Preliminary Ecological Appraisal

Land Near the Junction of Lynwick Street and Guildford Road

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Contents

LIABILITIES:

Whilst every effort has been made to guarantee the accuracy of this report, it should be noted that living animals and plants are capable of migration/establishing and whilst such species may not have been located during the survey duration, their presence may be found on a site at a later date.

This report provides a snap shot of the species that were present at the time of the survey only and does not consider seasonal variation. Furthermore, where access is limited or the site supports habitats which are densely vegetated only dominant species maybe recorded.

The recommendations contained within this document are based on a reasonable timeframe between the completion of the survey and the commencement of any works. If there is any delay between the commencement of works that may conflict with timeframes laid out within this document, or have the potential to allow the ingress of protected species, a suitably qualified ecologist should be consulted.

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

1.0 Introduction

1.1 The Ecology Partnership was commissioned by Welbeck Land to undertake an updated preliminary ecological appraisal (PEA) at Land Near the Junction of Lynwick Street and Guildford Road, Horsham, West Sussex.

1.2 The key objectives of a PEA (CIEEM, 2017) are to:

- Identify the likely ecological constraints associated with a project;
- Identify any mitigation measures likely to be required, following the 'Mitigation Hierarchy' (CIEEM, 2016; BSI 2013, Clause 5.2);
- Identify any additional surveys that may be required to inform an Ecological Impact Assessment (EcIA); and
- Identify the opportunities offered by a project to deliver ecological enhancement.

1.3 This report comprises the:

- Legislative and planning context (Section 1);
- Assessment methodologies (Section 2);
- Results of previous surveys 2019, and results of the 2021 updated PEA (Section 3);
- Implications for development (Section 4);
- An impact assessment (Section 5); and
- Conclusions (Section 6).

Site Context and Status

1.2 The site is to the south-west of Rudgwick and to the north-west of Horsham (TQ07973305). The site covers approximately *c.* 5ha and consisted of two cow-grazed grasslands with scrub, broadleaved treelines and hedgerows with trees along the field boundaries. The immediate surroundings comprised of arable fields, broadleaved woodland and low-density residential housing. There are no Sites of Special Scientific Interest (SSSI) or Local Nature Reserves (LNR) within 2km of the site.

1.3 The aerial photograph (Figure 1) shows the site and its immediate surroundings. The red line depicts the approximate site boundary and survey area.

Figure 1: Approximate location of the red line boundary (Google Earth Pro June 2021)

Description of Proposed Development

1.4 Current proposals for the site are to build a new residential development with associated access and landscaping which includes the creation of SuDS ponds.

Relevant Planning and Legislation

1.5 The proposals were assessed against policy guidance provided by the National Planning Policy Framework (NPPF, 2023) as well as relevant planning policies from the Horsham District Planning Framework (adopted in 2015) which contains policies relating to nature conservation. Those relevant to the site include:

- Policy 25 – The Natural Environment and Landscape Character
- Policy 31 – Green Infrastructure and Biodiversity

1.6 The emerging Local Plan 2019-2036 also contains the following draft policies relating to nature conservation and relevant to the site:

- Strategic Policy 27 - The Natural Environment and Landscape Character
- Strategic Policy 28: Countryside Protection
- Policy 31 - Strategic Policy: Green Infrastructure and Biodiversity

1.7 The Environment Bill received Royal Assent on 9th November 2021 and is now enacted as the Environment Act 2021. Part 6 (Nature and Biodiversity) and Schedule 14 of the Environment Act 2021 insert a new section 90A and Schedule 7A into the Town and Country Planning Act 1990 (TCPA), which contain the provisions requiring mandatory biodiversity net gain for development granted planning permission pursuant to the TCPA. These provisions require developments to provide a biodiversity value post-development that exceeds the predevelopment biodiversity value of the onsite habitats by at least 10%. This was adopted in February 2024 although there are a number of exemptions which may mean that biodiversity net gain is not required. These are listed under government guidance and are as follows:

- Development below a de minimis threshold;
- Householder applications;
- Small scale self-build and custom housebuilding;
- HS2; and
- Biodiversity net gain sites.

1.8 The assessment also takes into consideration nature conservation and wildlife legislation including, but not limited to, the Wildlife and Countryside Act 1981 (as amended), the Natural Environment and Rural Communities (NERC) Act 2006 and the Conservation of Habitats and Species (EU Exit) Regulations 2019.

1.9 The report has been produced with reference to current guidelines for PEA (CIEEM 2017) and in accordance with BS 42020:2013 Biodiversity – Code of Practice for Planning and Development.

2.0 Methodology

Desktop Study

2.1 A desktop study search was completed using an internet-based mapping service (www.magic.gov.uk) for statutory designated sites and an internet-based aerial mapping service (maps.google.co.uk) was used to understand the habitats present in and around the survey area including identifying habitat linkages and features (ponds, woodlands etc.) within the wider landscape. Records for the site and local area (up to 2km) were purchased from the Sussex Biodiversity Records Centre (Appendix 5).

Phase 1 Habitat Survey, UKHab, and BNG Condition Assessment

2.2 An extended preliminary ecological appraisal was undertaken on the 20th May 2019 by Ecologist Jade Brennan BSc (Hons) MSc Grad CIEEM, with the update PEA undertaken on 2nd June 2021 by Alice Bailey BSc (Hons) QCIEEM and Aimee Littlechild BSc (Hons). This report describes the findings of the 14th May 2024 update survey undertaken by Alice Bailey BSc (Hons) ACIEEM and Ed Simpson BSc (Hons) MSc. The surveyors identified the habitats present, following the 'Phase 1 habitat survey' auditing method (Joint Nature Conservancy Council (JNCC)) and the UK Habitat classification system (UKHab V2). The site was surveyed on foot and the existing habitats and land uses were recorded on an appropriately scaled map.

2.3 Plant species abundance was recorded using the DAFOR scale and species abundance was assigned to one of the following categories in Table 1.

Table 1: DAFOR Scale Lettering

DAFOR Category	Letter
Dominant	D
Abundant	A
Frequent	F
Occasional	O
Rare	R

Protected Species Assessments

2.4 Any evidence of additional protected species was recorded. Standard methods of search and measures of presence, or likely presence based on habitat suitability were used for bats in trees and buildings (Collins 2023), breeding birds (BTO 2020), hazel dormice *Muscardinus avellanarius* (Bright *et al.* 2006), great crested newts *Triturus cristatus* (ARG 2010), reptiles (Froglife 2015), [redacted] (Creswell *et al*. 1990) and water voles *Arvicola amphibius* (Strachan *et al*. 2011).

Limitations

2.5 It should be noted that whilst every effort has been made to provide a comprehensive description of the site, no single investigation could ensure the complete characterisation and prediction of the natural environment. The site was visited over the period of one site visit, as such seasonal variations cannot be observed and potentially only a selection of all species that potentially occur within the site have been recorded. Therefore, the survey provides a general assessment of the potential nature conservation value of the site and does not include a definitive plant species list.

2.6 The protected species assessment provides a preliminary view of the likelihood of protected species occurring on-site, based on the suitability of the habitat and any direct evidence on site. It should not be taken as providing a full and definitive survey of any protected species group. The assessment is only valid for the time when the survey was carried out. Additional surveys may be recommended if, based on this assessment it is considered reasonably likely that protected species may be present.

3.0 Results

Desktop Study

3.1 There were no designated sites within 2km of the site. The closest designated sites were the Slinfold Stream and Quarry Site of Special Scientific Interest (SSSI) approximately *c*. 4.4km south-east and the Chiddingfold Forest SSSI approximately *c*. 5.1km west of the site's red line boundary. The Mens SSSI, Special Area of Conservation (SAC) was also located approximately *c*. 7.8km south-west from the site.

3.2 In terms of non-statutory designations, there are four Local Wildlife Sites (LWS) within 2km of the site. These were as follows:

- Lynwick Hanger LWS is approximately *c.* 240m NW of the site;
- Baynards Tunnel LWS is approximately *c.* 1.2km NW of the site;
- Smithwood & Tittlesfold Copses LWS is approximately *c.* 1.4km SE of the site;
- Godley's Copse LWS is approximately *c.* 1.5km NE of the site.

3.3 A number of priority habitats were present in the local surroundings including deciduous woodland and traditional orchard. The Habitat of Principal Importance, ancient woodland, was also present in the local area.

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Figure 2: Priority habitat: deciduous woodland (dark green) and traditional orchard (medium) surrounding the red line boundary. The Habitat of Principal Importance: ancient woodland (brown stripes) was also present in the local surroundings.

3.4 In terms of waterbodies, OS maps revealed two ponds and five drains within 250m of the red line boundary.

3.5 There are also four European Protected Species (EPS) licences, and seven great crested newt (GCN) licence return results within 2km of the red line boundary (Figure 3):

- GCN licence return 235m south-east confirming GCN presence May 2016
- GCN licence return 305m south-east confirming GCN presence May & June 2016
- GCN licence return 1.2km north-east confirming GCN presence May 2015
- GCN licence return 1.4km north-east confirming GCN presence May & June 2015
- GCN licence return 1.2km north-east confirming GCN presence May & June 2015
- GCN licence return 1.3km north-east confirming GCN presence May 2015
- GCN licence return 1.4km north-east confirming GCN presence May 2015
- EPS licence dated 2015-2023 for the destruction of a GCN resting place *c*. 1.2km north-east.
- EPS licence dated 2017-2021 for the destruction of a GCN resting place *c*. 1.3km north-east.
- EPS licence dated 2017-2019 for the destruction of a common pipistrelle *Pipistrellus pipistrellus* resting place *c*. 1.2km north-east.
- EPS licence dated 2014-2016 for the destruction of a common pipistrelle and brown long-eared bat *Plecotus auritus* resting place *c*. 2km north-west.

3.6 A 2km radius data search was requested from the Sussex Biodiversity Records Centre (SxBRC). Notable protected species from this search are outlined below (Table 2). Only records from within the last ten years and those closest to site have been included.

