LIZARD
Landscape Design and Ecology

MR. JAMIE ORTON

Land Adjacent to Scyld, Horsemere Green Lane, Climping

- Preliminary Ecological Appraisal Report
- Preliminary Bat Roost Assessment

Planning Issue

Prepared by	LB
Checked by	CO
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SUMMARY

Lizard Landscape Design and Ecology has been commissioned by Mr. Jamie Orton to undertake a Preliminary Ecological Appraisal and Preliminary Bat Roost Assessment of land adjacent to the property known as 'Scyld', Horsemere Green Lane, Climping (*Grid Reference: SU 996 90226 – hereafter referred to as 'the site'*), to appraise the existing ecological resource within the land and the surrounding area and the potential for bats to be present within any areas of the building affected by the development proposals.

The survey identified habitats dominated mainly by broadleaved woodland to the northern edge and site boundaries, with amenity grassland located centrally, tall ruderal vegetation to the south of the site and areas of introduced shrubs surrounding the property. The habitat and plant species on site were common and widespread or ornamental; no rare or unusual species were recorded.

Bird activity was noted within the proposed site and bordering tree line / wooded areas. All active birds' nests are protected against damage / destruction under *The Wildlife and Countryside Act 1981* (*as amended*). Clearance of any trees / dense scrub should take place outside of the bird nesting season (*Season: March - August*) or after inspection by an ecologist to ensure no active birds' nests are present.

The building on site has been assessed as providing '*negligible*' bat roost suitability. Under the current development proposals, no further survey work for any protected species is recommended for this site.

The tall ruderal is considered to provide suitable reptile habitat while the many log piles and compost offer hibernation and foraging potential. **A reptile survey is recommended to ascertain the presence / absence of reptiles on site**. The survey should include 7 no. survey visits in suitable weather conditions (*9 - 18°C, sunny, dry*) during the optimal survey season (*mid-March – October with April – June and September – October being peak months*).

Proposed enhancements which should be considered as part of the scheme are detailed in Section 8.0.

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1.0 INTRODUCTION

1.1 Lizard Landscape Design and Ecology has been commissioned by Mr. Jamie Orton to undertake a Preliminary Ecological Appraisal and Preliminary Bat Roost Assessment of land adjacent to the property known as 'Scyld', Horsemere Green Lane, Climping (*Grid Reference: SU 996 90226 – hereafter referred to as 'the site'*).

1.2 A preliminary ecological appraisal (*PEA*) was undertaken on 4th July 2018, to appraise the existing ecological resource within the land and the surrounding area. The *PEA* comprised a baseline survey conforming broadly to the *JNCC Ecology Phase 1 Habitat Survey* protocol, to identify the existing habitats. In addition, a bat roost and protected species assessment was undertaken to identify the potential for European and nationally protected species within and adjacent to the land.

1.3 The field survey data and analysis contained in this report were undertaken and prepared by Louise Barker (*Ecologist; Lizard Landscape Design and Ecology*). The report has been reviewed by Catherine O'Reilly *(Senior Ecologist; Lizard Landscape Design and Ecology).*

Site Information

1.4 The proposed site, is formed of an existing residential plot comprising one architecturally designed residential building, hardstanding, amenity grass, introduced scrub, tall ruderal and scattered trees. The red-line boundary covers a total area of approximately 8,500 m^2. The site is bounded by Horsemere Green Lane to the north and neighbouring residential properties to all other aspects.

1.5 The site is located c.4.0 metres above sea level. Soils on site are described as freely draining slightly acid loamy soils.

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Surrounding Landscape

1.6 The wider landscape of Climping has a rural feel, the immediate surrounding landscape is that of residential properties, with arable farmland extending south for at least 1km. The town of Yapton is located 1.9 km NW of the site. The area surrounding the site is a mixture of scattered small pockets of deciduous woodland and coastal and floodplain grazing marsh in an easterly direction toward the Arun River.

1.7 There are very few waterbodies located within 500.0m of the proposed development site, with vast areas of housing and hard standing in-between. Due to the intervening distances and poor terrestrial habitat on site, no further investigation with regards to Great Crested Newts was considered necessary.

