



**Essential
Ecology**

Land off Edneys Hill, Barkham

Biodiversity Gain Statement

(Ref: ESEC/24084/02/v1.0)

Prepared by Essential Ecology
on behalf of Abbeymill Homes

April 2025

Quality Control

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The recommendations and conclusions are valid for the current proposals only. Should the proposals plans be amended, the report will need to be updated and where appropriate informed by additional/update survey work.

Report Ref.	Issue Date	Revision	Surveyor(s)	Author	Comments
ESEC/24084/02	28/04/25	V1.0	MJ	MJ	

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1. Executive Summary

Table 1.1. Executive Summary	
Section	Summary
Introduction and Methodology	A Biodiversity Gain Statement, informed by the Statutory Metric, has been provided by Essential Ecology (ESEC) on behalf of Abbeymill Homes The assessment is based on a UK Habitat survey and the proposals provided for the site and has been undertaken in accordance with the Statutory Metric User Guide and the relevant legislation.
Biodiversity Gain Assessment and Strategy	Proposals for habitat retention, creation and enhancement are shown at the Post-development Habitats Plan (ref: ESEC/24084/02-01). Subject to the implementation as set out within this report and the accompanying Statutory Metric, the proposals result in a net gain of hedgerow units well in excess of 10%. The proposals result in a net loss of habitat units. No existing linear watercourse features are present within the site.
Conclusions	The proposals result in a net gain of hedgerow units well in excess of 10%, albeit result in a net loss of habitat units. Therefore, in order to be compliant with the legislation pertaining to BNG, additional habitat units will likely need to be acquired from a habitat bank in order for the pre-commencement biodiversity gain condition to be discharged. As well as acquiring the unit deficit, it will also be necessary for the offsite habitat proposals to satisfy the metrics trading rules and it is therefore likely that offsite habitat provision will either need to include creation/enhancement of other neutral grassland and/or of a high/very high distinctiveness habitat.

2. Introduction

2.1 Terms of Reference

2.1.1 Essential Ecology (ESEC) has been commissioned by Abbeymill Homes to provide a Biodiversity Gain Statement to inform a planning application for the site, located at Land off Edneys Hill, Barkham (central ordnance survey (OS) grid reference SU 78468 67172).

2.1.2 The assessment for the site will be submitted to Wokingham Borough Council to inform the planning application.

2.2 Site Location and Overview

2.2.1 The site comprises a single field. The site is located south of B3349 Barkham Road and west of Edneys Hill in Wokingham (see Figure 2.1 below). Within a wider context, the site is surrounded by existing residential development to the north, east and west and agricultural land to the south. The land to the south is located within Rooks Nest Suitable Alternative Natural Greenspace (SANG) proposed extension.