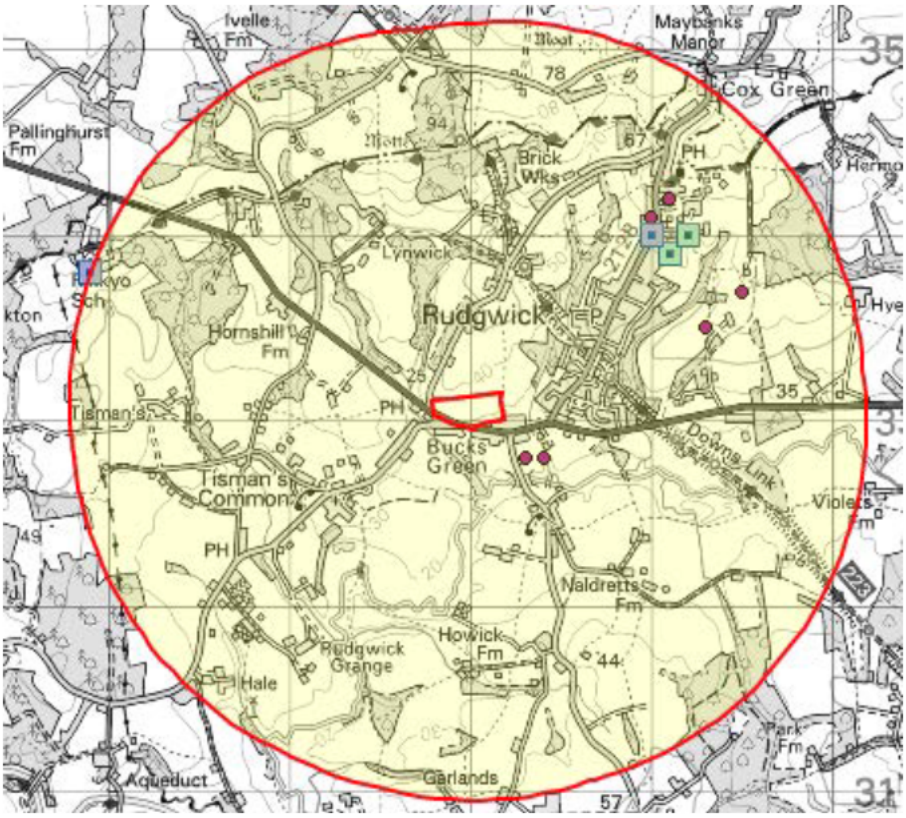

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Figure 3: EPS licences (GCN in green, bats in blue) and GCN licence returns (red dots) within 2km of the red line boundary

Table 2: Biological Records from SxBRC 2024

Species*	Legislation	Distance from site	Most recent record
Great Crested Newt *Triturus cristatus*	Wildlife and Countryside Act (1981 as amended) Schedule 5; NERC Act (2006) Section 41; UK BAP Priority	*c.* 1.3km north-east	2022
Grass Snake *Natrix natrix*	Wildlife and Countryside Act (1981 as amended) Schedule 5; NERC Act (2006) Section 41; Bern Convention Appendix 3	*c.* 1km south-east	2015
West European Hedgehog *Erinaceus europaeus*	UK BAP Priority, NERC Act (2006) Section 41	*c.* 730m south-east	2021
Bechstein's Bat *Myotis bechsteinii*	The Conservation of Habitats and Species Regulations (2017) Schedule 2; Habitat and Species Directive (1992) Annex 4; Wildlife and Countryside Act (1981 as amended) Schedule 5; UK BAP Priority.	*c.* 1.2km NE from the site	2016
Daubenton's Bat *Myotis daubentonii*	The Conservation of Habitats and Species Regulations (2017) Schedule 2; Habitat and Species Directive (1992) Annex 4;	*c.* 1.3km N from the site	2022

	Wildlife and Countryside Act (1981 as amended) Schedule 5; UK BAP Priority.		
Whiskered *Myotis mystacinus*	The Conservation of Habitats and Species Regulations (2017) Schedule 2; Habitat and Species Directive (1992) Annex 4; Wildlife and Countryside Act (1981 as amended) Schedule 5; UK BAP Priority.	*c.* 1.3km N from the site	2017
Natterer's Bat *Myotis nattereri*	The Conservation of Habitats and Species Regulations (2017) Schedule 2; Habitat and Species Directive (1992) Annex 4; Wildlife and Countryside Act (1981 as amended) Schedule 5; UK BAP Priority.	*c.* 1.3km N from the site	2022
Common pipistrelle *Pipistrellus pipistrellus*	The Conservation of Habitats and Species Regulations (2017) Schedule 2; Habitat and Species Directive (1992) Annex 4; Wildlife and Countryside Act (1981 as amended) Schedule 5; UK BAP Priority.	*c.* 1km NE from the site	2021
Soprano pipistrelle *Pipistrellus pygmaeus*	The Conservation of Habitats and Species Regulations (2017) Schedule 2; Habitat and Species Directive (1992) Annex 4; Wildlife and Countryside Act (1981 as amended) Schedule 5; UK BAP Priority.	*c.* 115m E from the site	2017
Brown long-eared Bat *Plecotus auritus*	The Conservation of Habitats and Species Regulations (2017) Schedule 2; Habitat and Species Directive (1992) Annex 4; Wildlife and Countryside Act (1981 as amended) Schedule 5; UK BAP Priority.	*c.* 500m SE from the site	2021
Red Kite *Milvus milvus*	Wildlife and Countryside Act (1981 as amended) Schedule 1 Pt1, Birds Directive Annex 1	*Within 2km*	2022
Linnet *Linaria cannabina*	UK BAP Priority, NERC Act (2006) Section 41, BoCC5 Red List.	*c. 1.3km* NW from the site	2015
Nightingale *Luscinia megarhynchos*	BoCC5 Red List	*c.* 1.5km SE from the site	2022
Starling *Sturnus vulgaris*	UK BAP Priority, NERC Act (2006) Section 41, BoCC5 Red List.	*Within 2km*	2022
Song thrush *Turdus philomelos*	UK BAP Priority, NERC Act (2006) Section 41, BoCC5 Red List.	*c.* 100m S from the site	2015

*Additional species are present within the biological records but may be older than 10years or outside our search radius. Some species have not been included due to the likelihood of presence on site due to habitat types.

Habitats

3.7 The habitat map is presented in **Appendix 2,** full species lists are given in **Appendix 3,** the Condition Assessments Tables are in **Appendix 4,** and the site photos are in **Appendix 1**.

3.8 The site was located in the eastern portion of Rudgwick and it was dominated by two parcels of cow-grazed grassland, labelled F1 and F2 in Figure 4 for ease of reference. Boundary habitats included scrub, broadleaved treelines, and a hedgerow with trees. These habitats are all discussed further in the relevant sections of this report.

Figure 4: Labelled fields for ease of reference

Modified grassland

3.9 Both F1 and F2 were both previously subject to an NVC assessment in 2021 to accurately classify their grassland type. The results suggested that the closest match was MG6 which is considered to be an agriculturally improved grassland, albeit a neutral grassland.

3.10 As such the fields were previously classified as other neutral grassland. However, the 2024 survey suggested that the content and abundance of species within the grassland had changed slightly in the intervening period. This, in addition to the updated UKHab Classification system in 2023, means that the habitat no longer fulfilled sufficient required criteria to classify as other neutral grassland. Namely due to the abundance of perennial ryegrass and the species-poor nature of the grassland. As such, both land parcels have been re-classified as modified grassland.

3.11 Both F1 and F2 were grazed by cattle at the time of the survey. Vegetation height varied between c. 5 to 15cm tall. Perennial rye-grass, Yorkshire fog, and cocksfoot were abundant, and rough hawkbit was frequent in both fields. F1 also supported frequent meadow foxtail, and sweet vernal grass. Both fields supported occasional common daisy, creeping buttercup, and dandelion and a number of rarely occurring forbs. As such, species richness varied between the two fields, with an average of 8 species per square meter in F1 and an average of 5 species per square meter in F2.

Line of trees

3.12 Two broadleaved treelines were present on site: an ecologically valuable line of mature oak trees bisected the two fields in the centre of the site (TL1 in Figure 4), and a sycamore-dominated treeline was present along a portion of the southern boundary (TL2 in Figure 4). TL2 also supported species such as lime and horse chestnut.

Hedgerow with trees

3.13 The hedgerow on the west boundary which extended around the southern boundary no longer formed two distinctive features and was considered uniform enough in structure and composition to be classed as a single hedgerow with trees. Species present included ash, hawthorn, blackthorn, sycamore, wild privet, dogwood, with standard field maple, horse chestnut and pedunculate oak trees. Cow parsley, barren brome, lords and ladies, herb Robert, wood avens, foxglove, common vetch, common nettle, cleavers, creeping thistle and creeping cinquefoil we present within the ground layer.

Mixed scrub

3.14 Mixed scrub was present at the southern end of the central treeline (S1 in Figure 4) and on the eastern site boundary (S2 in Figure 4). Due to trampling from the grazing cows passing between the two fields likely preventing notable regeneration of the central scrub, this area scored a lower condition than the eastern boundary scrub. S1 was made up of blackthorn, field maple, hawthorn, rose and bramble, with very little in the way of understorey. S2 was made up of blackthorn, hawthorn, damsons, oaks and sycamore. The ground layer was dominated by bramble, broadleaved dock, common nettle, and common ivy.

Bramble scrub

3.15 Bramble-dominated scrub was located parallel to the southern site boundary. Rare willow sp. trees were also present within this habitat. Due to the density of the bramble, no ground layer was noted.

Individual trees

3.16 Scattered trees were present within the site boundary distinct from the surrounding habitats and boundary features. This included two small, nine medium, and three large trees. Species included oak, ash, field maple, horse chestnut, and red beech.

Protected Species

Bats

Ground Level Tree Assessment

3.17 A Ground Level Tree Assessment (GLTA) of the trees on site was carried out as a precaution, although it is understood that all the trees would be retained as part of the proposed development.

3.18 Table 3 summarises the results of the GLTA for the trees on site that displayed Potential Roof Features (PRFs) and their locations are shown in Figure 5.

