

Preliminary Ecological Appraisal

Date: 01.10.19

Site: Hartlea House, Woldingham

Client: Mr. Alan Johnston

Version 002

aLyne Ecology Ltd.

The Cabin

54 Woodlands Road

Bookham

Leatherhead

Surrey

KT23 4HH

01372 602372 / 07443 652988

sarahlyne@alyneecology.co.uk

www.alyneecology.co.uk

DOCUMENT HISTORY AND STATUS

Document Control			
Project Title	Hartlea House, Woldingham		
Surveyor(s)	Sarah Lyne CEnv BSc (Hons) MCIEEM NE Bat Class Licence: WML-CL17 NE Great Crested Newt Licence: WML-CL08 Martin Roche BSc (Hons) Grad CIEEM Accredited Agent, NE Bat Class Licence: WML-CL17 NE Great Crested Newt Class Licence: WML-CL08 NE Hazel Dormouse Class Licence: WML-CL10a		
Author	Martin Roche BSc (Hons) Grad CIEEM Accredited Agent, NE Bat Class Licence: WML-CL17 NE Great Crested Newt Class Licence: WML-CL08 NE Hazel Dormouse Class Licence: WML-CL10a		
Approver	Sarah Lyne CEnv BSc (Hons) MCIEEM NE Bat Class Licence: WML-CL17 NE Great Crested Newt Class Licence: WML-CL08		
Revision Details			
Version	Date of Issue	Pages affected	Comments
001	24.09.19	N/A	Issued to client.
002	01.10.19	Various	Client's comments addressed.
Life Span of Survey Data and Report			
Report	This report remains valid for 12 months from date of issue. The report, conclusions and recommendations are valid for current development plans only. Should these change the report should be reviewed and, if necessary, further survey work and desk study review undertaken.		
Survey Data	Survey data are valid for 12 months from the date the survey was undertaken.		

Copyright aLyne Ecology Ltd.

This report is intended for the commissioning party only and should not be copied or reproduced in any way without prior written permission from aLyne Ecology Ltd.

This report has been prepared for the sole use of the client. Any third party referring to this report or relying on the information contained herein, does so entirely at their own risk.

The information which we have prepared and provided is true and has been prepared and provided in accordance with the Chartered Institute of Ecology and Environmental Management's Code of Professional Conduct.

Contents

1. Summary	1
2. Introduction	3
2.1 Site Description	3
2.2 Proposed Development.....	3
2.3 Brief and Objectives	3
3. Relevant Legislation and Planning Policy	4
3.1 Designated Sites	4
3.2 Habitats of Principal Importance and Ancient Woodland.....	5
3.3 Trees.....	5
3.4 Protected Species	5
3.5 Ecological Enhancement.....	6
4. Methods	6
4.1 Data Search	6
4.2 Phase 1 Habitat Survey.....	7
4.3 Protected Species Assessment.....	7
4.4 Survey Limitations	8
5. Baseline Ecological Conditions	8
5.1 Data Search	8
5.2 Phase 1 Habitat Survey - Habitats	11
5.3 Phase 1 Habitat Survey - Species.....	12
6. Ecological Constraints and Opportunities Assessment	14
7. Recommendations	21
7.1 Habitats of Principal Importance	21
7.2 Trees.....	21
7.3 Protected Species and Species of Conservation Concern	22
7.4 Ecological Enhancement.....	23
8. References	23
9. Figure 1 – Results of Phase 1 Habitat Survey	26
10. Appendix 1 – Site Photographs	27
11. Appendix 2 – Full Species List and Target Notes	29

1. Summary

Site Details
<ul style="list-style-type: none"> Hartlea House, High Drive, Woldingham, Caterham, Surrey, CR3 7EL. OS grid reference: Approximate Area: 0.2 ha.
Scope of Works
<ul style="list-style-type: none"> Acorn Ecology Ltd was commissioned by Mr. Alan Johnston to undertake a Preliminary Ecological Appraisal (PEA), comprising a data search and Phase 1 habitat survey to assess the baseline ecological conditions of the site and its potential to support protected species and species of conservation concern.
Development Proposals
<ul style="list-style-type: none"> The development proposals are for a new dwelling, with vehicle access via High Drive. The remaining trees and scrub on the western and southern boundaries of the site are proposed to be retained. The old beech hedge, which divides the site from the client's rear gardens, requires removal or relocation.
Key Ecological Constraints and Opportunities
<ul style="list-style-type: none"> The old beech hedgerow on site and woodland adjacent to the site's western boundary are habitats of principal importance. Habitats of principal importance, as listed on Section 41 of the Natural Environment and Rural Communities (NERC) Act, 2006 should be given due consideration by Local Planning Authorities. The log piles have the potential to support the stag beetle, which is a species of principal importance, listed under Section 41 of the NERC Act, 2006. Roman snails were found during the field survey. Roman snails are protected against killing and injury under the Wildlife and Countryside Act, 1981 (as amended). There are ponds located within 250 m of the site, which could support great crested newts. The great crested newt is fully protected under the Wildlife and Countryside Act, 1981 (as amended) and the Conservation of Habitats and Species Regulations, 2017. The ponds may also support the common toad, which is a species of principal importance, listed under Section 41 of the NERC Act, 2006. The log, rubble and brick piles on site have the potential to support reptiles. Reptiles are protected under the Wildlife and Countryside Act, 1981 as amended. The trees and hedgerow support breeding birds. Under the Wildlife and Countryside Act, 1981, it is illegal to take, damage or destroy the nests of wild birds whilst being built or when in use. The breeding bird season is generally accepted to be from March to August inclusive, although some species will breed outside this period.

- The trees and hedgerow could support roosting, foraging and commuting bats. Bats are fully protected under the Wildlife and Countryside Act, 1981 and the Conservation of Habitats and Species Regulations, 2017.
- The scrub and hedgerow could support the European hedgehog. The European hedgehog is a species of principal importance under the NERC Act, 2006.
- Evidence of badgers foraging on site was found during the survey. Badgers are fully protected under the Protection of Badgers Act, 1992.

Recommendations for Avoidance, Mitigation and Enhancement

- Protection measures should be put in place, to ensure the woodland adjacent to the site is not negatively impacted upon by the development proposals.
- Laurel is present in the tree and scrub area of the western end of the site, which should be removed and replaced with native shrub species.
- Log, rubble and brick piles should be removed carefully by hand with an Ecological Clerk of Works (ECoW) present, to ensure that any stag beetles, Roman snails, amphibians, reptiles and European hedgehogs, which may be present can escape unharmed. In the unlikely event that a great crested newt is found during site clearance, works should cease, and Natural England contacted for advice on how to proceed lawfully.
- Further removal of vegetation should be kept to a minimum and be carried out outside of the bird nesting season.
- Measures should be put in place, to ensure negative impacts of outside lighting on foraging and commuting bats, are minimised.
- Measures to avoid injury to badgers should be put in place during site clearance and construction activities.
- The landscape design for the development should include the planting of native species of shrubs and trees.
- Consideration should be given to translocating the old beech hedgerow to the required new location.
- The development could include ecological enhancements such as bat and bird boxes and the creation of hibernacula for invertebrates, reptiles and hedgehogs, in line with national and local planning policy.