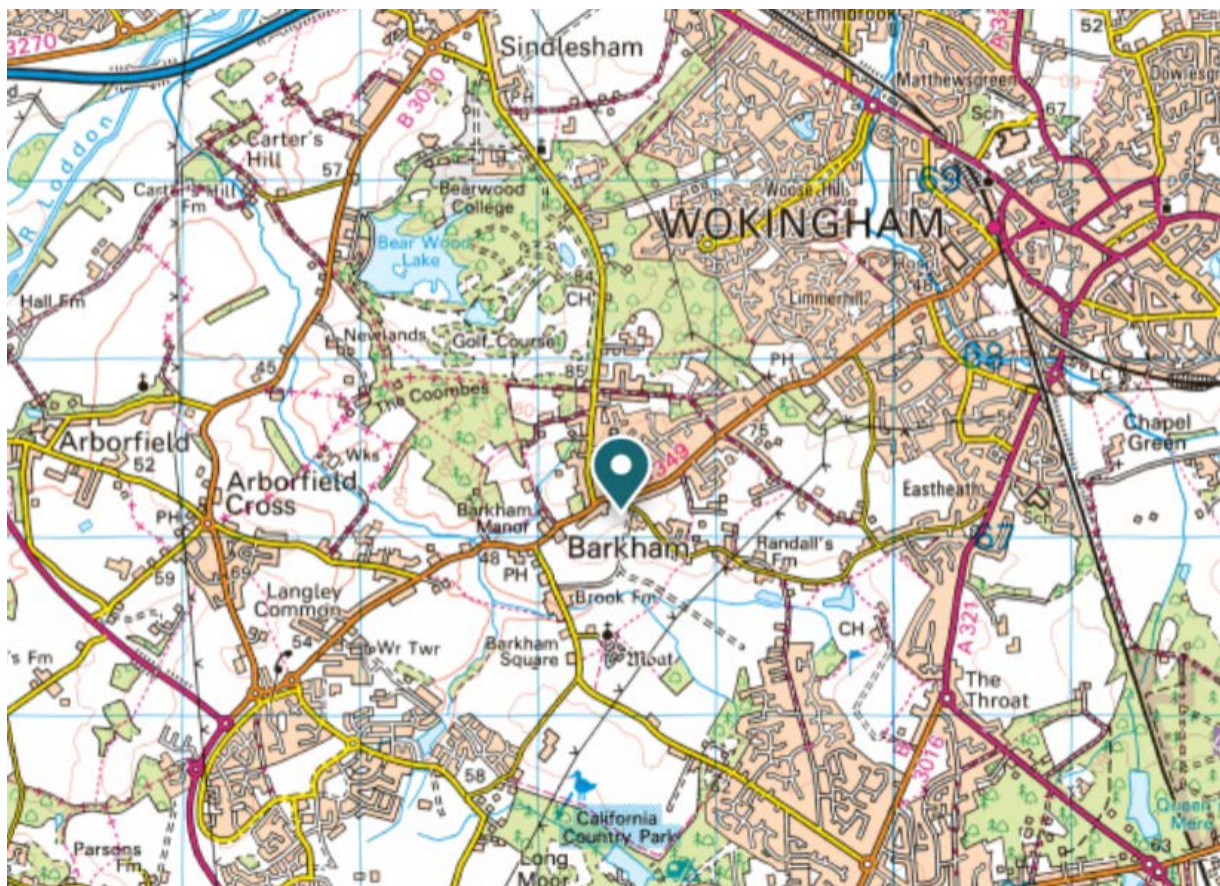


Figure 2.1: Site Location

2.2.2 The site, as shown by the red line boundary on drawing no. ESEC/24084/02-01, comprises an area of c. 0.7ha.

2.2.3 The site is dominated by other neutral grassland, along with areas of mixed scrub, Bramble scrub and trees. Portions of a hedgerow and an ecologically valuable line of trees are also present at the site boundaries.

2.3 Description of Proposals

2.3.1 The proposals include development of sixteen residential dwellings, with associated access and ancillary facilities (see Appendix 1).

2.4 Purpose of Report

2.4.1 On the basis of the proposals, the development will be subject to the biodiversity gain condition. The purpose of this Biodiversity Gain Statement is to provide the local planning authority with sufficient information in order to assist the consideration of biodiversity net gain as part of the determination of the planning application.

2.5 Quality Assurance and Management

2.5.1 The site survey work and Biodiversity Gain Statement have been undertaken by Megan Jewson (Director). Megan has over 12 years' experience in professional ecological consultancy, is a full member of CIEEM and holds a Master degree in Biodiversity and Conservation. Megan has experience in undertaking numerous biodiversity net gain assessments across a range of sites and development projects in England, since the Warwickshire pilot in 2012.

2.5.2 This report and the associated Statutory Metric have been produced with reference to the relevant legislations and current best practice guidance produced by DEFRA, including '*Statutory biodiversity metric: user guide*' (DEFRA 2024), as well as British Standard (BS) 8683:2021 (The British Standards Institution 2021) which sets out the process for designating and implementing biodiversity net gain.