Table 3: Trees with roosting potential. Tree locations can be seen in Figure 5

Tree species	Tree description	Bat roosting potential	Tree number
Pedunculate oak	Mature tree with an upward pointing split in a tree branch.	**PRF-I** due to the very limited suitability of the roosting features present for bats.	1
Alder	Standing deadwood with two holes in the trunk and peeling bark.	**PRF-M** due to the number and nature of the features present	2
Field maple	Mature tree with dense ivy coverage which could obscure features suitable for roosting bats.	**PRF-I** due to the very limited suitability of the roosting features present for bats.	3
Pedunculate oak	Mature tree with three splits in dead branches and sections of peeling bark.	**PRF-M** due to the number and nature of the features present	4
Ash	Mature tree with four woodpecker and rot holes in the central trunk.	**PRF-M** due to the number and nature of the features present	5
Pedunculate oak	Dead tree with flaking bark.	**PRF-I** due to the very limited suitability of the roosting features present for bats.	6
Common lime	Mature tree with dense ivy coverage which could obscure features suitable for roosting bats.	**PRF-I** due to the very limited suitability of the roosting features present for bats.	7
Cherry species	Mature tree with dense ivy coverage which could obscure features suitable for roosting bats.	**PRF-I** due to the very limited suitability of the roosting features present for bats.	8
Ash	Mature tree with dense ivy coverage which could obscure features suitable for roosting bats.	**PRF-I** due to the very limited suitability of the roosting features present for bats.	9
Pedunculate oak	Mature tree with dense ivy coverage which could obscure features suitable for roosting bats.	**PRF-I** due to the very limited suitability of the roosting features present for bats.	10
Hawthorn	Mature tree with dense ivy coverage which could obscure features suitable for roosting bats.	**PRF-I** due to the very limited suitability of the roosting features present for bats.	11

Elm	Mature tree with dense ivy coverage which could obscure features suitable for roosting bats.	**PRF-I** due to the very limited suitability of the roosting features present for bats.	12
Ash	Mature tree with a single woodpecker hole in the central trunk	**PRF-M** due to the number and nature of the features present	13
Pedunculate oak	Mature tree with dense ivy coverage which could obscure features suitable for roosting bats.	**PRF-I** due to the very limited suitability of the roosting features present for bats.	14
Pedunculate oak	Mature tree with dense ivy coverage which could obscure features suitable for roosting bats.	**PRF-I** due to the very limited suitability of the roosting features present for bats.	15
Ash	Mature tree with a single woodpecker hole in the central trunk	**PRF-M** due to the number and nature of the features present	16
Pedunculate oak	Mature tree with dense ivy coverage which could obscure features suitable for roosting bats.	**PRF-I** due to the very limited suitability of the roosting features present for bats.	17
Pedunculate oak	Mature tree with dense ivy coverage which could obscure features suitable for roosting bats.	**PRF-I** due to the very limited suitability of the roosting features present for bats.	18

Figure 5: Location of trees with potential to support roosting bats.
(Google Satellite imagery date: 08.05.2024)

Foraging and commuting habitats

3.19 Hedgerow, treeline, and scrub habitats along the field boundaries would provide foraging and commuting opportunities as these formed green corridors with some level of connectivity within the wider area. However, the grasslands could provide some limited foraging opportunities for bats in the local area however, their suitability was reduced by grazing which limited vegetation height and composition. The local surroundings were also dominated by grazed fields and amenity grassland which are sub-optimal habitats for foraging and commuting bats. Despite this, it must be noted that there were records for seven bat species within 2km of the site.

[redacted]

Great Crested Newt (GCN)

3.21 A total of two water-bodies were present within 250m of the red line boundary (Figure 6) but both were located on private land so were not accessible to be surveyed at the time of the walkover.

3.22 The grasslands on site were considered to be sub-optimal for GCN due to the dominating short vegetation height providing limited coverage from predations. The hedgerow, treeline, and scrub habitats along the site boundaries could provide a greater number of foraging, commuting, and refuge opportunities for GCN. However, the context of the site being bound by roads, residential housing, and grazed fields separated the site from suitable habitats in the wider landscape. There were recent biological records for GCN within 1.3km of the site but this record was separated from the site by roads and dense residential housing. Due to this, in addition to the dominance of sub-optimal habitats on site and the separation of the closest water-bodies from the site by distance and barriers to dispersal, it is considered highly unlikely that GCN would be present on site.

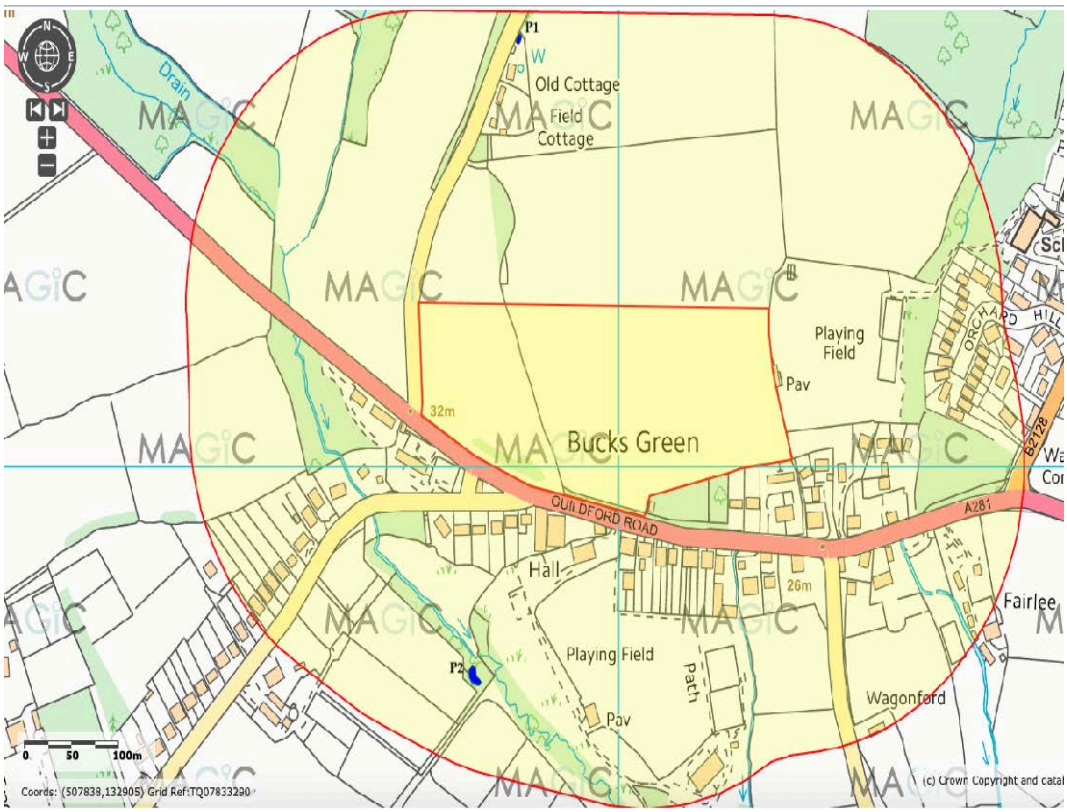

Figure 6: Location of ponds within 250m of the site boundary

Reptiles

3.22 The scrub, treeline, and hedgerow habitats along the field boundaries could provide foraging and commuting opportunities for reptiles. But the grazed grassland dominating the site was not considered suitable for these species. The local surroundings were also dominated by arable/grazed fields. There were biological records for grass snake within 1km of the site but these were separated from the site by roads and dense residential housing.

Dormice

3.23 The grassland which dominated the site was not considered suitable for dormice. However, the scrub, treeline, and hedgerow habitats along the field boundaries could provide foraging and commuting opportunities for dormice due to some variability in the vegetation structure and composition and some level of connectivity within the wider landscape. There are no recent biological records for dormice within 2km of the site.

Other Species

3.24 No active mammal holes were noted within the site boundaries during the survey, however dense vegetation in some areas meant that visibility in these areas was often limited.

3.25 Given the presence of local records for hedgehogs within 730m of the site and the open rural nature of the site, presence of foraging and commuting hedgehogs on site cannot be ruled out.

3.26 There is potential nesting habitat for a range of bird species within the boundary features in the hedgerow, treeline, and scrub habitats. The grazed grassland was not considered suitable for ground nesting birds due to its dominating short sward height.

3.27 The were no habitats on site which were considered to be suitable for water voles or otters.

4.0 Discussion

4.1 The following paragraphs consider the effects of the development on designated sites, priority habitats and protected and priority species. Where the desk study and habitat survey provide sufficient evidence for an assessment of effects on any of these groups to be taken through planning, these are detailed below, the need for additional surveys and when and how these should be completed are summarised, if required.

4.2 Provisional recommendations are also given for means to enhance biodiversity net gain, following the principle (CIEEM et al. 2016) of following the mitigation hierarchy of; avoidance, minimisation of loss, compensation on site and biodiversity offset.

Site and Designations

4.3 There are no designated sites within 2km of the site. The closest sites were the Slinfold Stream and Quarry SSSI *c.* 4.4km south-east and the Chiddingfold Forest SSSI approximately *c.* 5.1km west from the site. The proposals fall outside of the SSSI impact risk zones for these sites in regards to risks concerning residential development.

4.4 The site is located over 7.8km to the south-west of The Mens SSSI, SAC. This area is protected by the Habitats Directive (EC Directive 92/43/EEC on the Conservation of

Natural and Semi-Natural Habitats and of Wild Fauna and Flora) and the Habitats Regulations (The Conservation (Natural Habitats &c.) Regulations 1994).

4.5 In Great Britain, the Habitats Regulations implement the requirements of the Habitats Directive. The Regulations aim to protect sites in the UK that have rare or important habitats and species, such as The Mens SAC, in order to safeguard biodiversity. Under these Regulations, the LPA have a duty to assess whether there is a risk of any plan or proposal having a significant impact on the integrity of the SAC.

4.6 With regard to the SAC and the natural habitats and/or species for which the site has been designated (the 'Qualifying Features', here listed as barbastelle bat and Bechstein bat listed below), and subject to natural change.

'Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;

- *The extent and distribution of the habitats of qualifying species*
- *The structure and function of the habitats of qualifying species*
- *The supporting processes on which the habitats of qualifying species rely*
- *The populations of qualifying species, and,*
- *The distribution of qualifying species within the site. '*

4.7 Bats are mobile and species that are qualifying features of the SACs, which can forage or roost on land outside of the SAC boundaries. Occasionally impacts to such habitats can have a significant effect upon the special interest of a European site, through an impact on conservation objective 4 (effect on the population) and 5 (the distribution of the species). Habitats used by significant numbers of qualifying features of the SAC are defined as ***functionally linked*** to the site and so require assessment under the Habitats Directive and Regulations, as if they were within the SAC boundary (Chapman and Tyldesley, 2016).