Development Proposals

1.8 It is understood that the development proposals include the development of 9 no. new dwellings and associated gardens within the site boundary. The existing dwelling is outside of the ownership boundary and would be retained.

2.0 SCOPE OF THE SURVEY

2.1 The aim of the preliminary ecological appraisal survey has been:

- *To identify and display the main habitat types and plant communities;*
- *To provide a species list for the major habitats;*
- *To identify habitats with potential for protected species;*
- *To provide recommendations for surveys of protected species and / or ecological enhancement / compensation.*

2.2 This report establishes the potential ecological resource within the site and outlines where any ecological constraints may occur.

2.3 The aims of the day-time bat roost assessment survey were:

- *To identify the potential for roosting bats;*
- *Identify areas where future detailed survey effort would be required and should be focused;*
- *To establish whether other habitat features for different species groups exist to warrant further investigation.*

3.0 BAT LEGISLATION AND PLANNING POLICY

3.1 All species of bat and their breeding sites or resting places (*bat roosts*) are protected under *Schedule 2* of *The Conservation of Habitats and Species Regulations 2010 (as amended)*. It is an offence for anyone to disturb, deliberately capture, injure or kill a bat. It is an offence to damage or destroy a breeding or resting place of a bat. It is also an offence to have in one's possession or control, any live or dead *European Protected Species*, or deliberately obstruct access to a bat roost.

3.2 Disturbance is defined as acts that are likely to impair the ability of a *European Protected Species (EPS)* to survive, breed or reproduce, or rear or nurture their young. In the case of hibernating and migratory species, this factor applies to their ability to hibernate or migrate. Disturbance is also an offence if it is likely to significantly affect the local distribution or abundance of the *EPS*.

3.3 A *Natural England European Protected Species (EPS) Licence* is required to permit otherwise unlawful activities and can only be granted for certain purposes under *The Conservation of Habitats and Species Regulations (2010)*. Development activities are included within these licensable activities. The *National Planning Policy Framework (NPPF)* sets out government policy regarding biodiversity and development. Under the *NPPF* the presence of a protected species is a material consideration when considering planning applications which may, if carried out, result in harm to the habitat or species.

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3.4 In summary, with regard to ecology and biodiversity the *NPPF* requires that the planning system and planning policies should:

- *Minimise impacts on biodiversity and provide net gains in biodiversity where possible;*
- *Explore and encourage opportunities to incorporate biodiversity in and around developments;*
- *Refuse planning permission if significant harm cannot be avoided, adequately mitigated or, as a last resort, compensated for.*

4.0 METHODOLOGY

4.1 A preliminary ecological appraisal was undertaken on 4th July 2018, and the site subjected to an ecology survey using guidelines set out in the *Handbook for Phase 1 Habitat Survey – A Technique for Environmental Audit (JNCC, 2003).* This has resulted in a Site Habitat Plan *(Figure No. 01)* and Species Lists for Habitat Parcels (*Table No. 04)*.

4.2 Habitats within the land were classified and the presence, or potential presence, of certain protected and / or notable species of flora and fauna were identified. A summary description of the habitat within the site following the *Phase 1 Habitat Survey Methodology* is presented in Section 5.0. This involved identifying features that may be used by protected species, potential foraging areas and other signs of use. Water bodies were recorded wherever possible, within 500 metres of the proposed development site.

4.3 Due to the field survey consisting of only one site visit, certain species, particularly some of the flowering plants, may not have been visible or may have been otherwise inconspicuous at the time of the survey and hence overlooked. These are accepted constraints associated with the standard *Phase 1 Habitat Survey Methodology*.

4.4 The results are summarised and accompanied in large part by photographic evidence contained in *Appendix 1 – Site Photographs*. Recommendations for further investigation and survey are made in the following report.