Further Survey Requirements

- None.

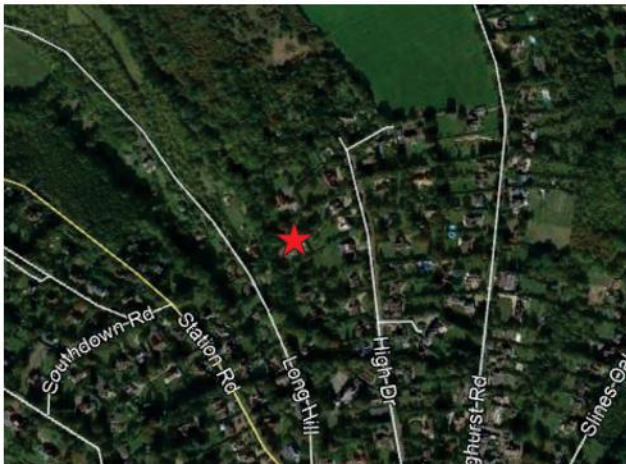
2. Introduction

2.1 Site Description

The site is located at Hartlea House, High Drive, Woldingham, Caterham, Surrey, CR3 7EL (OS grid reference: TQ 3691 5636) and is approximately 0.2 ha.

The site predominantly comprises bare ground with patches of short mown amenity grassland and an area of scattered trees and scrub. Photographs of the site are provided in Appendix 1.

The site is bordered by existing dwellings and associated gardens on the northern and southern boundaries, High Drive on the eastern boundary and deciduous woodland on the western boundary. Woldingham & Oxted Downs Site of Special Scientific Interest (SSSI) is located approximately 500 m to the south east of the site. Two ponds are located approximately 155 m to the north of the site, separated from the site by existing gardens. An aerial plan showing the location of the site is provided below.



Site Location (© Google Earth Pro, accessed 06.09.19).

2.2 Proposed Development

The development proposals are for a new dwelling, with vehicle access via High Drive. The remaining trees and scrub on the western and southern boundaries of the site are proposed to be retained. The old beech hedge, which divides the site from the client's rear gardens, requires removal or relocation.

2.3 Brief and Objectives

The purpose of the PEA was to:

- Map and identify the existing habitats within the survey area.
- Check for evidence of protected species and assess the potential for protected species to be present on site.
- Check for evidence of invasive species.
- Identify potential ecological impacts and constraints relating to the proposed works.
- Make recommendations for further survey work, as appropriate.
- Propose mitigation measures to avoid, mitigate or compensate for ecological impacts, as appropriate.
- Propose measures to enhance the ecological value of the site, as appropriate.

Existing data search information was used for this report. The data search report was generated in September 2018, which is considered sufficiently recent for use as part of this assessment.

3. Relevant Legislation and Planning Policy

This section provides a summary of legislation and planning policy for designated sites, habitats of principal importance, ancient woodland and trees, and protected species, which are assessed to be present or potentially present on site, as detailed in Table 4, Section 6.

The legislation and planning policy detailed in this section is intended to be a summary only. The relevant pieces of legislation and planning policy should be referred to for full information. Legislation and planning policy pertaining to protected habitats and species can be found at the following websites:

- The Birds Directive 2009/147/EC: http://ec.europa.eu/environment/nature/legislation/birdsdirective/index_en.htm
- The Habitats Directive 1992/43/EEC: http://ec.europa.eu/environment/nature/legislation/habitatsdirective/index_en.htm
- Wildlife and Countryside Act, 1981 (as amended): <http://www.legislation.gov.uk/ukpga/1981/69>
- Conservation of Habitats and Species Regulations, 2017: http://www.legislation.gov.uk/uksi/2010/490/pdfs/uksi_20100490_en.pdf
- Countryside Rights of Way Act, 2000: <http://www.legislation.gov.uk/ukpga/2000/37/contents>
- Natural Environment and Rural Communities Act, 2006: <http://www.legislation.gov.uk/ukpga/2006/16/contents>
- National Planning Policy Framework, 2018: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/60777/2116950.pdf
- OPDM Circular 06/2005 Biodiversity and Geological Conservation – Statutory Obligations and their Impact within the Planning System: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/7692/147570.pdf
- Tandridge District Core Strategy, Adopted October 2008: <https://www.tandridge.gov.uk/Portals/0/Documents/Planning%20and%20building/Planning%20strategies%20and%20policies/Current%20and%20adopted%20planning%20policies/Core%20strategy/Core-Strategy.pdf>
- Tandridge Local Plan Part 2: Detailed Policies 2014-2029, Adopted July 2014. <https://www.tandridge.gov.uk/Portals/0/Documents/Planning%20and%20building/Planning%20strategies%20and%20policies/Current%20and%20adopted%20planning%20policies/Core%20strategy/Local-Plan-part-2-Detailed-policies.pdf>

3.1 Designated Sites

Woldingham & Oxted Downs SSSI is located approximately 500 m to the south east of the site. Woldingham & Oxted Downs SSSI – Templehill Plantation (008) is located within 1 km of the site. There are two Sites of Importance for Nature Conservation (SINCs) and five potential Site of Importance for Nature Conservation (pSINCs) located within 1 km of the site. SSSIs are sites of national nature conservation importance and are protected by domestic wildlife and habitat legislation. SSSIs, SINCs and pSINCs are also afforded protection through national planning policy – NPPF and local planning policy (Policy CSP 17 of the Tandridge District Core Strategy and Policy DP19: Biodiversity, Geological Conservation & Green Infrastructure of the Tandridge Local Plan Part 2).

3.2 Habitats of Principal Importance and Ancient Woodland

The site supports a hedgerow. Semi-natural broad-leaved woodland borders the site. Hedgerows and semi-natural broad-leaved woodland are habitats of principal importance, as listed in Section 41 of the NERC Act, 2006, which places on a duty on Local Planning Authorities to have due regard to biodiversity. Areas of ancient woodland are located within 1 km of the site.

Habitats of principal importance and ancient woodland are also afforded protection through the NPPF, which states that council policies should '*promote the preservation, restoration and recreation of priority habitats...the council should have regard for conserving this habitat*'. The ODPM Circular 06/05 states that: '*The potential effects of a development on habitats or species listed as priorities in the UK Biodiversity Action Plan (BAP) (now habitats and species of principal importance) ...are capable of being a material consideration...in the making of planning decisions*'. Section 74 of the CRoW Act, 2000, places duties on Government Ministers and Departments in respect of the conservation of biodiversity. Habitats of principal importance and ancient woodlands are also afforded protection through local planning policy (Policy CSP 17 of the Tandridge District Core Strategy and Policy DP19: Biodiversity, Geological Conservation & Green Infrastructure of the Tandridge Local Plan Part 2).