4.8 The Mens SAC, the site falls outside the 6.5km key conservation area of the Sussex bats SACs, but lies within the wider conservation area. Within this area, impacts must be considered as habitats within the zone. Following the Sussex SAC guidance, avoidance,

mitigation, and compensation must be considered in relation to bats associated with the SACs.

4.9 Advice laid out within Sussex Bat Special Area of Conservation, Planning and Landscape Scale Enhancement Protocol states that all proposals within this zone should take:

'reasonable steps to avoid impacts to the SACs and biodiversity in general and where this cannot be achieved, 'mitigation' measures should be implemented and if there are still residual impacts then compensatory measures will need to be provided'.

4.10 The definitions of avoidance, mitigation and compensation are shown below in Table 4.

Table 4: Definitions of avoidance, mitigation and compensation measures in relation to bats associated with the Sussex SACs.

Measure	Definition
Avoidance	This normally means redesigning the scheme to avoid all direct and indirect impacts
Mitigation	This normally involves measures that reduce and/or minimise impacts such as altering the timing of works or using a different technique
Compensation	This generally involves the creation of new habitat, either on or off site and should only be considered as a last resort.

4.11 Using these definitions, it is considered that the proposals are already avoiding most impacts on commuting, foraging and roosting bats, by retaining the scattered trees, and hedge habitats within the site. Currently there is a small loss of hedgerow and scrub habitat to facilitate new road and footpath access onto the site. However, significant linear scrub planting will take place along the northern site boundary, creating an extensive new green corridor and compensating for this loss above and beyond requirement.

4.12 The grassland habitat is not considered to be significant in terms of bats foraging and commuting, and thus this loss is not considered to be significant. The grassland is considered to be of lower botanical interest, and, as such, enhancements to the site's biodiversity value, through careful design and planting, can be achieved.

4.13 Mitigation has been recommended in the form of a sensitive lighting scheme, which can be conditioned. It is recommended that all mature trees are retained where possible, as within current proposals. Compensation in the form of tree planting within the site is recommended for any small losses of habitat.

4.14 Enhancements to the site have also been recommended within the enhancements section of this report, to create more opportunities for foraging, commuting and roosting bats within the site.

4.15 Overall, with the site avoiding impacting the majority of the suitable bat habitat, which is limited within the site, and if these mitigation and compensation measures are followed, it is considered that no likely significant effects on roosting and foraging bats, including barbastelles and Bechstein, would occur as a result of the proposals. Therefore, the proposals would not have any significant impact on the qualifying features for which The Mens SAC is designated for.

4.16 Current proposals involve the construction of residential dwellings, with associated access, greenspace, and SuDS. However, it is not considered likely that there will be any direct impacts on this or other designated sites due to the distances involved and the separation of the development from the site by features which include roads and dense residential housing. The proposals would therefore not result in the loss or fragmentation of any habitats on these sites. Habitats on this site will also not become isolated as a result of these proposals as current proposals also involve the retention of boundary features on site, consequently the local ecological network will be retained post-development. This would also ensure that local commuting routes used by barbastelle bats on this site are retained post-development further minimising the potential to directly or indirectly impact this species.

4.17 Due to the likely sizeable scale and nature of the proposals, there is potential for indirect impacts, such as an increase in recreational pressure, to negatively impact local designated sites. However, these impacts are considered to be unlikely due to the separation of the proposals from this and other designated sites. It is recommended that an early consultation with the LPA is undertaken to identify if there is potential for the proposals

to impact the Mens SAC and if an HRA screening report would be required to support the application. Dependent on the outcome of the screening, an appropriate assessment may also be required. This will need to be conducted to ensure the proposals are completed in accordance with section 5 of **Policy 31** which requires "*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*."

4.18 Under **Policies 25** and **31** of Horsham District Council's Local Plan, development proposals likely to have a direct or indirect adverse impact on any sites or features of importance for biodiversity will be refused unless certain criteria are met. Due to the distances involved and the nature of current proposals, it is considered likely that the development would be completed in accordance with these policies. In order to ensure this, it is recommended all of the boundary features are retained where possible to maintain the Green Infrastructure Network post-development in accordance with **Policy 25**. These features should also be enhanced through the use of native species planting in line with **Policy 25** which required proposals to achieve a net gain in biodiversity.

4.19 Four Local Wildlife Sites were also located within 2km of the redline boundary and these were all separated from the site by roads and/ or distance, consequently, it is considered that any direct or indirect impacts should be minimal. To ensure there are no adverse impacts on these sites, it is recommended that any proposals must retain important ecological features and seek to enhance and protect the sites biodiversity as a whole.

4.20 There is no ancient woodland located on site or immediately adjacent to the site. The nearest area of ancient woodland is located approximately 120m to the north west of the site. Considering the distance from the site no impacts direct or otherwise are considered likely.

Onsite Habitats

4.21 The habitats on site are common and widespread with modified grassland being dominant with scattered trees, scrub, treelines and a hedgerow along the field boundaries. The grassland, treelines, hedgerow, and scrub on site are considered to have ecological potential for several protected species. This includes roosting, foraging and commuting

bats, [redacted] dormice, hedgehogs, and nesting birds. Recommendations have been made below for the necessary further surveys, mitigation and compensation required for these species.

4.22 It is always recommended that all hedgerows and treelines are retained and enhanced post-development with the planting of native species. It is considered important to keep connectivity across the site post development and to enhance existing sections of hedgerow where possible. This would ensure that the proposals are completed in accordance with **Policies 25** and **35** which requires proposals to "*maintain and enhance the Green Infrastructure Network.*"

4.23 It must be noted that hedgerows are habitats listed under S41 of the NERC Act 2006 and as such are considered to be habitats of principle importance. As a Habitat of Principle Importance, the council /decision maker has to have 'due regard' for these habitats. It is recommended that hedgerows on the site are maintained and enhanced where possible, as within current proposals. Small sections of hedgerows are required to be lost for site access, and these will be compensated for within the design of the master plan.

Protected Species

Ground Level Tree Assessment

4.24 As understood from current proposals, all of the recorded bat roost potential trees are planned to be retained within the scheme and appropriately protected during works. However, if the proposed development removes any trees within the site, appropriate mitigation must be implemented. Any PRF-I trees which require removal must be soft-felled in sections which are gently lowered to the ground. Ivy should first be removed by hand. In the unlikely event that a roost is discovered, no further works should be undertaken and the advice of an ecologist sought. Any PRF-M trees which require removal must first be subject to further surveys to determine their use by roosting bats. This will involve either at least two dusk emergence surveys or endoscopic inspections. If surveys determine roosting bats are present, a Natural England licence will be required to remove the tree. The licence will require the provision of additional bat roosting opportunities.

Foraging and commuting habitats

4.25 Local biological records indicate that that at least seven bat species are present in the local area. However, the grasslands dominating the site were considered to have limited suitability for foraging and commuting bats due to grazing. Suitable bat habitat was restricted to the field boundaries only within the scrub, hedgerow, and treelines. Bats use linear features such as hedgerows, tree lines and woodland edges to navigate the landscape, and the linear habitats on site do have some level of connectivity within the wider landscape. As such, it is recommended that as much of these habitats are retained as possible, as within current proposals, to maintain connectivity to the wider landscape. The site was considered to have 'low' suitability for foraging and commuting bats overall.

4.26 According to Bat Conservation Trust guidelines, it is important that proportionality is employed when recommending further survey work for bat species on a proposed development site. As stated within section 2.2.19 of the latest survey guidelines (2023), the following points need to be taken into account with regard to planning bat surveys:

- Likelihood of bats being present;
- Type of proposed activities;
- Scale of proposed activities;
- Size, nature and complexity of the site;
- Species concerned;
- Number of individuals.

4.27 With the above considered, a total of three night-time bat walkover (NBW) surveys, and monthly automated/static detector surveys, have been instructed to identify how bats are using the site. However, it is considered that as long as these treelines and hedgerows are retained, a sensitive lighting and enhancement scheme for bats is implemented, then the favourable conservation status of bats within the local area will be maintained post-development.

4.28 All bat species are nocturnal, resting in dark conditions in the day and emerging at night to feed. Bats are known to be affected by light levels, which can affect both their roosting and foraging behaviour. This needs to be taken into account with a sympathetic lighting scheme. Recommendations include;

- Installing lighting only if there is a significant need;
- Using Light-emitting diodes instead of mercury or metal halide lamps where glass glazing is preferred due to its UV filtration characteristics;
- Directing light to where it is needed and avoiding light spillage;
- Using baffled lighting where light is directed towards the ground;
- Avoid putting lighting near treelines or hedgerows and angling light away from these linear features which are used by commuting and foraging bats;
- Planting a barrier or using man-made features required within the scheme to form a barrier.

[redacted]

Great Crested Newts (GCN)

4.32 The total area within the redline site boundary covers approximately *c.* 5ha and this area was dominated by modified grassland which was sub-optimal for GCN due to grazing pressures. Scrub, hedgerow, and treeline habitats along the site boundaries could however provide some foraging, commuting, and refuge opportunities for GCN in their terrestrial phase. However, the habitats are largely to be retained and protected during the proposed works, with limited losses to facilitate the new access road and footpaths onto site.

4.33 The closest water-body is also located over 150m from the site. Research by Robert Jehle (2000) identified a 'terrestrial zone' of 63 metres around a breeding pond, within which 95% of summer refuges were located. A subsequent study (Jehle, R. & Arntzen, JW., 2000) showed that after the breeding season 64% of newts were recorded within 20m of the pond site. In this instance, all ponds within close proximity to the site are all over 150m from the site's boundary, as such it is considered unlikely dispersing newts from these ponds would be present on the site. Whilst there are always going to be some outliers, the immediate surrounds of a breeding pond are considered to be the most significant. Furthermore, research has identified a higher affinity of GCNs using areas which are wooded rather than grassland, and several wooded areas were present within close proximity to the local ponds.

4.34 In addition to this, the site appears to be located entirely within the green zone of the NatureSpace GCN risk zone mapping (Figure 7), indicating limited GCN habitat suitability and reduced likelihood of their presence.

4.35 The proposed development does not affect any ponds, does not result in the isolation of one pond from another and does not result in the isolation of a breeding pond from suitable terrestrial habitat. The edges around the site will be retained and will therefore continue to provide opportunities for amphibians to move across the site and into the wider landscape.