3. Methodology

3.1 Habitat Survey

3.1.1 The site was surveyed on 1st March 2025 based on UK Habitat Classification Survey (v2) (UKHab Ltd 2023) methodology. This involves identifying and mapping habitat types. The condition of each habitat has been assessed in accordance with technical Annex 1 of the Statutory Biodiversity Metric '*Condition Assessment Sheets and Methodology*' (DEFRA 2024).

3.2 Statutory Metric

3.2.1 To quantify the level of biodiversity net gain that can be achieved under the proposed development, the change in biodiversity value has been calculated using the Statutory Biodiversity Metric calculation tool (DEFRA 2024). The Statutory Metric has been completed in accordance with the relevant legislation and the accompanying user guide (DEFRA 2024). The completed metric is based on the UK Habitat survey undertaken by Essential Ecology and the proposals plan provided at Appendix 1.

3.3 Survey and Assessment Limitations

3.3.1 The UK Habitat Classification Survey was undertaken in March, outside the optimum survey season. Nevertheless, it is considered that the data collected represents a valid sample of ecological evidence and therefore provides a robust assessment of the habitats. Where deemed appropriate, a precautionary assessment has also been undertaken in relation to grassland type.

4. Biodiversity Net Gain Strategy

4.1 Overview

4.1.1 The relevant date for the pre-development biodiversity value is the 10th April 2025.

4.1.2 All of the land within the site, as shown by the red line boundary, has contributed to the overall biodiversity net score. There are no other schemes in place at the site which would mean it can only contribute in part or not at all (e.g., suitable alternative green space (SANG)¹, nutrient neutrality or environmental impact assessment compensation).

4.2 Statutory Metric

4.2.1 The Statutory Biodiversity Metric Tool has been used to complete the assessment. The assessment has been undertaken in accordance with the User Guide (DEFRA 2024).

4.2.2 The site comprises only of habitats and linear hedgerow features. No linear watercourse features are present onsite or within 10m of the site.

4.2.3 Coding for Strategic significance of habitats pre- and post-development has been based on their inclusion within Local Nature Recovery Strategies. Where these are not yet available, coding for strategic significance is based on Local Plans, strategies or policies, such as the Local Biodiversity Action Plan. In this instance, the existing hedgerows which qualify as Priority Habitat (i.e., native hedgerows and tree lines) within the site are considered to be of strategic significance in accordance with Policy CP7 Biodiversity of the Core Strategy (Wokingham Borough Council 2010). Habitats of strategic significance are highlighted in bold below.

Baseline

Habitats

4.2.4 Baseline habitats are shown at drawing ESEC/24084/02-01, whilst condition assessment sheets are provided at Appendix 2.

4.2.5 The site comprises medium distinctiveness habitats in the form of:

- Medium – Other neutral grassland (poor condition), Bramble scrub (poor condition), Mixed scrub (moderate condition) and Individual trees (moderate and good condition).

4.2.6 None of the habitats within the site form irreplaceable habitats.

¹ SANG will be required as mitigation at this site, however the strategy will be to provide financial contributions to offsite SANG rather than to provide SANG onsite.

Hedgerows

4.2.7 Baseline hedgerows are shown at drawing ESEC/24084/02-01, whilst condition assessment sheets are provided at Appendix 2.

4.2.8 The site comprises a medium and very high distinctiveness hedgerows in the form of:

- Medium – **Ecologically valuable line of trees (moderate condition)**
- Very high – **Species-rich native hedgerow with trees – associated with ditch or bank (good condition).**

Post-development

Habitats

4.2.9 Post-development habitats are shown at drawing ESEC/24084/02-02, whilst condition assessment sheets are provided at Appendix 3.

4.2.10 Following development, the site will comprise very low to medium distinctiveness habitats in the form of:

- Very Low – Developed land; sealed surface (condition N/A) and Unvegetated garden (condition N/A).
- Low – Vegetated garden (condition N/A), Introduced shrub (condition N/A) and Modified grassland (moderate condition).
- Medium – Other neutral grassland (poor and moderate condition), Mixed scrub (moderate condition) and Urban trees (moderate condition).