Preliminary Bat Roost Assessment

4.5 A Preliminary Bat Roost Assessment was undertaken on 3rd July 2018 by an experienced bat surveyor who undertook an external examination of the existing buildings and trees on site. The bat surveyor assessed the existing building visually and searched for evidence such as:

- *Grease Marks;*
- *Urine Stains;*
- *Bat Droppings;*
- *Feeding Remains;*
- *Dead or Live Bats.*

4.6 An external investigation assessed the fabric of the building to see if there were access points readily available for bats to utilise. Gaps / crevices identified within the structure were examined using binoculars, torches and endoscope where appropriate.

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

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

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

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Table No. 01 – Bat Roost Suitability Guidelines (BCT, 2016)

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

5.0 RESULTS

5.1 Desk Study – Background Information

Designated Sites and Habitats

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

Statutory Protected Sites

5.1.2 There are no designated sites located within 2.0 km of the proposed development site. The nearest statutory protected sites are detailed below.

Table No. 02 – Statutory Protected Sites

Site	**Description**	**Location**
Climping Beach SSSI.	Nationally uncommon habitat which supports important populations of wintering birds.	2.1 km SE.
West Beach LNR.	Site forms part of Climping Beach SSSI. The area includes mud flats, shingle and sand dunes.	2.15 km SE.

5.1.3 The site is located within the *Impact Risk Zone of Climping Beach SSSI*. The development proposals are considered unlikely to detract or impinge upon the citation criteria of this SSSI.

Non-Statutory Protected Areas

5.1.4 *Sites of Nature Conservation Interest* (*SNCIs*) are designations applied to the most important non-statutory nature conservation sites. They are recognised by the *National Planning Policy Framework (2012)* and as such are material considerations when assessing planning applications. A SNCI was identified within 2.0 km of the site, listed in *Table No. 03* below.

Table No. 03 – Non-Statutory Protected Sites

SNCI	Locations
Climping to Houghton Biodiversity Opportunity Area (BOA).	*1 Km E.*

5.1.5 The proposed development site is neither located adjacent to or within any SNCI. The BOA mentioned above, is an extensive stretch of the River Arun floodplain, potentially provides key opportunities for wetland and river restoration and the enhancement of floodplain grazing marsh. The area is also strategically important for water voles following a recent reintroduction at the Arundel Wildfowl and Wetland Trust. The development proposals are highly unlikely to have an adverse effect upon any surrounding SNCI due to the intervening distances and habitat differences.

UK Priority Habitats

5.1.6 Within 2.0 km of the site there are *Priority Habitats* of *Coastal Vegetated Shingle, Maritime Cliffs and Slopes, Coastal and Floodplain Grazing Marsh, Intertidal Substrate Foreshore (sand, mud and sand and gravel) and Deciduous Woodland.* The site itself does not contain any *Priority Habitat*, proposals will not remove or degrade any area of *Priority Habitat*.

UK Priority Species

5.1.7 Bat species relevant to the site such as Common Pipistrelle (*Pipistrellus pipistrellus*); Daubentons bats (*Myotis daubentonii*) and Serotine bats (*Eptesicus serotinus)* have been recorded within 2.0 km of the site.

5.1.8 All species of bats and their roosts are protected under *The Conservation of Habitats and Species Regulations 2017*. It is an offence for anyone to intentionally kill or injure a bat; disturb a roosting bat; damage, destroy or obstruct access to any place used by bats for shelter; and / or to significantly alter the local distribution of bats.

5.1.9 There are records of grass snake (*Natrix helvetica)* and common lizard (*Zootoca vivipara*) within 2.0 km of the site. All species of UK reptile are protected against reckless or intentional killing or injuring under *The Wildlife and Countryside Act 1981 (as amended*).

5.1.10 There are numerous records of Hedgehogs (*Erinaceus europaeus*) within 2.0 km of the land. Hedgehog numbers are declining, and they have been a *UK Priority Species* since 2007.

5.1.11 There are no records of Great Crested Newts (*Triturus cristatus*) within 2.0 km of the site, Great Crested Newts are protected under *The Conservation of Habitats and Species Regulations 2017*. It is an offence for anyone to intentionally kill, injure or disturb a GCN or to damage, destroy or block access to areas of suitable habitat.