4.36 As such, it is reasonable to assume that the proposed development *"will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status across their range"* and no further surveys are considered necessary.

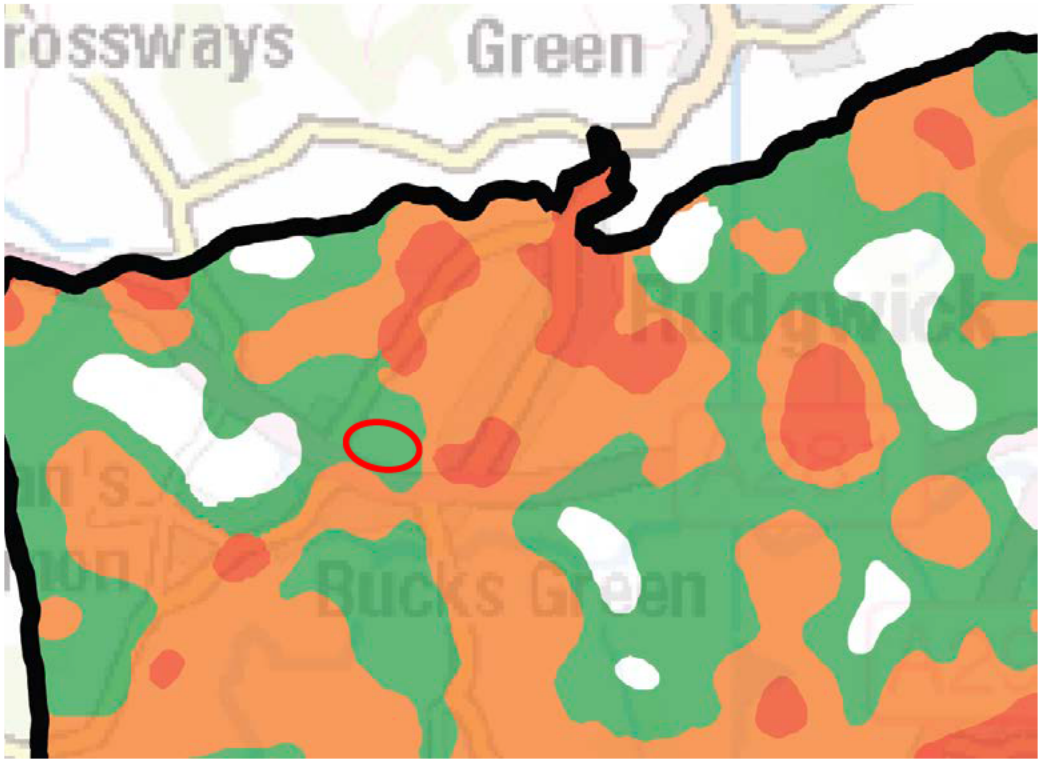

Figure 7: NatureSpace impact risk map showing the site in the green zone

Reptiles

4.37 The habitats on site are largely unsuitable for reptiles due to being frequently grazed. The local surroundings were also dominated by grazed fields, roads and residential housing which provide limited opportunities for reptiles. The closest biological records for reptiles were also separated from the site by distance and several barriers to dispersal.

4.38 It is understood that plans are to build on both sections of grassland within the red line boundary. In order to ensure these grasslands remain unsuitable for reptiles, it is recommended that the current grazing regime is maintained until the commencement of works. If this recommendation is adhered to it is considered that reptiles will not form a constraint on the proposed development. However, if the grasslands are left unmanaged

and allowed to become more suitable for these species, an updated ecological assessment will be required.

Dormice

4.39 The hedgerow, treeline, and scrub habitats on site could potentially provide opportunities for dormice in the local area although there are no recent biological records for dormice within 2km of the site. However, lack of biological records cannot rule out their presence with complete certainty. Broadleaved, and ancient and semi-natural woodlands were also present in the local area, although onsite connectivity to these habitats is limited. Under current proposals, the boundary features are to be largely retained, however some small scale removal of scrub and hedgerow will be required to facilitate site access. As a precautionary measure, a presence/absence nest tube survey, with supplementary footprint tunnel surveys, have been scheduled. This will determine whether the proposals are constrained by this species and inform any further mitigation requirement.

Other Species

Nesting birds

4.40 Breeding birds are likely to use the hedgerows, trees, and scrub on site. It is recommended that habitats are retained *in situ* where possible. Any small scale removal of these habitats is recommended outside of the breeding bird season (March-September inclusive) or immediately after a nesting bird check by a suitably qualified ecologist. If active nests are identified, works in the vicinity of the nest must cease until the birds have fledged the nest.

Burrowing Mammals

4.41 If any mammal holes are discovered during small-scale scrub/hedgerow removal and will be affected by the proposals, these should be assessed by a suitably qualified ecologist to determine the species of their inhabitant and whether any further survey measures and mitigation are required. [redacted] This is because the Wild Mammals Protection Act 1996 states that it is an offence to crush or cause asphyxiation to mammals.

4.42 Given the likelihood of hedgehogs present within the site, recommendations have been made within the General Site Enhancements section of this report to design the scheme to accommodate this species post-development.

4.43 The site did not support habitats which are considered suitable to support other protected species including otters or water voles.

General Site Enhancements

4.44 A number of enhancements can be made to the final development to help reduce potential ecological impacts. The development will also have to give due regard to **Policy 31: Green Infrastructure and Biodiversity**. This requires proposals to *"maintain or enhance the existing network of green infrastructure.* Proposals should also *"contribute to the enhancement of existing biodiversity, and should create and manage new habitats where appropriate."*

4.45 A number of enhancements can be incorporated within the development scheme to help reduce potential ecological impacts and provide net gains to biodiversity in line with NPPF (2023) and the Environmental Act 2021. It is important to utilise native species of local provenance in landscaping schemes to enhance the ecological value of a development.

4.46 It is recommended that a detailed mitigation and enhancement strategy is drawn up for the site based on the findings of the Phase 2 protected species surveys and through the review of the proposals. This will potentially include but not be limited to the following:

- Creation of new high distinctiveness habitats such as ponds, green infrastructure such as swales and reed beds and enhancement of existing habitats of value including hedgerows, tree lines and pockets of scrub, to be managed in the long term for biodiversity;
- The on site tree lines and hedgerows on site, should be retained and buffered and managed within the landscape, with landscape linkages provided;
- Creation of log piles and reptile hibernacula to provide safe refuge and hibernation sites for reptiles, amphibians, and hedgehog.

4.47 A detailed enhancement strategy will be dependent on the results of the further ecological surveys. This is likely to include the general recommendations above, but also more details recommendations such creation of high distinctiveness habitats.

5.0 Biodiversity Net Gain

5.1 The BNG strategy has been developed in order to adhere to good practice principles (CIEEM 2016), which references measures to review and support biodiversity initiatives during the design, building and maintenance of developments.

5.2 The initial principle is the application of the mitigation hierarchy, where measures to avoid impacts on biodiversity should be taken. With regards to this site, the PEA has been in 2024 and provides a detailed baseline assessment of the site. In this case, the habitats on site are largely common and widespread, however, the tree lines and hedgerows are considered to be the most significant in terms of ecological value. The tree line will be retained within the site boundary. The development will be restricted to habitats which are common and widespread.

5.3 The separate BNG report provides a detailed assessment of the baseline and reviews the pre and post development habitats and plans. The proposed new habitats will be managed under a 30 year management plan as required under BNG obligations. A management plan for the site can be conditioned.

6.0 Ecological Impact Assessment

6.1 The CIEEM *Guidelines for Ecological Impact Assessment* (EcIA) (CIEEM, 2018) are the current guidelines that will form the basis of the assessment. The guidelines help in the determination of the baseline conditions, what features are important, what impacts significant and how to apply the mitigation hierarchy.

6.2 Impact assessment is required for each feature determined as important and not for other features. CIEEM 20018 advises that each impact assessment should consider, if possible, the different stages of a development (construction, operation and decommissioning).

6.3 In essence, an EcIA assesses the activities associated with a proposed scheme that are likely to generate changes, within identified zone of influences, on identified ecological features and receptors. The proposals are subsequently reviewed and iteration undertaken to include enhancements and mitigation to reduce negative impacts.

6.4 A full Ecological Impact Assessment (EcIA) cannot be carried out at this stage as the plans for the site are not finalised. An assessment should be carried out following the completion of the further surveys in order to quantify and evaluate the potential impacts of the development on the habitats and species present on site and within the local area.

6.5 The scheme should also be considered in conjunction with other surrounding proposals in order to determine cumulative impacts on ecological features. The majority of nearby applications within the last five years involved alterations to single dwellings such as extensions and remodelling. There are no other current applications in close proximity to the site which involve increasing the number of dwellings in the area.

Summary

6.6 The development at Rudgwick will result in the loss of semi-improved grassland which is currently of limited ecological value. The site is located within 2km of the Lynwick Hanger LWS, Smithwood & Tittlesfold Copses LWS and the Godley's Copse LWS. The site is also of *c*. 7.8km from The Mens SAC and SSSI. Due to the nature of current proposals and the separation of the proposals from these sites, it is currently not considered likely that there will be any residual impacts on these sites. However, it is recommended that an early consultation with the LPA is conducted to determine this and to decide if a HRA will be required.

7.0 Conclusions

7.1 There were no designated sites within 2km of the site. The closest designated sites were Slinfold Stream and Quarry Site of Special Scientific Interest (SSSI) approximately *c*. 4.4km south-east and the Chiddingfold Forest SSSI approximately *c*. 5.1km east of the site's red line boundary. The Mens SSSI, Special Area of Conservation (SAC) was also located approximately *c*. 7.8km south-west from the site. Due to the distances involved and the features present between the proposals and these sites, it is not considered that these sites

will be impacted directly by any proposed development. It is recommended that an early consultation with the LPA is conducted to determine if a HRA will be required.

7.2 The habitats on site are predominantly common and widespread throughout the local area and the UK as a whole. Modified grasslands were dominant with scrub, treelines, and hedgerows being present along the field margins. These habitats have potential suitability for the following protected species: roosting, foraging and commuting bats, [redacted] hedgehogs, dormice, and nesting birds. Recommendations for further surveys, mitigation and compensation have been discussed within the relevant sections.