4.2.11 Habitat enhancements include creation of medium distinctiveness habitats and could therefore be considered to form significant enhancements.

Hedgerows

4.2.12 Post-development hedgerows are shown at drawing ESEC/24084/02-02, whilst condition assessment sheets are provided at Appendix 3.

4.2.13 Following development, the site will comprise medium to very high distinctiveness hedgerows in the form of:

- Medium – **Ecologically valuable line of trees (moderate condition)** and **Species-rich native hedgerow (moderate condition)**
- Very high – **Species-rich native hedgerow with trees – associated with ditch or bank (moderate condition).**

4.2.14 Hedgerow enhancements at the site, include creation of medium and very high distinctiveness hedgerows and would therefore be considered to form significant enhancements.

Results

4.2.15 Subject to the information set out within this report and the accompanying Statutory Metric, Table 4.1 below provides a summary of the overall results:

Table 4.1: BNG Results Summary					
Habitat Type	Baseline Units	Post-development Units	Net Change Units		Unit Deficit to achieve 10%
			Units	%	
Habitats	2.93	2.71	-0.22	-7.64%	0.52
Hedgerows	0.32	1.70	+1.38	+429.14%	N/a

4.2.16 On the basis of the results, the proposed development, subject to the enhancements set out within this report and accompanying metric, are considered to be compliant with the legislation pertaining to BNG for hedgerows and therefore no additional hedgerow units would need to be acquired to discharge the biodiversity gain condition.

4.2.17 However, the proposals result in a loss of habitat units. Therefore, additional habitat units will need to be acquired from a habitat bank in order for the pre-commencement biodiversity gain condition to be discharged. As well as acquiring the unit deficit, it will also be necessary for the offsite habitat proposals to satisfy the metrics trading rules and it is therefore likely that offsite habitat provision will either need to include creation/enhancement of other neutral grassland and/or creation/enhancement of a high/very high distinctiveness habitat.

4.3 Biodiversity Gain Hierarchy

4.3.1 The site includes solely of medium distinctiveness habitats and therefore the proposals inevitably result in losses of medium distinctiveness habitats. However, it is noted that these habitats, comprising largely Mixed scrub, Bramble scrub and poor condition Other neutral grassland, are very common and widespread in the local area and therefore losses as a result of the proposals are unlikely to be significant at the local level. Furthermore, areas of proposed greenspace have been designed to maximise retention, enhancement and creation of these habitats, where feasible and appropriate.

4.3.2 The site includes medium and very high distinctiveness hedgerow features which are located along the site boundaries and largely excluded from the site itself. The proposals have been designed to minimise impacts to hedgerow features through retention within public open greenspace. Losses are only proposed in order to accommodate vehicular access, with total losses equating to c. 9.5m. Furthermore, the development will bring forward creation of additional species-rich native hedgerows and a length of species-rich native hedgerow with trees – associated with bank or ditch, which will result in net gains in excess of 10%. This hedgerow creation would not be brought forward in the absence of the proposals.

5. Conclusions

- 5.1.1 Essential Ecology has undertaken a UK Habitat survey and completed the Statutory Metric in order to inform a Biodiversity Gain Statement for the site. The assessment has been undertaken in accordance with the User Guide and consideration has been given to the Biodiversity Gain Hierarchy.
- 5.1.2 On the basis of the assessment of the proposals using the Statutory Metric, the development of the site will result in a net gain of hedgerow units in excess of 10% and the proposals are therefore compliant with the legislation pertaining to BNG in this regard.
- 5.1.3 However, the proposals result in a net loss of habitat units and therefore, additional habitat units will likely need to be acquired from a habitat bank in order for the pre-commencement biodiversity gain condition to be discharged. As well as acquiring the unit deficit, it will also be necessary for the offsite habitat proposals to satisfy the metrics trading rules and it is therefore likely that offsite habitat provision will either need to include creation/enhancement of other neutral grassland and/or involve creation/enhancement of a high/very high distinctiveness habitat.

