:00	22:49:00

Data Analysis

3.1.4 Bats were identified using Echo Meter Touch Pro 2 and Peersonic RPA3 full spectrum bat detectors. Sonogram analysis was undertaken using the Kaleidoscope programme.

3.2 Limitation and Constraints

3.2.1 No limitations to the emergence surveys was encountered, they were undertaken at the optimal time of year and in suitable weather conditions for bats to be active.

4.0 RESULTS

4.1 Desk Study

4.1.1 The desk study returned a total of 163no. bat species records, including records for common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelle *Pipistrellus pygmaeus*, barbastelle *Barbastella barbastellus*, serotine *Eptesicus serotinus*, Daubenton's *Myotis daubentonii*, whiskered *Myotis mystacinus*, Natterer's *Myotis nattereri*, Leisler's *Nyctalus leisleri*, noctule Nyctalus noctule and Brown long eared bat *Plecotus auritus*.

4.2 Preliminary Roost Assessment

4.2.1 The initial survey completed in December 2024 assessed all buildings within the site. B1 is a brick-built house with a tiled pitched roof and a dormer on the north side. The property was in disrepair, with decayed wooden soffits, loose tiles, and flashing around the chimney—creating potential access points. The building was unused, and the first floor inaccessible. Any loft space would be minimal due to the design. No signs of roosting bats were found. B2 is a concrete garage with a tiled roof heavily covered in ivy, limiting inspection. Most roof felt was missing or damaged and there was limited potential for crevice-dwelling bats. B3 is a small brick outbuilding with a pitched tiled roof. Several tiles were missing or slipped, and the doorway was open. While wooden cladding was intact beneath the tiles, there were no suitable cavities, and the open exposure makes it unlikely to support bats. The buildings were categorised as offering 'moderate' 'low' and 'negligible' suitability respectively. For full details of the PRA refer to the Preliminary Ecological Appraisal (Lizard Landscape Design & Ecology, May 2025).

4.3 Bat Emergence / Re-entry Surveys

4.3.1 No bats were seen to emerge from the building at any time during the survey period.

4.3.2 Bat activity was high throughout both surveys, with multiple bats heard but not seen at all survey points. Detected species included common and soprano pipistrelle and serotine. During the first survey between 21:37 and 22:23, common and soprano pipistrelles were observed commuting and foraging around Building B1. Serotine activity was particularly high at this location, with multiple individuals seen commuting and foraging.

4.3.3 The second survey recorded a greater diversity of species and more frequent observations. In addition to the species detected during the first survey, noctule, Leisler's (lesser noctule), a long-eared species (grey or brown), a Myotis species, and Daubenton's bat were recorded.

4.3.4 B1: Multiple bats were observed commuting and foraging between 21:36 and 22:29, including common and soprano pipistrelle, serotine, and a noctule seen at 21:45. A Myotis species was heard but not seen at 22:09, and a long-eared species was heard at 22:29. A noctule was heard simultaneously by two surveyors at 22:39.

4.3.5 B2: Moderate activity was recorded between 21:44 and 22:40, with a mix of species heard but not seen. These included soprano and common pipistrelle, serotine, a long-eared species (heard at 21:44), and a noctule (heard between 22:39 and 22:40).

4.3.6 B3: Activity was high between 21:44 and 22:45, with several species heard and observed commuting and foraging. Common and soprano pipistrelle, serotine, a faint Daubenton's bat (heard at 22:37), and a lesser noctule (heard but not seen at 22:39) were all recorded.

5.0 EVALUATION AND CONCLUSION

5.1 The results of the survey strongly suggest the likely absence of a bat roost within the dwelling on site.

5.2 Although bats were recorded on site within the typical emergence time these bats clearly originated from outside the site and did not emerge from the structure. All other bats appeared on site well after the expected emergence times for the species and were seen entering the site from various directions outside of the site, rather than emerging from the building.

5.3 Given the results of the survey, no further survey visits or any mitigation measures are required. The scheme is considered highly unlikely to contravene the protection afforded bats under The Conservation of Habitats and Species Regulations 2017 (as amended).

5.4 The scheme should provide ecological enhancements for the benefit of biodiversity, including enhancements for bats. Measures should include the installation of bat boxes to the southern aspect of new building and incorporation of pale and night species plant species within the soft landscape scheme.