3.3 Trees

The site contains native trees. Trees are afforded protection through Policy CSP 18 of the Tandridge District Core Strategy.

3.4 Protected Species

The NPPF and ODPM Circular 06/2005 sets out government policy on biodiversity in planning decisions. Under the NPPF and ODPM Circular 06/2005, the presence of a protected species is a material consideration when a planning authority is considering a development proposal. Protected and priority species are also afforded protection through local planning policy (Policy CSP 17 of the Tandridge District Core Strategy and Policy DP19: Biodiversity, Geological Conservation & Green Infrastructure of the Tandridge Local Plan Part 2).

3.4.1 Invertebrates

The roman snail (*Helix pomatia*) was recorded on site, which is protected un Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). This makes it an offence to kill or injure the roman snail.

The site may support the stag beetle (*Lucanus cervus*), which is a species of principal importance as listed under Section 41 of the NERC Act, 2006.

3.4.2 Amphibians

The site has low potential to support common toads (*Bufo bufo*) and great crested newts (*Triturus cristatus*), which are both species of principal importance, as listed under Section 41 of the NERC Act, 2006.

The great crested newt is a European protected species and is fully protected under the Wildlife and Countryside Act, 1981 (as amended) and the Conservation of Habitats and Species Regulations, 2017.

3.4.3 Reptiles

The site may support reptiles. Widespread reptile species are protected under Schedule 5 of the Wildlife and Countryside Act, 1981, (as amended). This makes it an offence to kill or injure reptile species including grass snake (*Natrix natrix*), adder (*Vipera berus*), common lizard (*Zootoca vivipara*) and slow

worm (*Anguis fragilis*). Reptiles are also afforded protection through national planning policy and are species of principal importance as listed under Section 41 of the NERC Act, 2006.

3.4.4 Breeding Birds

The site is likely to support breeding birds. Under the Wildlife and Countryside Act (1981) as amended, it is illegal to take, damage or destroy the nests of wild birds whilst being built or in use. Birds of high and medium conservation concern may also breed on site; however, these species do not receive any other protection above and beyond that received by all wild breeding birds.

3.4.5 Bats

The site has been identified to have potential to support foraging and commuting bats. All British bat species and their roosts are fully protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017. This means it is a criminal offence to:

- Deliberately capture, injure or kill a bat.
- Intentionally or recklessly disturb a bat in its roost or deliberately disturb a group of bats.
- Damage or destroy a bat roosting place (even if bats are not occupying the roost at the time).
- Possess or advertise/sell/exchange a bat (dead or alive) or any part of a bat.
- Intentionally or recklessly obstruct access to a bat roost.

Some species of bats are also species of principal importance, as listed under Section 41 of the NERC Act 2006.

3.4.6 European Hedgehogs

The site may support European hedgehogs (*Erinaceus europaeus*). The European hedgehog is a species of principal importance, as listed under Section 41 of the NERC Act 2006.

3.4.7 Badgers

A badger latrine and foraging signs (snuffle holes) were recorded on site. Badgers (*Meles meles*) are protected under the Protection of Badgers Act (1992). This makes it an offence to kill or injure a badger, damage or destroy a sett or disturb a badger whilst it occupies a sett.

3.5 Ecological Enhancement

The site offers significant opportunities for ecological enhancement. Both national and local policy support ecological enhancement in the design of developments. The NPPF and accompanying ODPM Circular 06/05 state that Local Planning Authorities should aim to conserve and enhance biodiversity.

4. Methods

This report has been produced with reference to current guidelines for Preliminary Ecological Appraisals (CIEEM, 2017) and BS42020:2013: Biodiversity – Code of Practice for Planning and Development.

4.1 Data Search

Surrey Biodiversity Information Centre (SBIC) was contacted in 2018 to provide a data search report for the site and land within 1 km of the site boundary (comprising information on protected species,

species of conservation concern and statutory and non-statutory designated sites). The following published materials were also consulted:

- The Multi-Agency Geographical Information for the Countryside (www.magic.gov.uk) (accessed 10th September 2019).
- Section 41: Species and Habitats of Principal Importance in England (NERC Act, 2006) (www.jncc.defra.uk, accessed on 10th September 2019).
- Tandridge District Core Strategy, Adopted October 2008 (accessed on 10th September 2019).
- Tandridge Local Plan Part 2: Detailed Policies 2014-2029, Adopted July 2014 (accessed on 10th September 2019).

4.2 Phase 1 Habitat Survey

A Phase 1 habitat survey (JNCC, 2010) was undertaken of the site by Sarah Lyne CEnv BSc (Hons) MCIEEM and Martin Roche BSc (Hons) Grad CIEEM on 19th September 2019. The weather conditions during the survey were 18°C, wind force 1, and dry.

The survey technique was extended to provide more detail on the potential for the site to support protected species. Target notes (TN) were used to identify potential for protected or notable species or habitats, and to give more detailed site descriptions. The standard habitat definitions were used, and plant species nomenclature were noted following Stace (2010).

Where grassland was recorded on site, presenting as species-poor, rank, overgrown and dominated by coarse grassland species such as Yorkshire-fog (*Holcus lanatus*), false oat-grass (*Arrhenatherum elatius*) and cock's-foot (*Dactylis glomerata*), an additional classification of COG was used, to indicate coarse grassland habitats.

4.3 Protected Species Assessment

As part of the PEA, the site was assessed for its potential to contain protected or notable species. The assessment was made based on the habitats present within the site and their suitability for protected species (information on the legislation of protected species can be found in Section 3). Protected species assessed for, but not limited to, were:

- Plants of conservation concern.
- Invertebrates of conservation concern.
- Great crested newts.
- Common toad.
- Reptiles.
- Breeding birds.
- Bats.
- Hazel dormice.
- Badgers.
- European hedgehog.
- Brown hare (*Lepus europaeus*).
- Otters (*Lutra lutra*).
- Water voles (*Arvicola amphibius*).

In addition, a search was undertaken for evidence of non-native, invasive species.

4.4 Survey Limitations

The data search should not be taken as a definitive list of the protected species and species of conservation concern that occur within the search area.

The site was visited over the period of one day, as such seasonal variations cannot be observed and only a selection of all species that potentially occur within the site have been noted. Therefore, the survey provides a general assessment of potential nature conservation value.

The Phase 1 habitat survey was undertaken at the optimal time of year. There were no limitations to the survey in terms of the following:

- The site could be fully accessed.
- Weather conditions (dry and sunny).
- Personal competence (qualifications, training, skills and experience).
- Time spent surveying.

5. Baseline Ecological Conditions

5.1 Data Search

A copy of the data search report from SBIC can be supplied on request (report reference: 18211).

5.1.1 Designated Sites

The site is not located within a designated site for nature conservation. Table 1 provides details on designated sites which are present within 1 km of the site.