7.3 The fields dominating the site were both classified as types of modified grassland, the eastern field in poor condition, and the western field in good condition. Loss of these habitats is not considered to be of significance above site level, given their widespread distribution. This offers opportunity for enhancement, detailed within this report.

7.4 A hedgerow was present on site, considered to be Priority Habitats under S41 of the NERC 2006 Act and/ or irreplaceable habitat. The central treeline was also considered to be of ecological value due to being characterised by mature oak trees. As such it is recommended that these are retained and enhanced on site as far as possible, as within the current proposals.

7.5 Several broadleaved trees across the site were considered to have PRF for roosting bats. It is understood that these trees are to be retained within the scheme. If these are to be removed then recommendations for further surveys, mitigation and compensation have been outlined in this report.

7.6 The site is considered to have 'low' potential to support foraging and commuting bats due to the presence of green linear features on their field boundaries with some level of connectivity locally. Current proposals involve the retention of these features along the site boundaries as far as possible, consequently minimal survey requirement has been recommended to assess the use of these features by bats. A sensitive lighting scheme will be implemented as part of the proposals.

[redacted]

7.8 The site is dominated by modified grassland which is currently in an unsuitable condition for GCN due to an intensive grazing regime. Scrub, hedgerows and treelines along the site boundaries do have some suitability for GCN but these are to be largely retained under current proposals. The site is also located within the NatureSpace 'green zone' reducing the likelihood of their presence on site. Due to the largely unsuitable condition of the site for GCN, no further surveys are currently considered necessary.

7.9 Hedgerows, treelines and scrub on site potentially provide some suitable foraging and commuting habitat for dormice. Presence/absence nest tube and footprint tunnel surveys have been recommended to determine their presence on site and inform any further required mitigation for the proposed works.

7.10 Currently, the grasslands on site are considered to be largely unsuitable for reptiles given the intensive grazing regime currently in place. In order to ensure the grassland remains unsuitable, it is recommended that this grazing regime is maintained up until the commencement of works. If the grassland is allowed to grow, then an updated ecological assessment will be required.

7.11 Nesting birds are likely to use the trees, hedgerows and scrub on site. It is recommended that any required small-scale clearance work on these habitats be undertaken outside of the breeding bird season (March-September inclusive) or immediately after a nesting bird check by a suitably qualified ecologist.

7.12 The recommended precautionary measures have been outlined, should any mammal holes be discovered within site boundary features during works.

7.13 Hedgehogs are considered likely to use the site in some capacity and the proposed development should take this species into account within its design. Recommendations for suitable fencing have been given within this report.

7.14 The site is not considered to be constrained by other protected species, such as otters and water voles. No further survey work for these species is required.

7.15 Recommendations for enhancements have been made within this report, aimed at improving the ecological value of the site post-development.

8.0 References

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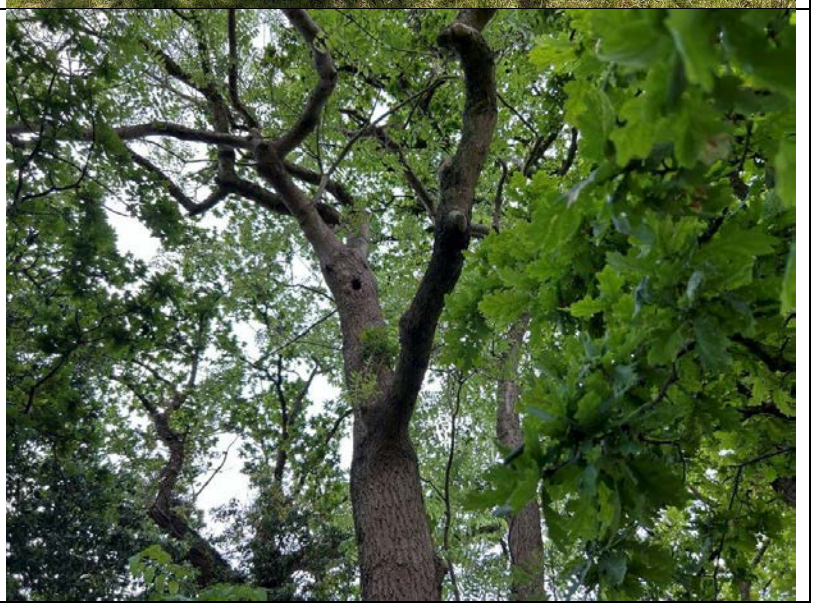
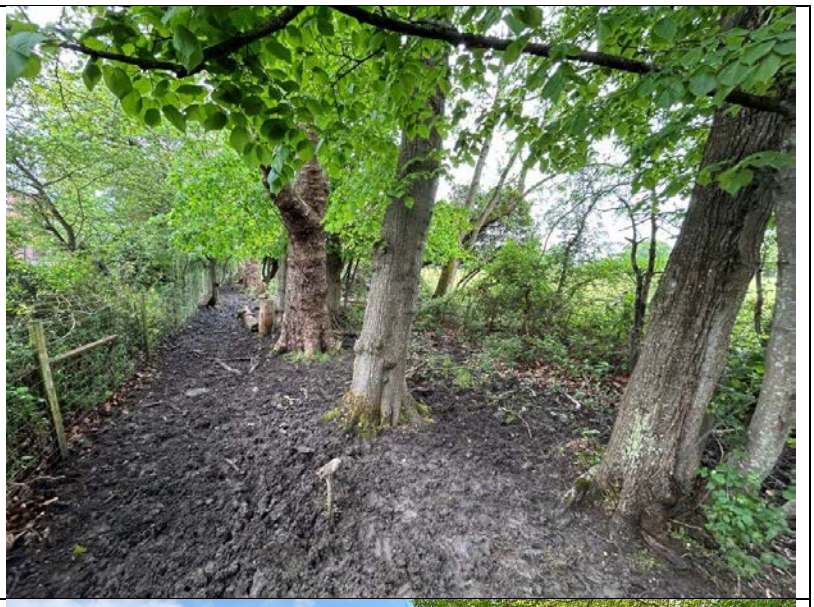
Internet resources:
Google Maps: www.google.co.uk/maps
Magic Interactive Map: www.magic.gov.uk

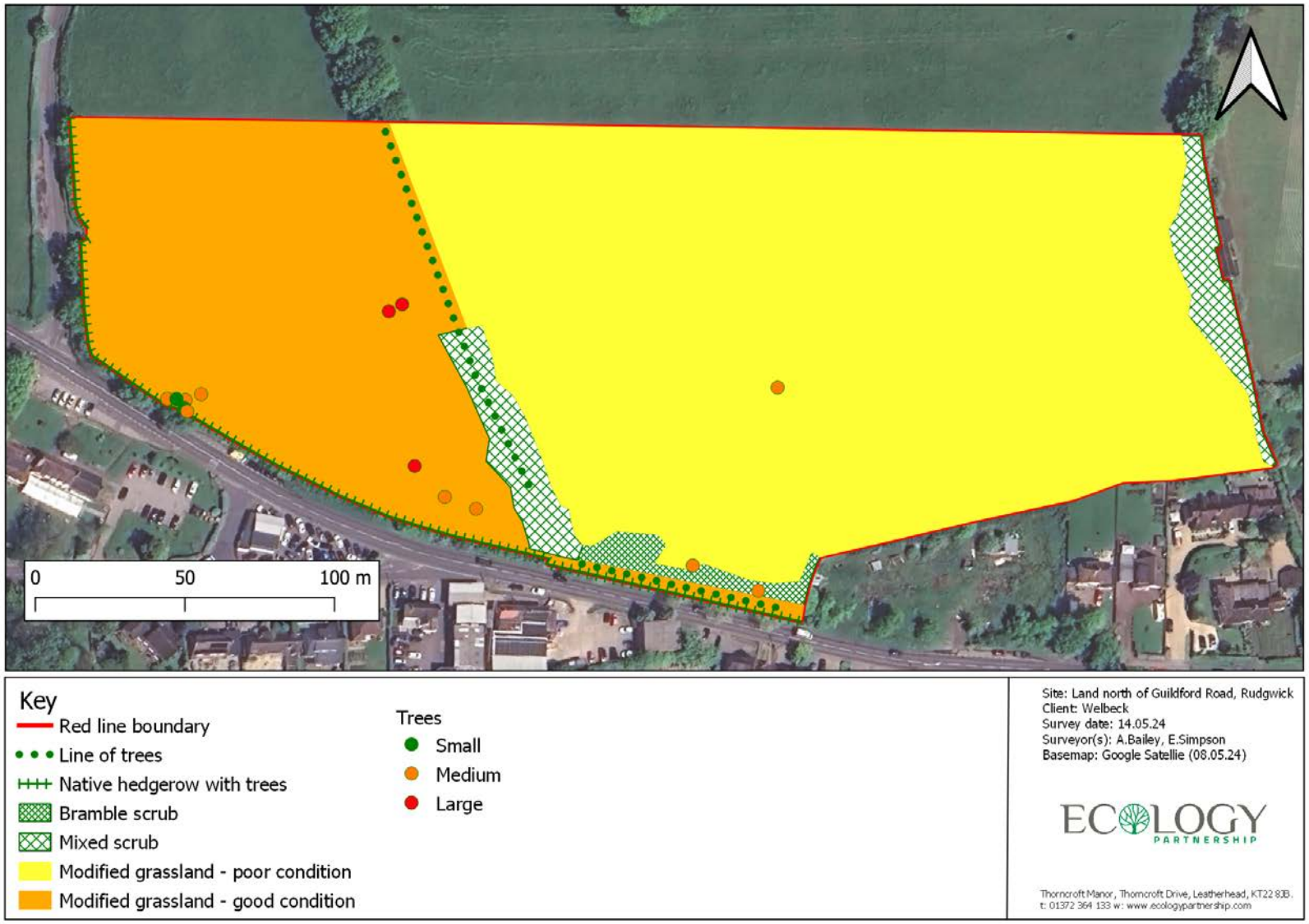
Appendix 1: Photographs

Photograph 1: Western grassland F1	
Photograph 2: Tree with PRF-M	

Photograph 3: TL1 and some large individual oak trees.	
Photograph 4: Bramble-dominated scrub on the southern site boundary	

Photograph 5: TL2 on the southern site boundary	
Photograph 6: Western/southern boundary hedgerow and some scattered trees	