6. References

DEFRA. 2024. *Statutory biodiversity metric calculation tool* . London: DEFRA.

DEFRA. 2024. *The Statutory Biodiversity Metric: User Guide* . London: DEFRA.

The British Standards Institution. 2021. *Process for designing and implementing Biodiversity Net Gain - Specification*. London: BSI Standards Limited.

UKHab Ltd. 2023. "UK Habitat Classification Version 2.0." *UK Habitat Classification website*. Accessed 2024. <https://www.ukhab.org>.

Wokingham Borough Council. 2010. "Wokingham Borough Local Development Framework - Adopted Core Strategy Development Plan Document (January 2010)."

Drawings



- Key:
- Site boundary
 - Other neutral grassland
 - Mixed scrub
 - Bramble scrub
 - Individual tree [0.012ha]
 - Species-rich native hedgerow
 - Ecologically valuable line of trees

Project:
Land off Edneys Hill, Barkham

Drawing Title:
Baseline Habitats

Drawing No:
ESEC/24084/02-01
Date:
April 2025

Rev:
-



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Key:

- Site boundary
- Developed land; sealed surface
- Vegetated garden
- Introduced shrub
- Other neutral grassland
- Enhanced Other neutral grassland
- Retained Other neutral grassland
- Mixed scrub
- Retained Mixed Scrub
- Modified grassland
- Species-rich native hedgerow
- Retained Ecologically valuable line of trees
- Species-rich native hedgerow with trees – associated with bank or ditch [0.022km]
- Individual tree [0.314ha]
- Retained Individual tree [0.008ha]

Project:
Land off Edneys Hill, Barkham

Drawing Title:
Post-development Habitats

Drawing No:
ESEC/24084/02-02
Date:
April 2025

Rev:
A



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Appendices



Indicative Native Tree Species	
Acer campestre	Field Maple
Betula pubescens	Downy Birch
Carpinus betulus	Common Hornbeam
Crataegus monogyna	Common Hawthorn
Malus sylvestris	Crab Apple
Prunus padus	Bird Cherry
Quercus robur	Common Oak
Sorbus aria	Common Whitebeam
Sorbus aucuparia	Rowan
Indicative Mixed Native Hedgerow Mix	
10% Acer campestre	Field Maple
10% Corylus avellana	Common Hazel
40% Crataegus monogyna	Common Hawthorn
5% Ligustrum vulgare	Wild Privet
10% Malus sylvestris	Crab Apple
15% Prunus spinosa	Blackthorn
5% Rosa canina	Dog Rose
5% Viburnum lantana	Wayfaring Tree
Indicative Mixed Native Shrub Mix	
Cornus sanguinea	Common Dogwood
Corylus avellana	Common Hazel
Crataegus monogyna	Common Hawthorn
Euonymus europaeus	Spindle
Ilex aquifolium	Common Holly
Rosa canina	Dog Rose
Ruscus aculeatus	Butcher's Broom
Sambucus nigra	Elder
Sorbus torminalis	Wild Service Tree
Viburnum opulus	Guelder Rose
Indicative Ornamental Shrubs & Grasses	
Brachyglottis 'Sunshine'	
Ceanothus thyrsiflorus repens	
Choisya 'Aztec Pearl'	
Cornus sanguinea 'Midwinter Fire'	
Cotinus coggyria 'Royal Purple'	
Euonymus fortunei 'Emerald n' Gold'	
Genista lydia	
Hebe albicans	
Hebe 'Midsummer Beauty'	
Lavandula angustifolia 'Hidcote'	
Potentilla fruticosa 'Tangerine'	
Sarcococca confusa	
Sedum spectabile 'Brilliant'	
Skimmia japonica 'Rubella'	
Spiraea japonica 'Firelight'	
Viburnum davidii	
Indicative Grass & Wildflower Mixtures @4g/msq.	
Emorsgate EL1 Flowering Lawn Mix.	
Emorsgate EM2 General Purpose Wildflower Meadow Mix (supplemented with Yellow Rattle to control the grasses).	
Emorsgate EM8 Meadow Mixture for Wetlands.	