Table 1. Designated Sites within 1 km of the Site

Site Name and Designation	Grid Reference	Approximate Distance from Site (m)	Area (Ha)	Description
Woldingham & Oxted Downs SSSI	TQ370540 TQ385543 TQ375562	500	128.9	Comprises a large area of downland on the scarp and dip slopes of the North Downs. The site includes rich chalk grassland, scrub and mature and secondary woodland, supporting many characteristic plants and animals, a number of which, are rare.
Long Hill SNCI	TQ366568	190	5.4	Supports species-rich unimproved chalk grassland, as well as some scrub. A Nationally Scarce plant species has been recorded from the site.
High Drive Scrub pSNCI (potential SNCI)	TQ368566	125	6.8	No information provided.

Site Name and Designation	Grid Reference	Approximate Distance from Site (m)	Area (Ha)	Description
Station Road Wood pSNCI	TQ364565	215	5.5	No information provided.
Lunghurst Wood pSNCI	TQ371571	585	7.0	No information provided.

5.1.2 Ancient Woodland

The site is not located within an area of ancient woodland or plantation on ancient woodland. Three areas of ancient woodland are located within 1 km of the site, the nearest being approximately 685 m to the north east of the site.

5.1.3 Habitats of Principal Importance

Four types of habitats of principal importance are located within 1 km of the site, as detailed in Table 2.

Table 2. Habitats of Principal Importance within 1 km of the Site

Habitat Type	Approximate Number of Land Parcels	Nearest Land Parcel to Site
Deciduous woodland	17	0
Woodpasture and Parkland	1	550
Lowland Calcareous Woodland	1	610
Ponds	2	155

5.1.4 Protected Species and Species of Conservation Concern

Table 3 below provides a summary of records of protected species and species of conservation concern within 1 km of the site, received from SBIC. Only the nearest record to the site and those no more than 10 years old have been included in Table 3. There are no records for the site itself.

Table 3. Protected Species and Species of Conservation Concern recorded within 1 km of the Site

Vernacular Name	Scientific Name	CHSR	WCA Sch 1, 5, 8	SPI	Local BAP	BOCC	Other	Number of Records	Nearest Record to Site (Approximate)	Most Recent Record
Plants										
Large-leaved lime tree	<i>Tilia platyphyllos</i>						NS	2	Within 1 km	2016
Bluebell	<i>Hyacinthoides non-scripta</i>		✓					3	Within 1 km	2017
Stinking hellebore	<i>Helieborus foetidus</i>						NS	1	Within 1 km	2013
Welsh poppy	<i>Mecanopsis cambrica</i>						NS	3	Within 1 km	2016
White helleborine	<i>Cephalanthera damasonium</i>			✓				2	Within 1 km	2016
White mullein	<i>Verbascum lychnitis</i>						NS	1	Within 1 km	2015
Invertebrates										
Chalk hill blue butterfly	<i>Polyommatus coridon</i>		✓ (9.5a)					3	Within 1 km	2009
Dingy skipper butterfly	<i>Erynnis tages</i>			✓				2	Within 1 km	2009
Grizzled skipper butterfly	<i>Pyrgus malvae</i>			✓				1	Within 1 km	2013
Roman snail	<i>Helix pomatia</i>		✓					2	Within 1 km	2010
Small blue butterfly	<i>Cupido minimus</i>		✓ (9.5a, b)					3	Within 1 km	2009
Small heath butterfly	<i>Coenonympha pamphilus</i>			✓				2	Within 1 km	2009
Mammals										
Brown long-eared bat	<i>Plecotus auritus</i>	✓	✓	✓				1	Within 1 km	2016
Hazel dormouse	<i>Muscardinus avellanarius</i>	✓	✓	✓				1	Within 1 km	2016
Roe deer	<i>Capreolus capreolus</i>						Protection of Wild Mammals Act, 1996	2	Within 1 km	2017

Source of records = SBIC. CHSR: Conservation of Habitats and Species Regulations 2017; WCA = Wildlife and Countryside Act, 1981 (as amended); SPI = Species of Principal Importance, NERC Act, 2006; Local BAP = Local Biodiversity Action Plan species; BOCC List = Birds of Conservation Concern 4: Red (high conservation concern) and Amber List (medium conservation concern).

5.2 Phase 1 Habitat Survey - Habitats

The results of the Phase 1 habitat survey undertaken on 19th September 2019 are presented in map form on Figure 1. Photographs of the site are provided in Appendix 1 and a full list of species, with scientific names, is provided in Appendix 2. The following habitats were recorded on the site:

- Scattered scrub.
- Scattered broad-leaved trees.
- Scattered coniferous trees.
- Felled broad-leaved trees.
- Tall ruderal.
- Non-ruderal.
- Amenity grassland.
- Introduced plants.
- Species-poor intact hedge.
- Fence.
- Buildings.
- Hard standing.
- Bare ground.

5.2.1 Scattered Scrub

Scattered scrub is present on the western northern boundaries of the site. The vegetation in this area is overgrown and unmanaged. Species of scrub recorded on site include bramble, blackthorn, dog-rose, dogwood, hazel, hawthorn and holly. Ivy and clematis were also recorded in the areas of scrub.

5.2.2 Scattered Broad-Leaved Trees

Scattered broad-leaved trees are present on all boundaries of the site. There are both young and mature scattered broad-leaved trees present, including ash, beech, English oak, sycamore and field maple.

5.2.3 Scattered Coniferous Trees

There are two young yew trees present on site (see Figure 1 for locations).

5.2.4 Felled Broad-Leaved Trees

There are numerous felled broad-leaved trees present on site. The resulting log piles are located at target note 1 on Figure 1.

5.2.5 Tall Ruderal

Tall ruderal vegetation is present on the western aspect of the site, in amongst trees and scrub. The only species recorded include broad-leaved willowherb and common nettle.

5.2.6 Non-Ruderal

An area of non-ruderal vegetation is present on the western aspect of the site in the areas associated with the scattered scrub habitat. The only species recorded was male fern.

5.2.7 Amenity Grassland

There are two distinct areas of amenity grassland on site; one area is associated with the buildings and one area runs along the southern site boundary leading from the site entrance. The amenity grassland is mown short and is dominated by annual meadow-grass. Herbaceous species recorded include creeping buttercup, dandelion and groundsel.

5.2.8 Introduced Plants

Patches of laurel and cotoneaster are present along the western and southern boundaries of the site. Other areas of introduced plants are associated with the amenity grassland, leading out to the site entrance.

5.2.9 Species-Poor Intact Hedge

A species-poor intact hedge, in the form of a large and mature beech hedge, is present on the site (see Figure 1 for location).

5.2.10 Fence

Metal chain-link fencing forms the northern, southern and western site boundaries.

5.2.11 Buildings

There are two shiplap sheds present on site (buildings B1 and B2 on Figure 1), with pitched bitumen felt roofs. The buildings are sited on concrete paving slabs.

5.2.12 Hard Standing

Hard standing is present on site in the form of the remains of a dry ornamental garden pond, paving slabs and brick piles.