5.1.12 There are 7 no. records of Water vole (*Arvicola amphibius*) within 2.0 km of the site. Water voles, breeding sites and resting sites are protected under the *Wildlife and Countryside Act 1981 (as amended).*

5.1.13 There is one record of Badger (*Meles meles*) within 2.0 km of the site. Badgers are protected under *The Protection of Badgers Act 1992.*

5.1.14 There are no records of Common (Hazel) Dormouse (*Muscardinus avellanarius*) within 2.0km of the site; The hazel dormouse is fully protected under *Schedules 5 & 6 of The Wildlife and Countryside Act 1981 (as amended)* and *Schedule 2 of The Conservation of Habitats and Species Regulations 2017.*

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5.2 Field Survey

5.2.1 The following habitats and features were recorded within the land and the extended survey area. The general site character has been described along with a brief description of the habitat's physical characteristics. These are shown on the Site Habitat Plan in *Figure No. 01.* Species Lists for Habitat Parcels are listed in *Table No. 04.*

5.2.2 Habitats within and adjacent to the land include:

- *Building & Hardstanding;*
- *Amenity Grassland;*
- *Introduced Shrubs;*
- *Tall Ruderal Vegetation;*
- *Broadleaved Woodland.*

Site Description *(Refer to Appendix 1 – Site Photographs)*

Building & Hardstanding

5.2.3 The gravel driveway provides access to the site from Horsemere Green Lane to the north. The parking and driveway area is located to the northwest corner of the site, adjacent to the residential property. The building is of a bespoke architectural design, with further survey details provided in the Preliminary Bat Roost Assessment. The hardstanding continues around the property to form a walkway with flower beds positioned around the building.

Amenity Grassland

5.2.4 The central area of the site (*approx. 1,500m^2*) is dominated by amenity grassland with a sward height which varies between 5.0cm and 15.0cm, with longer vegetation found to the southern edge of the site. Species composition is typical of amenity grassland being dominated by Perennial Rye-grass (*Lolium perenne*) and Yorkshire Fog (*Holcus lanatus*) interspersed with occasional Clover (*Trifolium repens*) and Creeping Buttercup (*Ranunculus repens*) with small stands of Common Nettle (*Urtica dioica*), mostly to the grass boundaries.

Introduced Shrub

5.2.5 The introduced shrubs border the existing property, the species are dominated by Lavender (*Lavandula sp*), Rosemary (*Rosmarinus officinalis*) and buddleia (*Buddleja*). A vegetable garden is also located centrally on the site with plant species including Gooseberry (*Ribes uva-crispa*), Raspberry (*Rubus idaeus*) and Rhubarb (*Rheum rhabarbarum*).

Tall Ruderal Vegetation

5.2.6 Overgrown vegetation areas to the south end of the boundary line *(approx. 2,000m^2*) and east of the property (*approx. 300m^2*). Dominating species include, Common Nettles (*Urtica dioica*), Thistle (*Cirsium vulgare*), and Bramble (*Rubus fruticosus*).

Broadleaved Woodland

5.2.7 The wooded habitat is located on the northern boundary adjacent to Horsemere Green Lane. This area covers approx. 1,200m^2. The trees dominating this habitat parcel include; Sycamore (*Acer pseudoplatanus*), Sweet Chestnut (*Castanea sativa*), Lawson Cypress (*Chamaecyparis lawsoniana*) and Pine (*Pinus sp*).

Existing Building - Site Description *(Refer to Appendix 2 – Site Photographs)*

External

5.2.8 The existing building is of a bespoke architectural design. Formed of 2 no. attached triangular structures (*garage and main building*). On the western and eastern aspects, the roof runs the entire length of the building, and sits within 10 cm of ground level. The tiles are made of thin concrete material with very little or no gaps between one another. The smaller (*garage*) structure contains; 1 no. window on the western side; 2 no. windows on the eastern side *(both are tightly sealed into the roof and tiles with little or no gaps around them*); the northern aspect consists of wooden sidings and a metal garage hinged door. The main building section on the eastern side has a combination of material and angles; 3 no. windows with concrete roof tiles in between. A flat faced edge (*on the eastern aspect*) is covered in wooden sidings and the lower half in a painted brick construction.