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Not for construction.

- Legend:**
- Application Site Boundary
 - Existing Trees & Vegetation Structure Retained | Refer Arboricultural Information
 - Proposed Houses, Apartments & Carports
 - Proposed Standard Specimen & Native Tree Planting | Min 14-16cmg | Rb
 - Proposed Large Canopied Semi-mature Native Tree Planting | Min 18-20cmg | Rb
 - Proposed Species Rich Mixed Native Hedgerow | @4/1in m
 - Proposed Species Rich Mixed Native Hedgerow with Trees & Dry Ditch
 - Proposed Mixed Native Shrub / Scrub Planting @ 2-3/m | Br | Transplants
 - Proposed Ornamental Evergreen & Herbaceous Shrub Planting | @ 3/m | in groups of 3+5 plants
 - Proposed Flowering Lawn Turf / Grass Mix Emorsgate EL1 or similar
 - Proposed Species Rich Wildflower Mix Emorsgate EM2 or similar (supplemented with Yellow Rattle to control grasses)
 - Proposed Attenuation Basin with Wetland Grass Mix Emorsgate EM8 or similar
 - Existing 1.2m Timber Post & Rail Fence
 - Proposed 1.8m Timber Close Board Fence
 - Proposed Timber Bike Shed
 - Proposed Asphalt Path
 - Proposed Permeable Block Paved Road Brindle or similar finish
 - Proposed Block Paved Road & Parking Charcoal Grey or similar finish
 - Proposed Flag Paving Paths & Patios Charcoal Grey or similar finish | 400x400mm
 - Existing Sewer Easement

Drawing Notes:

Drawing prepared for planning purposes and depicts the indicative landscape arrangement and principles of the landscape strategy only.

Native species of local provenance to be used.

Do not scale from drawing, use figured dimensions only.

Drawing to be read in conjunction with all Jenk Landscape Design + Planning Ltd reports and drawings.

Refer to Arboricultural drawings for full details of existing trees and retention / protection methods.

Jenk
landscape design + planning

client / project:
Abbeymill Homes
Land Off Edneys Hill, Barkham

drawing title:
Landscape Strategy Plan

project no:	drawing no:	revision:
LA1031	LSP/100	D
date:	scale:	initials:
Apr 2025	1:500@A3	CJ
www.jenk-landscape.com		

- Drawing Annotations:**
- Majority of the existing mature trees and vegetation structure along Barkham Road & Edneys Hill are retained to maintain the existing character of the streetscenes. Localised vegetation removal required for the new access and associated highways visibility splays - refer Arboricultural Info.
 - Proposed dwellings to be set back from Barkham Road & Edneys Hill to reflect the set back and settlement form of the locality whilst maximising tree retentions. Proposed materials and elevational treatment to reflect the local character enabling the development to respond to its context.
 - High quality hard landscape materials used for roads, parking, paths and patios utilising recessive finishes. This seeks to reflect the settlement - countryside edge context and responds to the localised townscape character of Barkham.
 - An area of open space for landscape and biodiversity enhancements with attenuation basin is included on the southern boundary which reflects localised character and assist in softening the proposed dwellings. This enhances green infrastructure and creates a high quality landscape setting.
 - Proposed tree planting internally and along the boundaries will mitigate for the degree of vegetation removal required for the access and creates a high quality green setting to the residential development. Ornamental planting using flowering and berry producing species add to wildlife value.
 - Proposed pedestrian access link through to Barkham Road provides direct links between the new development and existing built up area. Existing vegetation structure to be cut back locally and appropriately managed over the long-term to improve its overall condition and maintain longevity with additional spot planting.