5.2.13 Bare Ground

Bare ground habitat is present throughout the site. Three large log piles, one brick pile and two rubble piles are present on the bare ground habitat, where tree removal and site clearance has occurred (see target notes 1, 4 and 5 on Figure 1). A badger dung pit and badger snuffle holes were recorded on the bare ground habitat (see target notes 2 and 3 on Figure 1, respectively).

5.3 Phase 1 Habitat Survey - Species

The following fauna was recorded during the survey:

- Blackbird.
- Blue tit.
- Great tit.
- Grey squirrel.
- Goldfinch.
- Magpie.

- Robin.
- Rook.
- Speckled wood butterfly.
- Wood pigeon.
- Wren.

6. Ecological Constraints and Opportunities Assessment

Table 4 sets out known and potential ecological constraints to development, derived from the data search and Phase 1 habitat survey, including designated sites, ancient woodland, habitats of principal importance and protected species/species of conservation concern. Where a potential ecological constraint has been identified, further survey work and/or appropriate avoidance, mitigation and compensation (as appropriate) is likely to be required to address the issue.

Table 4. Ecological Constraints and Opportunities Assessment

Valued Ecological Receptor	Potentially Present / Known to be Present on Site	Assessment and Justification
Designated sites	None present on site	<p>There is one SSSI, one SNCI and three pSNClS located within 1 km of the site. The development should not result in significant adverse impacts on designated sites for the following reasons:</p> <ul style="list-style-type: none"> • The proposed development site is separated from the nearest designated site by 125 m of existing dwellings and gardens. • The development is for a single dwelling. • The proposed development will be confined to the site. • The proposed development will comply with legislation relevant to reducing the impacts of construction, namely the Control of Pollution Act, 1974, the Environmental Protection Act, 1990, The Clean Air Act, 1993, The Environment Act, 1995 and the Pollution Prevention and Control Act, 1999. • The proposed development will conform to British Standards on noise and vibration (BS 5228-2009. Code of Practice for Noise and Vibration Control on Construction and Open Sites). <p>For the above reasons, designated sites are not discussed further in this report.</p>

Valued Ecological Receptor	Potentially Present / Known to be Present on Site	Assessment and Justification
Habitats of principal importance	Beech hedgerow on site Woodland adjacent to the site	<p>Measures are recommended in Section 7.1, relating to how the woodland adjacent to the site should be protected during construction and development operation. Measures are also proposed in relation to the relocation of the beech hedgerow. Providing these recommendations are adhered to, the development should not result in significant adverse effects on habitats of principal importance located within and adjacent to the site.</p> <p>The proposed development should not result in a significant adverse impact on other habitats of principal importance, located within 1 km of the site, for the same reasons given for designated sites.</p>
Ancient woodland	None present on site	<p>Three areas of ancient woodland are located within 1 km of the site. The proposed development should not result in a significant adverse impact on ancient woodland, for the same reasons given for designated sites. Therefore, ancient woodland is not discussed further in this report.</p>
Trees	Present	<p>Trees are present on site. Recommendations are made in Section 7.2 to ensure that remaining trees are protected during site works.</p>
Plants of conservation concern	Negligible potential	<p>No protected or notable rare plant species were noted during the survey. The habitats present on site (bare ground and amenity grassland) have negligible potential to support plants of conservation concern. Therefore, plants of conservation concern are considered to be absent from the site and are not discussed further in this report.</p>
Invasive plant species such as rhododendron, Japanese knotweed (<i>Fallopia japonica</i>) and giant hogweed (<i>Heracleum mantegazzianum</i>)	None present on site	<p>Invasive plants were not identified during the field survey. Therefore, invasive plants are considered to be absent from the site and are not discussed further in this report.</p>

Valued Ecological Receptor	Potentially Present / Known to be Present on Site	Assessment and Justification
Invertebrates of conservation concern	Possible (stag beetles). Roman snail confirmed to present on site	<p>The Roman snail was identified on site during the field survey. The Roman snail is protected against killing and injury. As the proposals could potentially result in harm to Roman snails during site clearance, avoidance measures have been recommended in Section 7.3.</p> <p>The log piles on site could support stag beetles. As the proposals will require the clearance of the log piles, which could result in harm to stag beetles, avoidance measures have been recommended in Section 7.3.</p> <p>Providing these recommendations are adhered to, the development should not result in harm to the stag beetle, which is a species of principal importance and the Roman snail, which is protected against killing and injury.</p> <p>The habitats present on site (bare ground and amenity grassland) and have negligible potential to support other invertebrates of conservation concern identified in the data search.</p>
Great crested newts	Unlikely to be on site	<p>The site does not contain any water bodies. There are at least two waterbodies located within 250 m of the site, the nearest being approximately 150 m to the north (www.bing.com/maps). Taking into consideration the points below, it is considered that it is likely that great crested newts will be encountered during site clearance works.</p> <ul style="list-style-type: none"> Great crested newts can disperse 500 m or more from their breeding pond. However, small populations are most likely to utilise habitats within 50 m (Natural England, 2001). The likelihood of great crested newts utilising habitats decreases the further the distance from the breeding pond. The site is located outside of this core area of 50 m, separated from the ponds by grassland, woodland and gardens, which are habitats of higher value to great crested newts.

Valued Ecological Receptor	Potentially Present / Known to be Present on Site	Assessment and Justification
		<ul style="list-style-type: none"> The site currently comprises mostly bare ground and amenity grassland, with introduced plants, which have limited potential to support great crested newts. The wooded area in the site will be retained and protected. Great crested newts were not recorded in the data search in the last 10 years. The most recent record for great crested newts within 1 km of the site is for 1996. <p>However, as the site comprises log, rubble and brick piles, which can be favoured by amphibians for shelter outside of the breeding season, in this case, it is considered appropriate to take a precautionary approach to ensure great crested newts are not harmed during the works, in the unlikely event that they are present on site (see recommendations in Section 7.3). Providing these recommendations are adhered to, the development should not result in harm to the great crested newt, which is a fully protected species.</p>
Common toads	Unlikely to be on site	For the same reasons given above (great crested newts), there is a low probability that common toads are present within the area to be affected by the works. Therefore, it is considered appropriate to take a precautionary approach to ensure common toads are not harmed during the works (see recommendations in Section 7.3). Providing these recommendations are adhered to, the development should not result in harm to the common toad, which is a species of principal importance.
Reptiles (such as slow worms- <i>Anguis fragilis</i> , common lizards - <i>Zootoca vivipara</i> , and grass snakes- <i>Natrix natrix</i>)	Moderate potential – log, rubble and brick piles	The site comprises log, rubble and brick piles, which could potentially support basking and hibernating reptile species. However, as the remaining areas of the site comprise habitats, which are largely unsuitable for reptiles, i.e., short-mown amenity grassland and bare ground, further survey for reptiles is not considered necessary. Therefore, it is considered appropriate to take a precautionary approach to ensure reptiles are not harmed during the works (see recommendations in Section 7.3). Providing these