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Internal

5.2.9 There is no loft void inside the property. Wooden panels seal the ceiling at roof level.

Summary

5.2.10 No bat droppings were noted, and no signs of bats or bat roost potential were found during the survey.

5.3 Constraints / Considerations

5.3.1 No major constraints which would cast doubt on these results were encountered. Full access was available to all areas of the site including internal access to all buildings.

6.0 EVALUATION

6.1 The site is in use as a residential dwelling. The grassland is well maintained with heights ranging between 5.0 and 15.0 cm. The habitat parcels on site include amenity grassland, mixed broadleaved woodland to the north with trees lining all aspects of the site boundaries, an existing residential building with hardstanding and introduced shrub surround the property and areas of tall ruderal vegetation covering the southern edge of the site. The plant species on site were common and widespread or ornamental species; no rare or unusual species were recorded.

6.2 The tall ruderal is considered to provide suitable reptile habitat while the many log piles and compost areas offer hibernation and foraging potential. A reptile survey is recommended to ascertain the presence / absence of reptiles on site. The survey should include 7 no. survey visits in suitable weather conditions (*9 - 18°C, sunny, dry*) during the optimal survey season (*mid-March – October with April – June and September – October being peak months*).

6.3 The existing building on site was extensively examined for any evidence of bats such as droppings, urine marks, feeding remains or grease stains; no evidence of bats was found. The thin concrete tiled roof construction and lack roof void reduce the suitability of the building for supporting a bat roost.

6.4 Trees bordering the site are mainly semi-mature specimens which offer no discernible bat roost features.

6.5 Bird activity was noted within the bordering treeline. All birds and their nests are protected against damage / destruction under *The Wildlife and Countryside Act 1981 (As Amended)*. It is advised that any removal of vegetation or demolition of structures are made outside the nesting season (*nesting season: 1st March – 31st August inclusive*) or following careful inspection to ensure no active nests are present.

6.6 No suitable habitat for any other protected species was noted on site. The existing site provides very little in the way of floral diversity and is considered to be of '*low ecological value'*. The proposed landscape scheme should seek to provide enhancements where possible, recommendations are provided in Section 8.0.

7.0 PROTECTED SPECIES – CONCLUSIONS AND RECOMMENDATIONS

Bats

7.1 The building on site has been assessed as providing '*negligible*' bat roost suitability.

Nesting Birds

7.2 Bird activity was noted along the tree boundaries / wooded areas of the site. All active birds' nests are protected against damage / destruction under *The Wildlife and Countryside Act 1981 (as amended).* Clearance of any trees / dense scrub should take place outside of the bird nesting season *(Season: March – August inclusive)* or after inspection to ensure no active birds' nests are present.

Reptiles

7.3 Due to the presence of suitable habitat on site, a full reptile survey is recommended to ascertain the presence / absence of reptiles on site. The survey should include 7 no. survey visits in suitable weather conditions (*9-18°C, sunny, dry*) during the optimal survey season (*mid-March – October with April June and September – October being peak months*).

Amphibians

7.4 Due to the intervening distance between the site and any ponds in the wider environment, and limited terrestrial habitat within the site area, development of this area is highly unlikely to result in an offence under *The Conservation of Habitats and Species Regulations 2017,* therefore no further survey work is required.

Others

7.5 No suitable habitat for any other species was recorded on site, while all flora on site was common and widespread.

8.0 ECOLOGICAL ENHANCEMENTS

8.1 The design of any proposed development should consider ecological enhancements for the benefit of wildlife in line with the *National Planning Policy Framework* and *Local Planning Policy*. Recommendations for ecological enhancements that could be considered as part of development proposals could include:

- *The use of flowering plants as listed within the RHS 'Perfect for Pollinators' plant list to provide year-round interest for invertebrates;*
- *The provision of nesting boxes for a variety of bird species within trees surrounding the site boundary;*
- *Holes of 13 cm x 13 cm should be left at the base of any fencing to allow free movement of hedgehogs across the site;*
- *The use of a flowering lawn mixture within grassed areas of the site such as Emorsgate EL1;*