Habitat	Other Neutral Grassland	Parcel Reference										Notes
Condition Assessment Criteria		G1	G2	G3								
												Notes (such as justification)
A	The parcel represents a good example of its habitat type, with a consistently high proportion of characteristic indicator species present relevant to the specific habitat type (and relative to Footnote 3 suboptimal species which may be listed in the UKHab description). ¹ Note - this criterion is essential for achieving Moderate or Good condition for non-acid grassland types only.	N	N	N								
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 insects, birds and small mammals to live and breed.	N	N	N								
C	Cover of bare ground is between 1% and 5%, including localised areas, for example, rabbit warrens ² .	Y	Y	Y								
D	Cover of bracken <i>Pteridium aquilinum</i> is less than 20% and cover of scrub (including bramble <i>Rubus fruticosus</i> agg.) is less than 5%.	Y	Y	Y								
E	Combined cover of species indicative of suboptimal condition ³ and physical damage (such as excessive poaching, damage from machinery use or storage, damaging levels of access, or any other damaging management activities) accounts for less than 5% of total area. If any invasive non-native plant species ⁴ (as listed on Schedule 9 of WCA ⁵) are present, this criterion is automatically failed.	N	Y	N								
F	There are 10 or more vascular plant species per m ² present, including forbs that are characteristic of the habitat type (species referenced in Footnote 3 and 5 cannot contribute towards this count). Note - this criterion is essential for achieving Good condition for non-acid grassland types only.	N	N	N								8.7 species per m ² excluding injurious weeds.
Essential criterion for Good condition achieved (for non-acid grassland) (Yes or No)		N	N	N								
Number of criteria passed		2	3	2								

Condition Assessment Result	Condition Assessment Score	Score Achieved ×/✓										
Non-acid grassland types (Result out of 6 criteria)												
Passes 5 or 6 criteria, including essential criterion A and additional criterion F.	Good (3)											
Passes 3 - 5 criteria, including essential criterion A.	Moderate (2)											
Passes 2 or fewer criteria; OR Passes 3 or 4 criteria excluding criterion A and F.	Poor (1)	✓	✓	✓								

Habitat	Scrub	Parcel Reference										Notes
Condition Assessment Criteria		S1										
												Notes (such as justification)
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 species², - No single species comprises more than 75% of the cover (except hazel <i>Corylus avellana</i>, common juniper <i>Juniperus communis</i>, sea buckthorn <i>Hippophae rhamnoides</i> (only in its restricted native range), or box <i>Buxus sempervirens</i>, which can be up to 100% cover).	Y										
B	Seedlings, saplings, young shrubs and mature (or ancient or veteran ³) shrubs are all present.	Y										
C	There is an absence of invasive non-native plant species ⁴ (as listed on Schedule 9 of WCA ⁵) and species indicative of suboptimal condition ⁶ make up less than 5% of ground cover.	Y										
D	The scrub has a well-developed edge with scattered scrub and tall grassland and or forbs present between the scrub and adjacent habitat.	N										

E	There are clearings, glades or rides present within the scrub, providing sheltered edges.		N										
	Number of criteria passed		3										
	Condition Assessment Result (out of 5 criteria)	Condition Assessment Score	Score Achieved ×/√										
	Passes 5 criteria	Good (3)											
	Passes 3 or 4 criteria	Moderate (2)	✓										
Passes 2 or fewer criteria	Poor (1)												

Habitat	Trees	Parcel Reference										Notes
Condition Assessment Criteria		T8	T13	T18								
		Criterion passed (Yes or No)										Notes (such as justification)
A	The tree is a native species (or at least 70% within the block are native species).	N	N	Y								
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).	Y	Y	Y								
C	The tree is mature (or more than 50% within the block are mature) ¹ .	N	N	Y								
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.	Y	Y	N								
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	N	N	Y								
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	Y	Y	Y								
Number of criteria passed		3	3	5								
Result	Condition Assessment Score	Score Achieved x/√										
Passes 5 or 6 criteria	Good (3)			√								
Passes 3 or 4 criteria	Moderate (2)	√	√									
Passes 2 or fewer criteria	Poor (1)											