6.0 REFERENCES

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Appendix A – Full Survey Results

Date	19/05/2025
Survey Type	Dusk
Sunrise / Sunset	20:51:00
Start Time	20:36:00
End Time	00:00:00
Start Temp	16 ºC
End Temp	13
Wind (Beaufort)	0
Cloud Cover	1/8
Rain	None

Surveyor	RE	
Point	B1 South-west by Eucalyptus feature	
Time	**Species**	**Notes**
21:37	OTHER	Possible faint pip, brief no id
21:42	SPIP	Brief
21:48	SPIP	Brief
21:50	SERO	HNS
21:52	SERO	HNS
21:53	CPIP	Feeding
21:55	CPIP	HNS
21:55	SERO	Faint
21:56	SERO	Lots of serotine, at least 2mins worth
22:00	SERO	Serotines still passing
22:07	SERO	Still foraging, on and off
21:16	SPIP	Passing
21:16	CPIP	Passing
21:16	SERO	Still lots of activity
21:20	CPIP	Passing
21:21	SERO	Likely more SERO
21:22	CPIP	HNS
21:23	SERO	Serotine still frequently calling

Surveyor	OB	
Point	NE of B1	
Time	**Species**	**Notes**
21:36	SPIP	HNS
21:41	SPIP	HNS
21:48-56	SERO	Commuting NE to NW and foraging around B1
21:52	CPIP	Or spip, HNS
21:55	PIP SP.	HNS
21:57-22:17	SERO	4 x serotine foraging

Surveyor	AC	
Point	SE of B1	
Time	**Species**	**Notes**
21:44	CPIP	Commuting over going from NE to SE
21:48	SPIP	HNS
21:50	SERO	Came commuting towards SE
21:50-56	SERO	Foraging back and forth
21:52	CPIP	HNS
21:58- 01	SERO	6x bats commuting along treeline then coming in and out foraging
22:03-23	SERO	4x bats foraging above me

Date	17/06/2025
Survey Type	Dusk
Sunrise / Sunset	21:19:00
Start Time	21:04
End Time	22:49:00
Start Temp	18 ºC
End Temp	16
Wind (Beaufort)	1
Cloud Cover	1/8
Rain	None

Surveyor	CO	
Point	NW of B1	
Time	**Species**	**Notes**
21:10	PIP SP.	HNS
21:45	NOCT	Flying S over W boundary of site
21:46	SPIP	Foraging along treeline to N
21:48	CPIP	Flying W over building,
21:48	CPIP	Commuting north
21:52	SERO	Flew from W hen looped E gable
21:54	PIP SP.	Flying S to N
21:57	SERO	Flying W to E
21:59	SERO	Foraging around W gable
21:59	CPIP	Flying W to E over Sam
22:04	SPIP	Flying E to W
22:07	CPIP	HNS
22:17	SPIP	HNS
22:22	CPIP	Flying N
22:29	SERO	Foraging over site
22:37	SERO	HNS
22:39	NOCT	HNS

Surveyor	SH	
Point	SW of B1	
Time	**Species**	**Notes**
21:36	SPIP	Commute overhead. W to E
21:44	NOCT	HNS
21:47	SPIP	Commute overhead E to W
21:51	SERO	Commute over building W to E
21:54	CPIP	HNS
21:57-01	SERO	HNS multiple passes
21:59-09	CPIP	Forage overhead
22:04	SPIP	Forage overhead
22:13	SERO	Commute over building W to E
22:18	CPIP	HNS
22:20	SERO	HNS
22:21-22	CPIP	HNS
22:25-27	SPIP	HNS
22:28-29	SERO	Forage overhead. circling
22:31-34	CPIP	HNS
22:37	SERO	HNS
22:40	CPIP	HNS
22:45	CPIP	HNS

Surveyor	JP	
Point	SE	
Time	**Species**	**Notes**
21:44	NOCT	HNS
21:47	SPIP	Brief HNS
21:52	SERO	Flew from NW to SE
21:57	SERO	Flew from NW to SE
21:59	SERO	Foraging around eastern side
22:08	CPIP	Foraging overhead then flew east
22:09	MYOT SP.	HNS (auto id NATT)
22:13	SERO	Foraging, flew NE to SW
22:18	CPIP	Flew NW to SE
22:19	SERO	Flew SE to NW
22:20	CPIP	HNS
22:22	CPIP	Flew NW to SE, foraged overhead briefly
22:26	SPIP	HNS
22:29	LE SP.	HNS
22:29	SERO	HNS multiple passes
22:36	NOCT	HNS
22:37	SERO	HNS
22:39	NYC SP.	HNS