Valued Ecological Receptor	Potentially Present / Known to be Present on Site	Assessment and Justification
Breeding birds	Likely to be present	<p>recommendations are adhered to, the development should not result in killing or injury of reptiles.</p> <p>The site comprises a hedgerow and introduced plants, which will be affected by the works and could support common species of breeding birds. As nesting birds are protected, recommendations to avoid disturbing nesting birds are provided in Section 7.3.</p>
Birds of conservation concern (such as barn owl - <i>Tyto alba</i> , peregrine falcon – <i>Falco peregrinus</i> and black redstart – <i>Phoenicurus ochruros</i>)	Negligible	Birds of conservation concern were not recorded in the data search or during the Phase 1 habitat survey. The site does not contain habitats, which typically support birds protected under Schedule 1 of the Wildlife and Countryside Act, 1981 (as amended). However, recommendations are made in relation to the protection of nesting birds, which also applies to birds, which are species of principal importance and/or of high/medium conservation concern.
Bats	<p>Buildings – negligible potential</p> <p>Hedgerow and site boundaries – potential for foraging and commuting bats</p>	<p>The buildings on site have negligible potential to support roosting bats.</p> <p>The woodland adjacent to the site and trees/scrub/hedgerow along the boundaries of the site are likely to support foraging and commuting bats. The woodland adjacent to the site and site boundaries are well linked to other areas of woodland. However, further survey for foraging and commuting bats is not considered necessary for the following reasons:</p> <ul style="list-style-type: none"> • The tree/scrub boundaries will be retained. • Recommendations have been made to relocate the beech hedgerow. <p>Recommendations have been made in Section 7.3., relating to outside lighting, and how impacts on foraging and commuting bats can be minimised. Providing these recommendations are adhered to, the development should not result in a significant adverse impact on foraging and commuting bats.</p>

Valued Ecological Receptor	Potentially Present / Known to be Present on Site	Assessment and Justification
Badger	Signs of foraging recorded on site	Signs of foraging badgers were recorded on site during the Phase 1 habitat survey. Therefore, measures have been recommended in Section 7.3, relating to how harm to badgers can be avoided during site clearance and construction activities. Providing these recommendations are adhered to, the development should not result in a significant adverse impact on foraging badgers.
Hazel dormouse	Unlikely to be present in areas to be directly impacted upon by development	<p>The site lies adjacent to woodland and contains trees/scrub on the north and south boundaries of the site, which could support the hazel dormouse. However, it is considered likely that the hazel dormouse is absent from the areas of the site, which will be impacted on by the proposals for the following reasons:</p> <ul style="list-style-type: none"> • Recommendations have been made relating to the protection of the woodland adjacent to the site. • The trees/scrub on the northern and southern site boundaries is proposed to be retained and protected under current plans. • The remaining areas of the site, which will be directly impacted on by the works, comprise mainly bare ground, log piles and amenity grassland, which have negligible value for hazel dormice. • The old beech hedgerow, which is proposed to be removed/relocated, comprises gaps at each end of at least 3 m, which reduces the likelihood that the hedgerow is used by the hazel dormouse. <p>Therefore, the hazel dormouse should not be negatively impacted on by the works and is not discussed further in this report.</p>
Brown hare	Negligible	The site does not contain any habitats which could support the brown hare, i.e. open arable farmland. The brown hare, is therefore considered to be absent from the site and is not discussed further in this report.

Mr. Alan Johnston – Hartlea House, Woldingham

Valued Ecological Receptor	Potentially Present / Known to be Present on Site	Assessment and Justification
Water vole and European otter	Negligible	The site does not contain any habitats, which could support the water vole and European otter, i.e. rivers and streams. Water voles and European otters are, therefore, considered to be absent from the site and are not discussed further in this report.
European hedgehog	Potentially present	The log piles and garden habitats on site could support European hedgehogs. As the European hedgehog could be present in areas of the site, which will be subject to site clearance and construction activities, avoidance measures for European hedgehogs have been recommended in Section 7.3. Providing these recommendations are adhered to, the development should not result in a significant adverse impact on the European hedgehog.

7. Recommendations

7.1 Habitats of Principal Importance

7.1.1 Protection of Woodland

The following avoidance and protection measures relating to broad-leaved woodland adjacent to the site's western boundary, are recommended:

- The site clearance and construction works should be supervised at all times by a competent person, with appropriate experience and training. All operatives attending site will possess, as a minimum, a trade specific Construction Skills Certificate Scheme (CSCS) card. The site supervisor for the demolition works will carry out toolbox talks on a weekly basis, including the presence of sensitive habitats on site.
- Working hours should not include times around dusk or dawn, when bats are emerging/re-entering roost spaces, which may be present in the surrounding woodland.
- Temporary hoarding should be used to separate the woodland from the rest of the site, to ensure a barrier is maintained and access into the woodland during construction is prevented.
- Panelled fencing (or similar) should be installed prior to occupation, abutting the garden of the new dwelling, with no gated access into the woodland.
- The proposals should include the provision of composting bins, which will provide further deterrent to the depositing of garden waste over the fence into the woodland.
- The proposals should include measures to reduce the impact of sensitive outside lighting on foraging and commuting bats (see Section 7.3).

Providing the recommendations given above are adhered to, the woodland adjacent to the site should not be negatively impacted upon by the development proposals.

7.1.2 Hedgerow

The beech hedgerow, which separates the site from the client's rear gardens, will require removal or relocation to facilitate development. It is recommended that the hedgerow is retained and relocated, considering its age and dense pollarded structure, which would be difficult to replicate by planting a new hedgerow. It is recommended that the hedgerow is relocated in its entirety, to the required new location (understood to be further east towards the client's property).

Hedgerow translocation should be carried out by a suitably experienced contractor at the optimal time of year. Following completion of translocation, aftercare of the hedgerow should be carried out as directed by the contractor, to ensure the hedgerow is maintained in perpetuity.

7.2 Trees

Native trees should be retained, where possible and any trees lost as a result of the proposed development, should be replaced with equivalent numbers of native species.

To prevent damage to retained trees during development, a buffer zone should be put in place to protect the rooting area (Root Protection Area, which is calculated in accordance with British Standard 5837, 'Trees in Relation to Construction'), in which no construction activities should be permitted.

7.3 Protected Species and Species of Conservation Concern

7.3.1 Stag Beetles, Roman Snails, Reptiles and European Hedgehogs

An Ecological Clerk of Works (ECoW) should be present on site during any construction activities, which are likely to involve the removal/disturbance of any vegetation, as well as for the removal of the log, rubble and brick piles. Any stag beetles, Roman snails, reptiles and European hedgehogs found, should be allowed to move away into adjacent habitats unharmed, of their own accord.

Should the client wish to clear log, rubble and brick piles prior to site clearance and construction works, this should be carried out carefully by hand and gradually over a lengthened period of time. If a protected animal is found, works should cease and aLyne Ecology contacted immediately for advice.