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- *The use of bug hotels such as NHBS Bee and Bug Biome to provide additional habitat for invertebrates;*
- *Integrated bat boxes could be incorporated into the southern aspect of the new buildings;*
- *Creation of a wildflower meadow incorporating a suitable wildflower mix. The meadow should be regularly mown in the first 12 months, then should be cut annually once in late summer once the flowers have set seed;*
- *Creation of a new native species rich hedgerow to the boundaries of the site with ground flora seeded with a suitable wildflower seed mix e.g. Emorsgate Seeds EH1;*
- *The use of wildflower grassland within areas of public open space, with a suitable management regime to maximise diversity.*

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9.0 REFERENCES

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

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

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

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

www.magic.gov.uk.

Table No. 04 – Species List for Habitat Parcels

Broadleaved Woodland

Common Name	***Scientific Name***	***DAFOR***
Alder	*Alnus glutinosa*	***R***
Apple	*Malus sp.*	***R***
Ash	*Fraxinus sp.*	***O***
Beech	*Fagus sylvatica*	***R***
Bramble	*Rubus fruticosus*	***LA***
Broad-leaved Dock	*Rumex obtusifolius*	***F***
Buddleia	*Buddleja sp.*	***O***
Cedar	*Cedrus libani*	***D***
Cherry	*Prunus sp.*	***O***
Common Ivy	*Hedera helix*	***O***
Cypress	*Cupressus sp.*	***R***
Elder	*Sambucus nigra*	***O***
Hawthorn	*Crataegus monogyna*	***F***
Hazel	*Corylus avellana*	***O***
Holly	*Llex aquifolium*	***O***
Hornbeam	*Carpinus betulus*	***O***
Indian Bean	*Catalpa sp.*	***R***
Judas Tree	*Cercis siliquastrum*	***R***
Laburnum (*Golden Chain*)	*Laburnum anagyroides*	***R***
Lawson Cypress	*Chamaecyparis lawsoniana*	***F***
Leyland Cypress	*Cupressus leylandii*	***R***
Lords-and-Ladies	*Arum maculatum*	***O***
Magnolia	*Magnolia sp.*	***R***
Maidenhair	*Gingko biloba*	***R***
Oak	*Quercus robur*	***R***
Pine	*Pinus sp.*	***O***
Plum	*Prunus sp.*	***O***
Poplar	*Populus sp.*	***R***
Ribwort Plantain	*Plantago lanceolata*	***F***
Silver Birch	*Betula pendula*	***O***
Sweet Chestnut	*Castanea sativa*	***D***
Sycamore	*Acer pseudoplatanus*	***D***
Tulip Tree	*Liriodendron sp.*	***R***
Goat Willow	*Salix caprea.*	***O***
Yew	*Taxus baccata*	***R***

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

Amenity Grassland

Common Name	***Scientific Name***	***DAFOR***
Bird-Eye Speedwell	*Veronica persica*	***O***
Broad-Leaved Dock	*Rumex obtusifolius*	***LF***
Common Daisy	*Bellis perennis*	***O***
Common Self-heal	*Prunella vulgaris*	***R***
Creeping Buttercup	*Ranunculus repens*	***F***
Creeping Thistle	*Circium arvense*	***O***
Dandelion	*Taraxacum officinale*	***O***
Fescue	*Festuca sp.*	***LF***
Perennial Rye-grass	*Lolium perenne*	***D***
Timothy	*Phleum pratense*	***O***
Hawkweed	*Hieracium*	***LF***
Red Clover	*Trifolium pratense*	***LF***
Ribwort Plantain	*Plantago lanceolata*	***A***
White Clover	*Trifolium repens*	***F***
Yorkshire Fog	*Holcus lanatus*	***LA***