Surveyor	HC	
Point	NE B2	
Time	**Species**	**Notes**
21:44	LE SP.	Faint call
21:48	SPIP	HNS
21:52	SERO	NW-SE Foraging
21:57-59	SERO	Commute over house W-E to then forage
22:08	CPIP	HNS Foraging
22:10-13	SERO	HNS Foraging
22:18	CPIP	W-SE Commuting over building
22:20-22	CPIP	HNS Foraging
22:23	SPIP	HNS
22:26	CPIP	HNS
22:29-37	SERO	Foraging
22:39-40	NOCT	HNS Foraging

Surveyor	AC	
Point	E of B3	
Time	**Species**	**Notes**
21:44	CPIP	Faint HNS
21:46	CPIP	Faint HNS
22:48	SPIP	Faint HNS
22:52	SERO	HNS
21:54	CPIP	HNS
21:57	SERO	Commuting from E to W towards building
21:58	SERO	Constant foraging around bracken and treeline
22:00-08	CPIP	Intermittent foraging
22:04-08	SPIP	Intermittent foraging
22:18	CPIP	HNS
22:20	SERO	Travelling along E treeline
22:25	SPIP	Travelling W towards building
22:26	CPIP	Commuting high towards N trees
22:26	CPIP	HNS
22:29	SERO	Foraging over me
22:31	CPIP	Commuting high going SW
22:34	CPIP	HNS multiple passes
22:37	DAUB	HNS faint
22:38	SERO	HNS
22:39	LNOC	HNS
22:45	CPIP	HNS multiple passes

LIZARD
Landscape Design and Ecology

GREAT CRESTED NEWT EDNA REPORT

Crosswinds, Hampers Lane, Storrington, West Sussex

On behalf of: Mark Alford Design Limited

Client:	Mark Alford Design Limited			
Project:	Crosswinds, Hampers Lane, Storrington, West Sussex			
Reference:	LLD3413-ECO-REP-005-00-eDNA			
Revision:	**Date:**	**Author**	**Proof**	**Approved**
00	01/08/25	Richard Emerson BSc	Sam Hall BSc (Hons) MSc	Sam Hall BSc (Hons) MSc

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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Contents

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SUMMARY

Lizard Landscape Design and Ecology (LLDE) has been commissioned by Mark Alford Design Limited to undertake amphibian surveys of ponds adjacent to land at Crosswinds, Hampers Lane, Storrington, West Sussex (located around central grid reference: TQ 10769 14316 – hereafter referred to as 'the site'

Based on OS mapping and satellite imagery; no ponds were immediately within the red line boundary, but the desk study identified 14no. ponds within 500m of the site, of which four were within 250m of the site. Out of the four ponds located within 250m of the site, all were within woodland habitat to the west and northwest of the site. The closest pond (P1) being located c.110m west of the site. Three larger water bodies; lakes, were identified between 250-400m SW of the site within a quarry. (**See *figure No. 01 – Pond plan***).

It is accepted that, unless connected by highly suitable habitat, great crested newts are likely to stay within 250m of breeding ponds (Langton *et al.*, 2001). Most of the local ponds were located within woodland habitat, functionally connected to the site by further woodland and suburban gardens. Moreover, the site itself was dominated by good terrestrial habitat. The site is therefore of **site level value** with a **moderate** potential for GCN to be present.

Ponds P1 and P2 were subject to eDNA survey, with water samples collected on the 15th of April 2025 before analysis by SureScreen Scientifics. (Results *Appendix A)*

Analysis of the samples confirmed the presence of great crested newts within the waterbody, pond P1 and likely absence within P2. Access was denied to P3 and P4 but due to the close proximity to P1, presence should be assumed as likely.

As proposals shall result in the removal of large areas of suitable GCN terrestrial habitat; within the core dispersal area around the pond, works could result in the killing or injuring of individual great crested newts, as well as potential degradation of the pond and surrounding terrestrial habitat. This would contravene the protection afforded great crested newts under The Conservation of Habitats and Species Regulations 2017 (as amended).

To allow works to proceed it is recommended that the site is entered into the District Level Licence scheme administered by NatureSpace. The site is located within the red zone and as such mitigation measures will be required, although these would be reduced in comparison with traditional licencing. No further survey is required to enter into DLL. Naturespace have been contacted and have identified the site and proposals as ‘low impact’ and following payment of the one-time fee, NatureSpace will issue a certificate and impact plan detailing the mitigation requirements. The certificate must be issued to the local authority and all mitigation works completed prior to commencement of works.