Appendix 2: Habitat map


0
50
100 m
Key
Red line boundary
Line of trees
Native hedgerow with trees
Bramble scrub
Mixed scrub
Modified grassland - poor condition
Modified grassland - good condition
Trees
Small
Medium
Large
Site: Land north of Guildford Road, Rudgwick
Client: Welbeck
Survey date: 14.05.24
Surveyor(s): A.Bailey, E.Simpson
Basemap: Google Satellie (08.05.24)
ECOLOGY PARTNERSHIP
Thorncroft Manor, Thorncroft Drive, Leatherhead, KT22 8JB.
t: 01372 364 133 w: www.ecologypartnership.com

Appendix 3: Species List

Modified Grassland – F1		
Common name	**Latin name**	**DAFOR score**
Yorkshire fog	*Holcus lanatus*	A
Perennial rye-grass	*Lolium perenne*	A
Cocksfoot	*Dactylis glomerata*	A
Meadow foxtail	*Alopecurus pratensis*	F
Sweet vernal-grass	*Anthoxanthum odoratum*	F
Rough hawkbit	*Leontodon hispidus*	F
Creeping buttercup	*Ranunculus repens*	O
Creeping cinquefoil	*Potentilla reptans*	F
Daisy	*Bellis perennis*	O
Rough meadowgrass	*Poa trivialis*	O
Yarrow	*Achillea millefolium*	R
Common knapweed	*Centaurea nigra*	R
Common mouse ear	*Cerastium fontanum*	R
Hard rush	*Juncus inflexus*	R
Creeping thistle	*Cirsium arvense*	R
Dandelion	*Taraxacum sp.*	O
Lesser stitchwort	*Stellaria graminea*	R
Bird's-foot trefoil	*Lotus corniculatus*	R
Common catsear	*Hypochaeris radicata*	R
Common sorrel	*Rumex acetosa*	R
Common selfheal	*Prunella vulgaris*	R
Crested dogstail	*Cynosurus cristatus*	R
Bulbous buttercup	*Ranunculus bulbosus*	R
White clover	*Trifolium repens*	R
Creeping bent	*Agrostis stolonifera*	R
Field woodrush	*Luzula campestris*	R

Modified Grassland – F2		
Common name	**Latin name**	**DAFOR score**
Yorkshire fog	*Holcus lanatus*	A
Perennial rye-grass	*Lolium perenne*	A
Cocksfoot	*Dactylis glomerata*	A
Meadow foxtail	*Alopecurus pratensis*	R
Sweet vernal-grass	*Anthoxanthum odoratum*	R
Rough hawkbit	*Leontodon hispidus*	O
Creeping buttercup	*Ranunculus repens*	O
Creeping cinquefoil	*Potentilla reptans*	O
Daisy	*Bellis perennis*	O
Rough meadowgrass	*Poa trivialis*	O

Yarrow	*Achillea millefolium*	R
Common knapweed	*Centaurea nigra*	R
Common mouse ear	*Cerastium fontanum*	R
Hard rush	*Juncus inflexus*	R
Creeping thistle	*Cirsium arvense*	R
Dandelion	*Taraxacum sp.*	O
Lesser stitchwort	*Stellaria graminea*	R
Bird's-foot trefoil	*Lotus corniculatus*	R
Common catsear	*Hypochaeris radicata*	R
Common sorrel	*Rumex acetosa*	R
Common selfheal	*Prunella vulgaris*	R
Crested dogstail	*Cynosurus cristatus*	R
Bulbous buttercup	*Ranunculus bulbosus*	R
White clover	*Trifolium repens*	R
Creeping bent	*Agrostis stolonifera*	R
Field woodrush	*Luzula campestris*	R

Mixed scrub – S1		
Common name	**Latin name**	**DAFOR score**
Hawthorn	*Crataegus monogyna*	F
Blackthorn	*Prunus spinosa*	F
Field maple	*Acer campestre*	O
Rose	*Rosa sp.*	R
Bramble	*Rubus fruticosus*	O

Mixed scrub – S2		
Common name	**Latin name**	**DAFOR score**
Sycamore	*Acer pseudoplatanus*	R
Blackthorn	*Prunus spinosa*	F
Hawthorn	*Crataegus monogyna*	F
Damsons	*Prunus domestica subsp. insititia*	O
Oak	*Quercus robur*	R

Ecologically valuable line of trees – TL1		
Common name	**Latin name**	**DAFOR score**
Oak	*Quercus robur*	D
Field maple	*Acer campestre*	R

Line of trees – TL2		
Common name	**Latin name**	**DAFOR score**
Sycamore		A
Horse chestnut	*Aesculus hippocastanum*	O
Lime	*Tilia × europaea*	O

Hedgerow with trees		
Common name	**Latin name**	**DAFOR score**
Ash	*Fraxinus excelsior*	O
Blackthorn	*Prunus spinosa*	F
Hawthorn	*Crataegus monogyna*	F
Oak	*Quercus robur*	O
Wild privet	*Ligustrum vulgare*	LF
Field maple	*Acer campestre*	O
Dogwood	*Cornus sanguinea*	O
Snowberry	*Symphoricarpos albus*	R
Sycamore	*Acer pseudoplatanus*	O
Horse chestnut	*Aesculus hippocastanum*	O
Rose	*Rosa sp.*	R
Elm	*Ulmus minor*	F
Bramble	*Rubus fruticosus*	F
Ground layer		
Cow parsley	*Anthriscus sylvestris*	O
Barren brome	*Anisantha sterilis*	R
Common nettle	*Urtica dioica*	F
Cleavers	*Galium aparine*	O
Lords and ladies	*Arum maculatum*	R
Ivy	*Hedera helix*	F
Violet sp.	*Violia sp.*	R
Foxglove	*Digitalis purpurea*	R
Herb robert	*Geranium robertianium*	O
Wood avens	*Geum urbanum*	O
Cuckoo flower	*Cardamine pratensis*	R

Scattered trees		
Common name	**Latin name**	**DAFOR score**
Ash	*Fraxinus excelsior*	-
Red beech	*Fagus sylvatica f. purpurea*	-
Field maple	*Acer campestre*	-
Oak	*Quercus robur*	-
Horse chestnut	*Aesculus hippocastanum*	-

Appendix 4: Condition Assessment Tables

Condition Sheet: GRASSLAND Habitat Type (low distinctiveness)				
UKHab Habitat Type(s): Grassland - Modified grassland				
Condition Assessment Criteria		**F1**	**F2**	
A	There are 6-8 vascular plant species per m present, including at least 2 forbs (this may include those listed in Footnote 1). **Note - this criterion is essential for achieving Moderate or Good condition.** Where the vascular plant species present are characteristic of medium, high or very high distinctiveness grassland, or there are 9 or more of these characteristic species per m~ (excluding those listed in Footnote 1), please review the full UKHab description to assess whether the grassland should instead be classified as a higher distinctiveness grassland. Where a grassland is classed as medium, high, or very high distinctiveness, please use the relevant condition sheet.	Pass – 8 species	Fail – 5.8 species	
B	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for vertebrates and invertebrates to live and breed.	Pass	Pass	
C	Any scrub present accounts for less than 20% of the total grassland area. (Some scattered scrub such as bramble *Rubus fruticosus* agg. may be present). Note – patches of scrub with continuous (more than 90% cover should be classified as the relevant scrub habitat type.	Pass	Pass	
D	Physical damage is evident in less than 5% of total grassland area. Examples of physical damage include excessive poaching, damage from machinery use or storage, erosion caused by high levels of access, or any other damaging management activities.	Pass	Pass	
E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens?).	Fail - poaching	Fail - poaching	
F	Cover of bracken *Pteridium aquilinum* is less than 20%.	Pass	Pass	
G	There is an absence of invasive non-native plant species? (as listed on Schedule 9 of WCA*).	Pass	Pass	
	Condition	**Good**	**Poor**	

Condition Assessment Result	
Good	Passes 6 or 7 of 7 criteria including essential criterion A
Moderate	Passes 4 or 5 of 7 criteria including passing essential criterion A
Poor	Passes 3 or fewer criteria; OR 4-6 of criteria but failing criterion A

Footnote 1 – Creeping thistle *Cirsium arvense*, spear thistle *Cirsium vulgare*, curled dock *Rumex crispus*, broad-leaved dock *Rumex obtusifolius*, common nettle *Urtica dioica*, creeping buttercup *Ranunculus repens*, greater plantain *Plantago major*, white clover *Trifolium repens* and cow parsley *Anthriscus sylvestris*.

Footnote 2 – For example, this could include small, scattered areas of bare ground allowing establishment of new species, or localised patches where not exceeding 10% cover.

Footnote 3 – Assess this for each distinct habitat parcel. If the distribution of invasive non-native species varies across the habitat, split into parcels accordingly, applying the buffer zone around the invasive non-native species with a size relative to its risk of spread into adjacent habitat, using professional judgement.