Introduced Shrub

Common Name	***Scientific Name***	***DAFOR***
Bramble	*Rubus fruticosus*	***LD***
Broad-leaved Dock	*Rumex obtusifolius*	***F***
Common Ivy	*Hedera helix*	***O***
Dandelion	*Taraxacum officinale*	***F***
Bay Leave	*Laurus nobilis*	***R***
Lavender	*Lavandula sp.*	***R***
Rosemary	*Rosmarinus officinalis*	***R***
Gooseberry	*Ribes uva-crispa*	***R***
Rhubarb	*Rheum rhabarbarum*	***R***
Cotoneaster	*Cotoneaster sp.*	
Blueberry	*Vaccinium corymbosum*	***R***
Raspberry	*Rubus idaeus*	***R***
Red Campion	*Silene dioica*	***R***
Ribwort Plantain	*Plantago lanceolata*	***F***
Rough Meadow Grass	*Poa trivialis*	***LD***
Chive	*Allium schoenoprasum*	***R***
Fern	*Dryopteris filix-mas*	***R***

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

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Tall Ruderal

Common Name	***Scientific Name***	***DAFOR***
Bind Weed	*Convolvulus*	***R***
Bramble	*Rubus fruticosus*	***LD***
Broad-leaved Dock	*Rumex obtusifolius*	***F***
Buddleia	*Buddleja sp.*	***R***
Cleavers	*Galium aparine*	***F***
Common Ivy	*Hedera helix*	***O***
Common Nettles	*Urtica dioica*	***LA***
Common Ragwort	*Senecio jacobaea*	***O***
Common Self-heal	*Prunella vulgaris*	***O***
Common Thistle	*Cirsium vulgare*	***F***
Cow Parsley	*Anthriscus sylvestris*	***O***
Dandelion	*Taraxacum officinale*	***F***
Elder	*Sambucus nigra*	***O***
Field Forget-me-not	*Myosotis arvensis*	***F***
Great Hairy Willowherb	*Epilobium hirsutum*	***R***
Hawkweed	*Hieracium*	***F***
Herb Robert	*Geranium robertianum*	***R***
Mayweed	*Matricaria sp.*	***O***
Perennial Rye-grass	*Lolium perenne*	***A***
Timothy	*Phleum pratense*	***O***
Red Campion	*Silene dioica*	***R***
Ribwort Plantain	*Plantago lanceolata*	***F***
Rough Meadow Grass	*Poa trivialis*	***LD***
Yorkshire Fog	*Holcus lanatus*	***LA***

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

Table No. 05 – Target Notes

No.	*Feature*	*Description*
TN01	Vegetable garden.	Introduced shrubs, vegetable garden and compost area.
TN02	Log pile.	Locally felled trees cut into logs and stacked into piles.
TN03	Log pile.	Locally felled trees cut into logs and stacked into piles.
TN04	Log pile.	Several wooden pallets stacked together.

APPENDICES – SITE PHOTOGRAPHS

ARUN DISTRICT COUNCIL CM/21/19/PL

APPENDIX NO. 1 - SITE PHOTOGRAPHS

Photograph No. 01 - Southern aspect of the existing residential property with adjacent amenity lawn, surrounding introduced shrubs and scattered trees, including magnolia (*Magnolia sp.*), indian bean (C*atalpa sp.*) and tulip tree (*Liriodendron sp.*).

Photograph No. 02 - Wooded driveway from the existing property, leading north towards the top of the property line and Horsemere Green Lane running parallel with the site.

APPENDIX NO. 1 - SITE PHOTOGRAPHS

Photograph No. 03 - A mixture of habitat parcels between the existing property and eastern border, including introduced shrubs, tall ruderal vegetation and wooded edge.

Photograph No. 04 - A vegetable garden with introduced plant species including, Raspberry (*Rubus idaeus*), Rhubarb (*Rheum rhabarbarum*) and Gooseberry (*Ribes uva-crispa*).

APPENDIX NO. 1 - SITE PHOTOGRAPHS

Photograph No. 05 - The tall ruderal adjacent to the property on the eastern edge, provides good reptilian habitat, this provides similar benefits as the tall ruderal found on the southern boundary line.