1.0 INTRODUCTION

1.1 Lizard Landscape Design and Ecology has been commissioned to undertake great crested newt (GCN) surveys to inform the proposed development of; Crosswinds, Hampers Lane, Storrington, West Sussex (*Grid Reference:* TQ 10769 14316 – *hereafter referred to as 'the site'*).

Survey Rationale

1.2 Surveys were recommended following the original ecology survey completed by LLDE in December 2024, which identified 14no. ponds within 500m, four of which are within 250m of the proposed construction zone.

1.3 The site consists of habitat, dominated by bracken *Pteridium aquilinum* with scattered trees and borders UK priority habitat; Decidious Woodland, to the North. No ponds are present on site.

1.4 Bracken-dominated habitat is generally considered sub-optimal terrestrial habitat for Great Crested Newts (GCN) due to low plant diversity, dense cover and poor soil structure. However, proposals could impact great crested newts commuting between ponds in the wider landscape. The potential for adverse impacts was heightened by the proximity of ponds to the proposed works. Further survey work to assess the potential impacts upon this species was therefore undertaken.

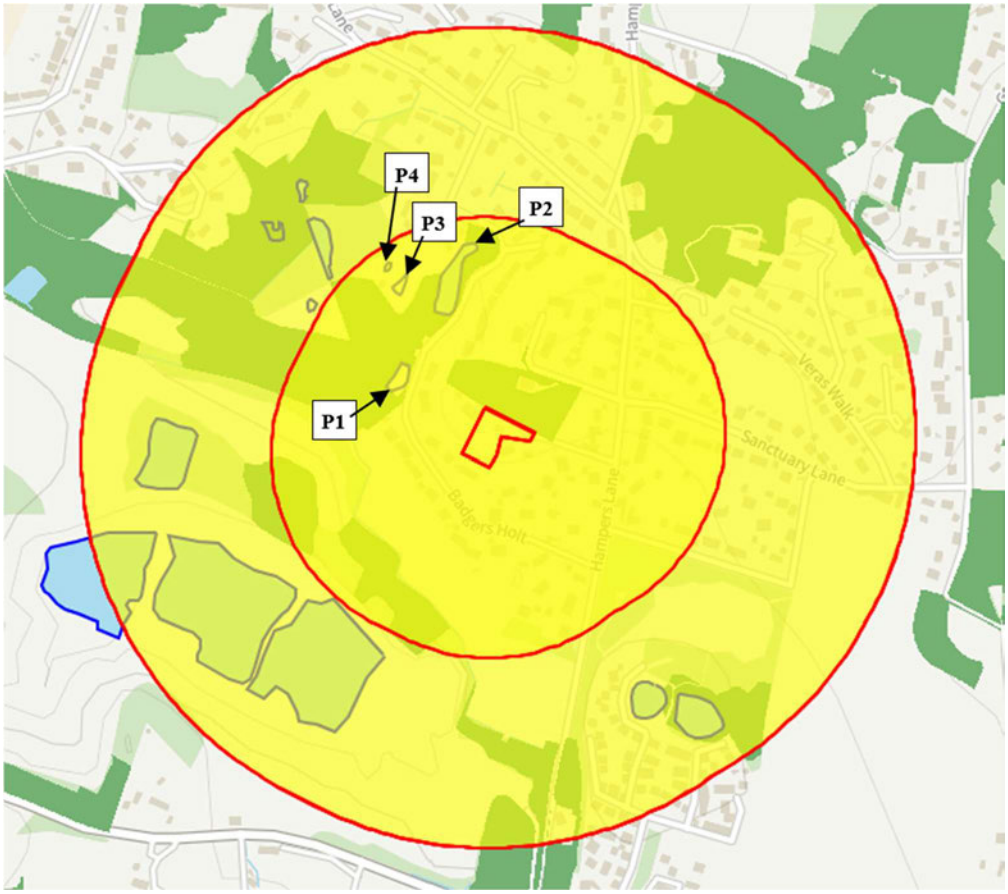

Figure No. 01 – Pond Plan. Buffer zones of 250m and 500m from the site boundary shown as well as all waterbodies in blue and Deciduous Woodland in dark green. Data taken from MAGIC. Contains OS Data © Crown Copyright and database rights 2025.

Site Information

1.5 The site covers an area of c. 0.34ha and consists of an L-shaped residential plot with one dwelling and two outbuildings. The site is situated in a suburban area, surrounded by further residential development on all sides, although adjacent land to the north is densely wooded. The boundary of the South Downs National Park is located c. 400m east and 600m south of the site. The soil on site is described as freely draining very acid sandy and loamy soils.