7.3.2 Amphibians

It is recommended that habitats within the site are carefully cleared to ensure that any common toads, if present, can be safely relocated away from the construction areas or move away into surrounding habitats of their own accord.

If great crested newts are found during clearance works, works should cease, and Natural England consulted on how works can proceed lawfully.

7.3.3 Breeding Birds

It is recommended that any necessary clearance of scrub/hedge should be undertaken outside of the breeding bird season (i.e. during September to February inclusive). However, if works which are likely to damage bird nests need to be carried out during the nesting period, there is potential that nesting birds could be harmed and disturbed. To ensure legal compliance, a check should be undertaken by an ecologist within 48 hours of works commencing, to confirm the presence/absence of nest sites. If nests sites are identified, works to that feature should be delayed until the nest site becomes inactive (species specific, but approximately 4-6 weeks maximum).

7.3.4 Bats

Recommendations to minimise the potential impacts of artificial external lighting on bat activity, are provided below (Institute of Ecology and Environmental Management, 2006; Institute of Lighting Engineers, 2007 and Bat Conservation Trust, 2018):

- Avoid prolonged use of outside lighting during the period dusk to dawn, particularly during the bat active season (April to September).
- Security lighting should be avoided on the southern and western boundaries of the site and be on a motion sensor and short duration timer (1 minute).
- Lighting that is required for security or safety reasons, should use a lamp of no greater than 2000 lumens (150 Watts) and should comprise sensor activated lamps.
- LED luminaires with a warm white spectrum (<2700 Kelvin) are the preferred option and should be used where possible. Luminaires should feature peak wavelengths higher than 550 nm to minimise disturbance to bats. All luminaires should lack UV elements, metal halide and fluorescent sources should not be used.
- Lighting should be directed to where it is needed with minimal light spillage. This can be achieved by limiting the height of the lighting columns and by using as steep a downward angle as possible and/or a specialist bollard that directs the light below the horizontal plane.

- Artificial lighting should not directly illuminate any potential bat roosting features, or habitats of value to foraging bats, i.e. woodland and boundary trees.

7.3.5 Badgers

The following measures should be put in place during site clearance and construction, to ensure badgers are not injured during the works:

- Any holes or trenches should not be left open overnight, or have a means of escape for badgers, such as a ramp or a plank of wood.
- Any temporarily exposed open pipe system should be capped in such a way as to prevent badgers gaining access, as may happen when contractors are off-site.

7.4 Ecological Enhancement

It is recommended that the following ecological enhancements are considered for the final development design:

- The installation of Schwegler 2FN Bat Boxes would be beneficial to common and widespread bat species that are likely to be present in the local area (www.arkwildlife.co.uk).
- The installation of Apex robin & Wren Nest Box and Apex House Sparrow Nest Box would be beneficial to dunnocks and house sparrows. These nest boxes can be purchased from www.arkwildlife.co.uk.
- The installation of a Royal Hedgehog House, which can be purchased from www.arkwildlife.co.uk.
- The installation of a hibernacula for invertebrates, such as the Bug Box 2000, which can be purchased from www.roceco.co.uk.
- A wildlife habitat panel, which can provide habitat for a range of invertebrates: <https://greenroofshelters.co.uk/habitat-panels/>
- The installation of a green or brown roof would provide suitable habitat for invertebrates and breeding birds. Even small green/brown roofs can be beneficial to wildlife, such as one created on a shed or other outbuilding. Further details can be found at http://www.greenroofguide.co.uk/media/en/applications/GRC_DIY_Guide_small.pdf.

8. References

Bat Conservation Trust. (2018). *Bats and Artificial Lighting in the UK, Guidance Note 08/18*. Institution of Lighting Professionals.

British Standards Institute (BSI) (2013). *BS42020 - Biodiversity Code of Practice for Planning and Development*. BSI, London.

British Standards Institution (2012). *BS 5837:2012 Trees in relation to design, demolition and construction - recommendations*. BSI Standards Ltd.

Collins (2016). *Bat Surveys: Good Practice Guidelines, 3rd edition*. Bat Conservation Trust.

Chartered Institute of Ecology and Environmental Management (2017). *Guidelines for Preliminary Ecological Appraisal. Technical Guidance Series*. CIEEM.

Chartered Institute of Ecology and Environmental Management (2017). *Guidelines for Ecological Report Writing. Technical Guidance Series*. CIEEM.

Eaton, M., Brown A., Noble D., Musgrove A., Hearn R., Aebischer N., Gibbons D., Evans A., and Gregory R. (2015) *Birds of Conservation Concern 4: The Population Status of Birds in the United Kingdom, Channel Islands and the Isle of Man*. British Birds 102, pp296-341.

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

English Nature (2004). *Bat Mitigation Guidelines*. English Nature, Peterborough.

HM Government (1981). *Wildlife and Countryside Act 1981 (as amended)*.

HM Government (2000). *Countryside and Rights of Way Act, 2000*.

HM Government (2005) *ODPM Circular 06/05 Government Circular: Biodiversity and Geological Conservation – Statutory Obligations and their Impact within the Planning System*.

HM Government (2006). *Natural Environment and Rural Communities Act 2006*.

HM Government (2017). *Conservation of Habitats and Species Regulations 2017*.

HM Government (2018) *National Planning Policy Framework*. Department for Communities and Local Government.