Photograph No. 06 - The amenity grassland species composition is typical of its type, dominated by Perennial Rye-grass (*Lolium perenne*) and Yorkshire Fog (*Holcus lanatus*), interspersed with occasional Clover (*Trifolium repens*)

APPENDIX NO. 1 - SITE PHOTOGRAPHS

Photograph No. 07 - Cotoneaster (*Cotoneaster sp.*) hedge border between the vegetable garden and eastern boundary.

Photograph No. 08 - Scattered tree line located between the amenity lawn and tall ruderal habitats, near to the southern boundary with a stack of wooden pallets providing suitable reptilian habitat.

APPENDIX NO. 1 - SITE PHOTOGRAPHS

Photograph No. 09 - Tall ruderal located on the southern boundary, surrounded by a tree lined border and neighbouring gardens beyond the site.

Photograph No. 10 - Tall ruderal with dominating Nettles (*Urtica dioica*) and Broadleaved Dock (*Rumex obtusifolius*) forming a suitable reptilian habitat.

APPENDIX NO. 2 - SITE PHOTOGRAPHS

Photograph No. 01 - Southern aspect of the existing residential property with adjacent amenity lawn and scattered trees, the building is of a bespoke architectural design.

Photograph No. 02 - Formed of 2 no. triangular structures linked via the garage and main building. On the Eastern aspect (*shown*), the roof runs the entire length of the building, and sits within 10 cm of the ground.

APPENDIX NO. 2 - SITE PHOTOGRAPHS

Photograph No. 03 - The tiles are made of thin concrete material with very little or no gaps between one another. The smaller (*garage*) structure contains; 1 no. window on the western side, tightly sealed into the roof and tiles with little or no gaps around it. The northern aspect consists of wooden sidings and metal garage door.

Photograph No. 04 - Connecting section between garage and main house, all materials sealing the wall and porch areas are aligned and tightly fitted into place against one another, no gaps are visable.

APPENDIX NO. 2 - SITE PHOTOGRAPHS

Photograph No. 05 - The garage structure consists of 2 no. windows on the eastern side, tightly sealed into the roof and tiles with little or no gaps around them.

Photograph No. 06 - The eastern aspect of the property is covered in mainly the concrete tiles, all windows and doors are fitted tightly into the roof and walls with no visible gaps suitable for bat roosting.

APPENDIX NO. 2 - SITE PHOTOGRAPHS

Photograph No. 07 - The wooden sidings on the eastern aspect were also noted as tightly fitted with no visible gaps suitable for bat roosting.

Photograph No. 08 - The eastern aspect of the property covers many angles and edges, all have limited potential for bat roosts.

APPENDIX NO. 2 - SITE PHOTOGRAPHS

Photograph No. 09 - The main house structure on the western aspect is covered in mainly concrete tiles, with 4 no. windows. All of the windows are fitted tightly into the roof with no visible gaps suitable for bat roosting.

Photograph No. 10 - The southern aspect is covered in wooden sidings with small balcony and patio doors fitted tightly against the wooden frames. No visible gaps suitable for bat roosts were noted.

APPENDIX NO. 2 - SITE PHOTOGRAPHS

Photograph No. 09 - All ceiling heights continue into the roof space. The apex of the property is open throughout the property.

Photograph No. 10 - Inside the property there is no loft void. the ceiling height continues into the otherwise roof space.

Legend

- Development Site Boundary / Survey Area.
- TN01 — Target Notes.
- Existing Buildings and Walls.
- A — Amenity Grassland.
- Tall Ruderal Vegetation.
- Broadleaved Woodland.
- Introduced Shrub Planting.
- Road/Track.

PLANNING ISSUE

Rev	Description	Date	Initials
01	Planning Issue	20.05.19	GS
00	Planning Issue	03.08.18	JH

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Project Title and Location
Land Adjacent to Scyld, Horsemere Green Lane

Client
Mr. Jamie Orton

Drawing Title
Site Habitat Plan

Scale	Drawn	Date
1:300@A1	JH	03.08.2018
	Approved LB	

Drawing No **LLD1488-ECO-FIG-001** *Revision* 01
CAD Filename LLD1488-CAD-ECO

N

Figure No.1 - Site Habitat Plan
Land Adjacent to Scyld, Horsemere Green Lane, Climping, West Sussex