Surrounding Landscape

1.6 The site is located on the edge of Storrington in an area known as Heath Common. The surroundings are rural, with extensive agricultural grazing pasture and well-connected hedgerows extending in all directions. The chalk escarpment which characterises the South Downs National Park is located approximately 1.8k south and extends to the east and west from that point. Several settlements are located in all directions, most notably Worthing which is approximately 8.5km south. The A24 runs north to south approximately 1.5km to the east and a sand quarry is located approximately 300m to the southwest.

Development Proposals

1.7 It is understood that the proposals are for the demolition of the existing dwelling and associated outbuildings and subsequent redevelopment of the site including 2no. new homes, 2no. garages and associated access and soft landscaping.

Aims

1.8 The aim of the amphibian and great crested newt survey was;

- *To identify presence / absence of great crested newt (GCN) within the water bodies identified within 250-500m of the site.*

2.0 LEGISLATION

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

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

2.2 The GCN is included on *Schedule 2 of The Conservation of Habitats and Species Regulations* 2017 (as amended) and *Schedule* 5 of the *Wildlife and Countryside Act 1981* (as amended) which makes it an offence, amongst other things, to deliberately capture, injure, kill or disturb any such species. In addition, this notification also prohibits the deliberate taking or destroying of any eggs and the damaging, destroying or blocking access toa breeding site or resting place of any such species.

2.3 This species is also a target of UK and Local Biodiversity Action Plans and listed as *Species of Principle Importance under Section 41 of the Natural Environment and Rural Communities Act 2006.* Local Authorities are obliged to have regard to the purpose of conserving biodiversity with particular emphasis on targeted species.

2.4 In addition, the National Planning Policy Framework (*NPPF*) 2021 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*.'

3.0 METHODOLOGY

3.1 Desk Study

3.1.1 The Multi-Agency Geographical Information Centre (*MAGIC*) was consulted for information regarding granted EPS licences within 2.0km, and location of ponds within 500.0m radius of the proposed construction site.

3.2 HSI Assessment

3.2.1 All waterbodies tested were subject to a HSI assessment in April 2025.

3.2.2 The *Habitat Suitability Index (HSI)* was developed by *Oldham et al (2000)* as a way of providing a numerical index allowing a direct comparison to be made between different water bodies. This index assesses ponds against ten different criteria, each of which have a bearing on the likelihood of great crested newts (*GCN*) being present in the pond under consideration.

3.2.3 The ten attributes against which ponds are assessed are:

- *Geographic Location.*
- *Pond Area (at its highest water level).*
- *Permanence.*
- *Water Quality.*
- *Perimeter Shading.*
- *Numbers of Wildfowl.*
- *Numbers of Fish Present.*
- *Pond Count (within a 1.0km radius).*
- *Terrestrial Habitat (within 250.00m).*
- *Macrophyte Coverage.*

3.2.4 The HSI results in a score between 1 and 0; with 1 being optimal conditions and 0 being unlikely to support a population. However, the index merely gives an indication as to whether a pond has the potential to support GCNs and is not a substitute for more detailed presence / absence surveys for protected species of amphibian. The evaluation criteria is shown in *Table No. 01* below.

Table No. 01 – HSI Evaluation Criteria

HSI Score	*Pond Suitability*
<0.5	Poor
0.5-0.59	Below Average
0.6-0.69	Average
0.7-0.79	Good
>0.8	Excellent

3.3 eDNA Survey

3.3.1 An eDNA survey of accessible ponds within 250m of the site was completed on the 15th of April 2025.

3.3.2 20no. water samples were collected from the margin of each pond, with samples spaced as evenly as possible to collect a representative sample. All samples were collected using a sterile sampling kit as supplied by SureScreen Scientifics.

3.3.3 Each sample was stored in a refrigerator before return to SureScreen Scientifics for analysis. The results of the survey indicate the presence of absence of great crested newt environmental DNA within the water body.

4.0 RESULTS

4.1 Desk Study

4.1.1 SxBRC returned 18 no. records for great crested newt *Triturus cristatus* rom within the search area, the closest of which was located c. 150m southwest of the site (the grid reference for this record was accurate to 100m). Records for Common frog *Rana temporaria,* Common toad *Bufo bufo* and Smooth newt *Lissotriton vulgaris* were also returned within the search area.

4.2 HSI Assessment

4.2.1 Ponds P1 and P2 are located within Sandgate Park to the northwest of the site and surrounded by woodland. The HSI assessment found P1 and P2 to offer good habitat suitability. The HSI assessment of these ponds is summarised below.