Footnote 4 – Wildlife and Countryside Act 1981 (as amended)

Condition Sheet: SCRUB Habitat Type				
UKHab Habitat Type(s): All forms of scrub				
Condition Assessment Criteria		**S1**	**S2**	
A	The parcel represents a good example of its habitat type - the appearance and composition of the vegetation closely matches its UKHab description (where in its natural range).[1] - At least 80% of scrub is native, - There are at least three native woody species[2], - No single species comprises more than 75% of the cover (except hazel *Corylus avellana*, common juniper *Juniperus communis*, sea buckthorn *Hippophae rhamnoides* or box *Buxus sempervirens*, which can be up to 100% cover).	Pass	Pass	
B	Seedlings, saplings, young shrubs and mature (or ancient or veteran[3]) shrubs are all present.	Fail – grazing impact	Pass	
C	There is an absence of invasive non-native plant species[4] (as listed on Schedule 9 of WCA[5]) and species indicative of sub-optimal condition[8] make up less than 5% of ground cover.	Pass	Pass	
D	The scrub has a well-developed edge with scattered scrub and tall grassland and or forbs present between the scrub and adjacent habitat.	Fail	Fail	
E	There are clearings, glades or rides present within the scrub, providing sheltered edges.	Fail	Fail	
	Condition	**Poor**	**Moderate**	

Condition Assessment Result	
Good	Passes 5 of 5 criteria
Moderate	Passes 3 or 4 of 5 criteria
Poor	Passes 2 or fewer criteria

Footnote 1 – Professional judgement should be used alongside the UKHab description.
Footnote 2 – Native woody species as defined and listed in the Hedgerow Survey Handbook: DEFRA (2007) *Hedgerow Survey Handbook: A standard procedure for local surveys in the UK.* 2nd ed. [online]. Defra, London. PB1195. Available from: Hedgerow Survey Handbook (publishing.service.gov.uk).
Footnote 3 – See gov.uk standing advice on ancient and veteran species. Available from: Keepers of time: ancient and native woodland and trees policy in England (publishing.service.gov.uk)
And Ancient woodland, ancient trees and veteran trees: advice for making planning decisions - GOV.UK (www.gov.uk)
Footnote 4 – Assess this for each distinct habitat parcel. If the distribution of invasive non-native species varies across the habitat, split into parcels accordingly, applying a buffer zone around the invasive non-native species with a size relative to its risk of spread into adjacent habitat, using professional judgement.
Footnote 5 – Wildlife and Countryside Act 1981 (as amended).
Footnote 6 – Species indicative of suboptimal condition for this habitat type may include: non-native conifers, tree-of-heaven *Alianthus altissima*, holm oak *Quercus ilex*, European turkey oak *Quercus cerris*, cherry laurel *Prunus*

laurocerasus, snowberry *Symphoricarpos* spp., shallon *Gaultheria shallon*, American skunk cabbage *Lysichiton americanus*, buddleia *Buddleja* spp., cotoneaster *Cotoneaster* spp., Spanish bluebell *Hyacinthoides hispanica* and hybrid bluebells *Hyacinthoides x massartiana*. There may be additional relevant species local to the region and or site.

Condition Sheet: INDIVIDUAL TREES Habitat Type

UKHab Habitat Type(s): Urban tree: Covers the following topographical formations most commonly found in urban areas[1]:
Individual Trees (urban or rural): Young trees over 75mm in diameter at breast height whose canopies are not touching.
Urban Perimeter / Linear Blocks and Groups (description applied to the urban environment only): Groups or stands of trees (size requirement as defined above) within and around the perimeter of urban land. This includes those along urban streets, highways, railways and canals, and also former field boundary trees incorporated into developments. Canopies must overlap continuously. Groups of urban trees that don't match the descriptions for woodland may be assessed within this category.

Condition Assessment Criteria		Small/Medium trees	Medium/Large trees	
A	The tree is a native species (or at least 70% within the block are native species).	Pass	Pass	
B	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Pass	Pass	
C	The tree is mature (or more than 50% within the block are mature)[1].	Fail	Pass	
D	There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain > 75% of expected canopy for their age range and height.	Pass	Pass	
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	Fail	Pass	
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	Pass	Pass	
	Condition	**Moderate**	**Good**	

Condition Assessment Result	
Good	Passes 5 or 6 criteria
Moderate	Passes 3 or 4 criteria
Poor	Passes 2 or fewer criteria

Footnote 1 - See gov.uk standing advice on ancient and veteran trees. Available from: Keepers of time: ancient and native woodland and trees policy in England (publishing.service.gov.uk) and: Ancient woodland, ancient trees and veteran trees: advice for making planning decisions - GOV.UK (www.gov.uk)
Footnote 2 - Enhancement of this habitat type is only possible by improving the habitat so that it meets all Criteria B, D and F. It is not possible or appropriate to enhance individual tree/s through meeting just one or two of those Criteria, nor by meeting Criteria A, C or E.

Condition Sheet: LINE OF TREES Habitat Type									
Condition Assessment Criteria		**TL1**	**TL2**						
A	More than 70% of trees are native species.	Pass	Fail – sycamore dominated						
B	Tree canopy is predominantly continuous with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide.	Fail	Fail						
C	One or more trees has veteran features and or natural ecological niches for vertebrates and invertebrates, such as presence of standing and attached deadwood, cavities, ivy or loose bark.	Pass	Fail						
D	There is an undisturbed naturally-vegetated strip of at least 6 m on both sides to protect the line of trees from farming and other human activities (excluding grazing). Where veteran trees are present, root protection areas should follow standing advice[2]	Pass	Fail – borders offsite road						
E	At least 95% of the trees are in a healthy condition (deadwood or veteran features valuable for wildlife are excluded from this. There is little or no evidence of an adverse impact on tree health by damage from livestock or wild animals, pests or diseases, or human activity.	Pass	Pass						
	Condition	**Moderate**	**Poor**						

Condition Assessment Result	
Good	Passes 5 of 5 criteria
Moderate	Passes 3 or 4 of 5 criteria
Poor	Passes 0, 1 or 2 of 5 criteria

Footnote 1 – DEFRA (2007) *Hedgerow Survey Handbook: A standard procedure for local surveys in the UK.* 2nd ed [online]. Defra, London. PB1195. Available from: Hedgerow Survey Handbook (publishing.service.gov.uk).

Footnote 2 – Where ancient and veteran trees are present, see gov.uk standing advice on ancient and veteran trees. Available from:
Keepers of time: ancient and native woodland and trees policy in England (publishing.service.gov.uk)
and:
Ancient woodland, ancient trees and veteran trees: advice for making planning decisions - GOV.UK (www.gov.uk)

Condition Assessment Criteria	Criteria achieved?									
Hedgerows	**H1**									
Height >1.5 m average along length	Pass									
Width >1.5 m average along length	Pass									
Gap – hedge base Gap between ground and base of canopy <0.5 m for >90% of length	Pass									
Gap – hedge canopy continuity Gaps make up <10% of total length and No canopy gaps >5 m	Pass									
Undisturbed perennial vegetation >1 m width of undisturbed ground with perennial herbaceous vegetation for >90% of length (on one side of the hedge (at least))	Fail									
Undesirable species Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground.	Pass									
Invasive species >90% of the hedgerow and undisturbed ground is free of invasive non-native plant species (including those listed on Schedule 9 of WCA[3]) and recently introduced species.	Pass									
Current Damage >90% of the hedgerow or undisturbed ground is free of damage caused by human activities.	Pass									
Tree Age (if hedgerow with trees) There is more than one age-class (or morphology) of tree present (for example: young, mature, veteran and or ancient), and there is on average at least one mature, ancient or veteran tree present per 20 - 50m of hedgerow.	Pass									
Tree health (if hedgerow with trees) At least 95% of hedgerow trees are in a healthy condition (excluding veteran features valuable for wildlife). There is little or no evidence of an adverse impact on tree health by damage	Pass									

from livestock or wild animals, pests or diseases, or human activity.										
Criteria failed	**1**									
Condition (G = good; M = moderate; P = poor)	**Good**									

Condition Assessment Result		
	Hedgerow without trees	**Hedgerow with trees**
Good	No more than 2 failures in total; AND No more than 1 in any functional group.	No more than 2 failures in total; AND No more than 1 failure in any functional group.
Moderate	No more than 4 failures in total; AND Does not fail both attributes in more than one functional group (e.g. fails attributes A1, A2, B1 & C2 = Moderate condition).	No more than 5 failures in total; AND Does not fail both attributes in more than one functional group (e.g. fails attributes A1, A2, B1, C2 & E1 = Moderate condition).
Poor	Fails a total of more than 4 attributes; OR Fails both attributes in more than one functional group (e.g. fails attributes A1, A2, B1 & B2 = Poor condition).	Fails a total of more than 5 attributes; OR Fails both attributes in more than one functional group (e.g. fails attributes A1, A2, B1 & B2 = Poor condition).

Footnote 1 – DEFRA (2007) *Hedgerow Survey Handbook. A standard procedure for local surveys in the UK.* [online] Available on:
layout (hedgelink.org.uk)
Footnote 2 – STALEY, J.T. ET AL. (2020) *Definition of Favourable Conservation Status for Hedgerows.* [online] Available on:
Definition of Favourable Conservation Status for Hedgerows - RP2943 (naturalengland.org.uk)
Footnote 3 – Wildlife and Countryside Act 1981 (as amended).
Footnote 4 – CHEFFINGS, C. M. et al. (2005) *The Vascular Plant Red Data List for Great Britain.* Species Status 7: 1-116. [online] Available on:
The Vascular Plant Red Data List for Great Britain (Species Status No. 7) | JNCC Resource Hub
Footnote 5 – BOTANICAL SOCIETY OF BRITAIN AND IRELAND (BSBI). *Definitions: wild, native or alien?* [online] Available on:
Definitions: wild, native or alien? – Botanical Society of Britain & Ireland (bsbi.org)
Footnote 6 – BSBI and Biological Records Centre (BRC) (2022) *Online Atlas of the British and Irish Flora.* [online] Available on:
Acknowledgements | Online Atlas of the British and Irish Flora (brc.ac.uk)
Footnote 7 – GB NON-NATIVE SPECIES SECRETARIAT (GBNNSS) (2022) Available on:
Home » NNSS (nonnativespecies.org)
Footnote 8 – See gov.uk standing advice on ancient and veteran trees. Available from:
Keepers of time: ancient and native woodland and trees policy in England (publishing.service.gov.uk)
and
Ancient woodland, ancient trees and veteran trees: advice for making planning decisions - GOV.UK (www.gov.uk)

Appendix 5: Biological records

Sussex Biodiversity Record Centre

Ecological Data Search SxBRC/24/118 - Summary Report

An ecological data search was carried out for land north of A281, Rudgwick on behalf of Alice Bailey (The Ecology Partnership) on 24/05/2024.

The following datasets were consulted for this report:

	Requested	Radius/buffer size
Designated sites, habitats & ownership maps	Yes	2km
Protected, designated and invasive species	Yes	2km

Summary of results

Sites and habitats

Statutory sites	None present
Non-statutory sites	4 LWS / 1 LGS
Section 41 habitats	3 habitats
Ancient and/or ghyll woodland	Present

Protected and designated species

International designations	25 species	571 records
National designations	89 species	1,299 records
Other designations	162 species	1,678 records
Total	**178 species**	**2,113 records**
Invasive non-native	20 species	105 records

The report is compiled using data held by Sussex Biodiversity Record Centre (SxBRC) at the time of the request. SxBRC does not hold comprehensive species data for all areas. Even where data are held, a lack of records for a species in a defined geographical area does not necessarily mean that the species does not occur there – the area may simply not have been surveyed.

This summary page may be published.
The full report and maps may not be published or otherwise shared.

The data search report is valid until 24/05/2025 for the site named above.

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