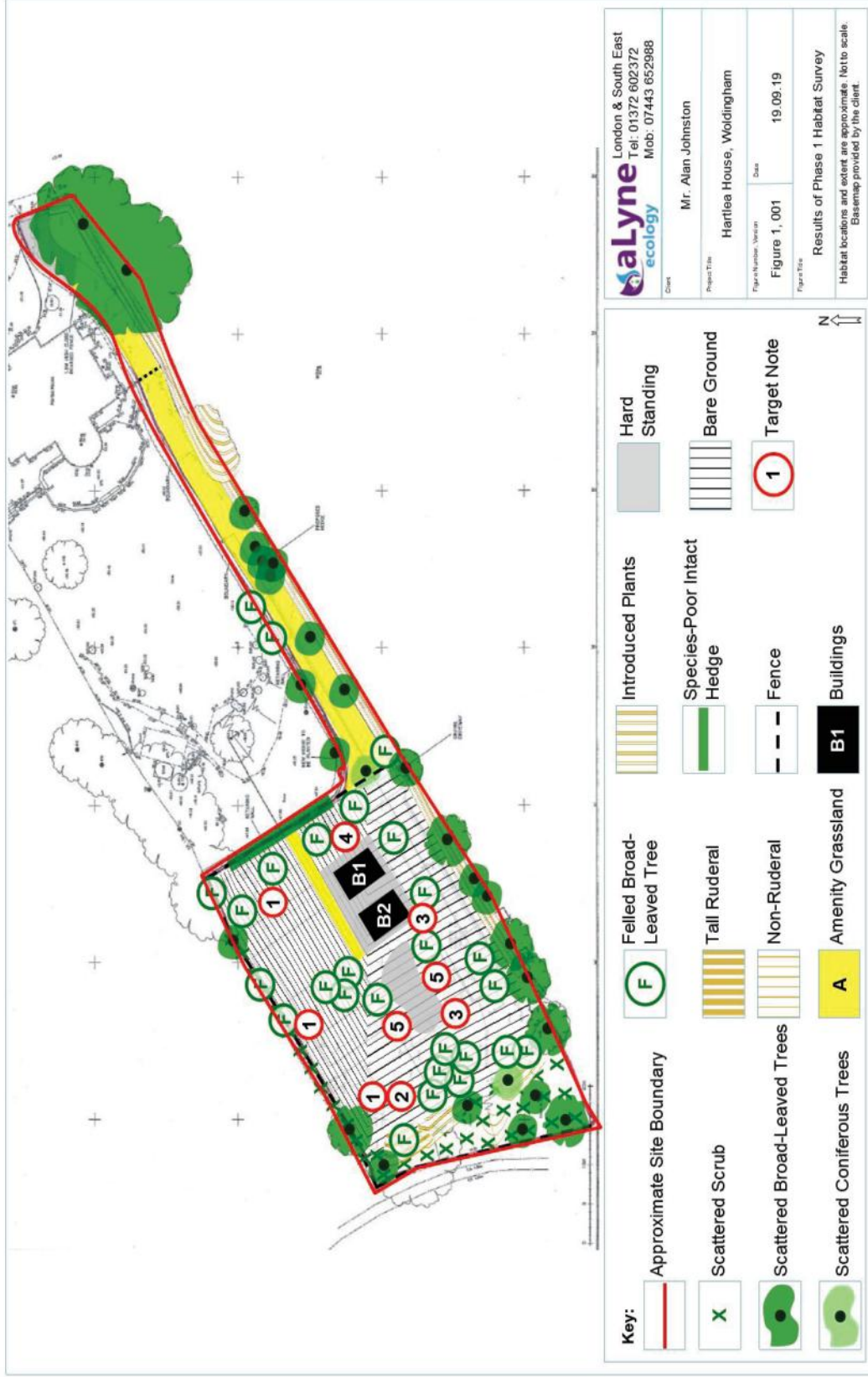
JNCC (2010). *Handbook for Phase 1 habitat survey*. Joint Nature Conservation Committee.

Stace (2010). *New Flora of the British Isles (third edition)*. Cambridge University Press, Cambridge.

Mr. Alan Johnston – Hartlea House, Woldingham



9. Figure 1 – Results of Phase 1 Habitat Survey



10. Appendix 1 – Site Photographs



Photograph 1—Bare ground and log piles in the western end of the site.



Photograph 2—View of the site looking north east. Trees along northern boundary are to be retained.



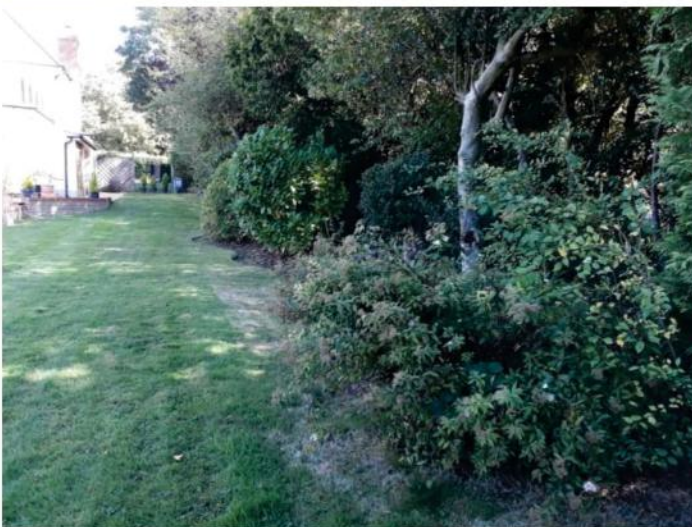
Photograph 3—Buildings B1 and B2.



Photograph 4—View looking west towards the adjacent woodland.



Photograph 5—Old beech hedgerow on left hand side of photo.



Photograph 6—View looking east along proposed route of access road.

11. Appendix 2 – Full Species List and Target Notes

Habitats	Common Name	Species Name
Scattered Scrub	Bramble	<i>Rubus fruticosus</i> agg.
	Blackthorn	<i>Prunus spinosa</i>
	Clematis	<i>Clematis vitalba</i>
	Dog-rose	<i>Rosa canina</i>
	Dogwood	<i>Cornus sanguinea</i>
	Hazel	<i>Corylus avellane</i>
	Hawthorn	<i>Crataegus monogyna</i>
	Holly	<i>Ilex aquifolium</i>
	Ivy	<i>Hedera helix</i>
Scattered Broad-Leaved Trees	Ash	<i>Fraxinus excelsior</i>
	Beech	<i>Fagus sylvatica</i>
	Elm	<i>Ulmus minor</i>
	English oak	<i>Quercus robur</i>
	Field maple	<i>Acer campestre</i>
	Hawthorn	<i>Crataegus monogyna</i>
	Holly	<i>Ilex aquifolium</i>
	Sycamore	<i>Acer pseudoplatanus</i>
Scattered Coniferous Trees	Yew	<i>Taxus baccata</i>
Tall Ruderal	Broad-leaved willowherb	<i>Epilobium montanum</i>
	Common nettle	<i>Urtica dioica</i>
Non-ruderal	Male fern	<i>Dryopteris filix-mas</i>
Amenity Grassland	Annual meadow-grass	<i>Poa annua</i>
	Creeping buttercup	<i>Ranunculus repens</i>
	Creeping thistle	<i>Cirsium arvense</i>
	Dandelion	<i>Taraxacum officinale</i>
	Dove's-foot crane's-bill	<i>Geranium molle</i>
	Groundsel	<i>Senecio vulgaris</i>
	Herb-Robert	<i>Geranium robertianum</i>
	Pendulous sedge	<i>Carex pendula</i>
Introduced Plants	Butterfly-bush	<i>Buddleja davidii</i>
	Clematis	<i>Clematis</i> sp.
	Cotoneaster	<i>Cotoneaster</i> sp.
	Laurel	<i>Laurus</i> sp.
	Raspberry	<i>Rubus</i> sp.
Species-Poor Hedge	Beech	<i>Fagus sylvatica</i>
Invertebrates	Speckled wood butterfly	<i>Pararge aegeria</i>
Birds	Blackbird	<i>Turdus merula</i>
	Blue tit	<i>Cyanistes caeruleus</i>
	Goldfinch	<i>Carduelis carduelis</i>
	Great tit	<i>Parus major</i>
	Magpie	<i>Pica pica</i>
	Rook	<i>Corvus frugilegus</i>
	Wood pigeon	<i>Columba palumbus</i>
	Wren	<i>Troglodytes troglodytes</i>
	Mammals	Grey squirrel

Target Note	Notes
1	Log/wood pile
2	Badger latrine
3	Badger snuffle hole
4	Brick pile
5	Rubble pile