Table No. 02 – Summary of HSI Results

HSI Criteria	P1		P2	
Location	1	Zone A	1	Zone A
Pond Area	0.95	c. 1,000m^2	0.83	c. 1,800 m^2
Permanence	0.9	Never dries	0.9	Never dries
Water Quality	0.67	Moderate	0.67	Moderate
Shade	0.4	90%	1	60%
Waterfowl	0.67	Minor (but banks damaged by dogs and walkers)	0.67	Minor
Fish	0.33	Some fish seen	0.33	Some fish seen
Pond Count	1	6.4/km^2	1	6.4/km^2
Terrestrial Habitat	1	Good terrestrial habitat	1	Good terrestrial habitat
Macrophyte	0.35	<10%	0.35	<10%
HSI Score	**0.54**	**Average**		**Good**

4.3 eDNA Survey

4.3.1 Pond P1 was positive for great crested newt environmental DNA, suggesting the presence of this species on site.

4.3.2 Pond P2 was negative for great crested newt environmental DNA, suggesting the absence of GCN within this waterbody.

4.4 Survey Constraints / Considerations

4.4.1 All phase 2 surveys were undertaken at the appropriate time of the year by trained, licenced surveyors. There were no constraints recorded relating to survey methodology, therefore the results are considered to a true representation of conditions on site.

4.4.2 No access was granted to P3 and P4 and as such the potential presence of great crested newt within these water bodies can not be discounted. A positive result within nearby P1 to the south of these ponds, increases the likelihood of GCN presence.

5.0 MITIGATION

5.1 The protected species assessment identified that the site and adjacent habitats offered moderate / high potential to support GCN. Several ponds were noted within a commutable distance of the site. Proposals may result in the removal of an area of suitable terrestrial habitat and therefore works could result in the killing or injuring of individual great crested newts; as well as potential degradation of surrounding terrestrial habitat. This would contravene the protection afforded great crested newts under The Conservation of Habitats and Species Regulations 2017 (as amended).

5.2 To allow works to proceed it is recommended that the site is entered into the District Level Licence scheme administered by NatureSpace. The site is located within the red zone and as such mitigation measures will be required, although these would be reduced in comparison with traditional licencing. No further survey is required to enter into DLL. Naturespace have been contacted and have identified the site and proposals as 'low impact' and following payment of the one-time fee, NatureSpace will issue a certificate and impact plan detailing the mitigation requirements. The certificate must be issued to the local authority and all mitigation works completed prior to commencement of works.

6.0 CONCLUSION

6.1 Great crested newts were found to be present within at least one pond within 250m of the site. As works involve the removal of a large area of suitable terrestrial habitat with good interconnectivity to GCN breeding ponds, the potential impacts to great crested newt are unavoidable. This would contravene the protection afforded this species by The Conservation of Habitats and Species Regulations 2017 (as amended).

6.2 A licence, via the District Level Licence scheme, and appropriate mitigation shall be required to allow works to progress.

7.0 REFERENCES

- English Nature (2001) Great Crested Newt Mitigation Guidelines, English Nature.

- Froglife (2001) Great Crested Newt Conservation Handbook. Froglife.

- Joint Nature Conservation Committee, (1998) Herpetofauna Workers' Manual. JNCC, Peterborough.

- Natural England (2015) Template for Method Statement to support application for licence under Regulation 53(2)e of The Conservation of Habitats and Species Regulations 2010 (as amended) in respect of great crested newts (Triturus cristatus). Form WML-A14-2 (Version December 2015).

Appendix A – eDNA Results

Folio No:	343-2025
Purchase Order:	LLD3413
Contact:	Lizard Landscape Design & Ecology
Issue Date:	28.04.2025
Received Date:	17.04.2025

SureScreen Scientifics

GCN eDNA Analysis

Summary

When great crested newts (GCN), *Triturus cristatus* , inhabit a pond, they continuously release small amounts of their DNA into the environment. By collecting and analyzing water samples, we can detect these small traces of environmental DNA (eDNA) to confirm GCN habitation or establish GCN absence.

Results

Lab ID	Site Name	OS Reference	Degradation Check	Inhibition Check	Result	Positive Replicates
GCN25 2358	Crosswinds P2		Pass	Pass	Negative	0/12
GCN25 2365	Crosswinds P1		Pass	Pass	Positive	5/12

Matters affecting result: none

Reported by: Chelsea Warner

Approved by: Chelsea Warner

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