Habitat	Hedgerows			Parcel Reference										Notes
Condition Assessment Criteria				1										
Core groups - applicable to all hedgerow types				Criterion passed (Yes or No)										Notes (such as justification)
A1.	Height	>1.5 m average along length	The average height of woody growth estimated from base of stem to the top of the shoots, excluding any bank beneath the hedgerow, any gaps or isolated trees. Newly laid or coppiced hedgerows are indicative of good management and pass this criterion for up to a maximum of four years (if undertaken according to good practice). A newly planted hedgerow does not pass this criterion (unless it is >1.5 m height).	Y										

A2.	Width	>1.5 m average along length	The average width of woody growth estimated at the widest point of the canopy, excluding gaps and isolated trees. Outgrowths (such as blackthorn <i>Prunus spinosa</i> suckers) are only included in the width estimate when they are >0.5 m in height. Laid, coppiced, cut and newly planted hedgerows are indicative of good management and pass this criterion for up to a maximum of four years (if undertaken according to good practice).	Y											
B1.	Gap - hedge base	Gap between ground and base of canopy <0.5 m for >90% of length	This is the vertical 'gappiness' of the woody component of the hedgerow, and its distance from the ground to the lowest leafy growth. Certain exceptions to this criterion are acceptable (see page 65 of the Hedgerow Survey Handbook).	N											

B2.	Gap - hedge canopy continuity	Gaps make up <10% of total length; and No canopy gaps >5 m	This is the horizontal 'gappiness' of the woody component of the hedgerow. Gaps are complete breaks in the woody canopy (no matter how small). Access points and gates contribute to the overall 'gappiness' but are not subject to the >5 m criterion (as this is the typical size of a gate).	Y										
C1.	Undisturbed ground and perennial vegetation	>1 m width of undisturbed ground with perennial herbaceous vegetation for >90% of length: · Measured from outer edge of hedgerow; and · Is present on one side of the hedgerow (at least).	This is the level of disturbance (excluding wildlife disturbance) at the base of the hedgerow. Undisturbed ground is present for at least 90% of the hedgerow length, greater than 1 m in width and must be present along at least one side of the hedgerow. This criterion recognises the value of the hedgerow base as a boundary habitat with the capacity to support a wide range of species. Cultivation, heavily trodden footpaths, poached ground etc. can limit available habitat niches.	Y										

C2.	Nutrient-enriched perennial vegetation	Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground.	The indicator species used are nettles <i>Urtica</i> spp., cleavers <i>Galium aparine</i> and docks <i>Rumex</i> spp. Their presence, either singly or together, does not exceed the 20% cover threshold.	Y										
D1.	Invasive and neophyte 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.	Recently introduced species refer to plants that have naturalised in the UK since AD 1500 (neophytes). Archaeophytes count as natives. For information on archaeophytes and neophytes see the JNCC website ⁴ , as well as the BSBI website ⁵ where the 'Online Atlas of the British and Irish Flora' ⁶ contains an up-to-date list of the status of species. For information on invasive non-native species see the GB Non-Native Secretariat website ⁷ .	Y										

D2.	Current damage	>90% of the hedgerow or undisturbed ground is free of damage caused by human activities.	This criterion addresses damaging activities that may have led to or lead to deterioration in other attributes. This could include evidence of pollution, piles of manure or rubble, or inappropriate management practices (for example, excessive hedgerow cutting).	Y												
Additional group - applicable to hedgerows with trees only																
E1.	Tree class	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.	This criterion addresses if there are a range of age-classes or morphologies which allow for replacement of trees and provide opportunities for different species.	Y												

E2.	Tree health	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 from livestock or wild animals, pests or diseases, or human activity.	This criterion identifies if the trees are subject to damage which compromises the survival and health of the individual specimens.	Y											
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The hedgerow condition assessment generates a weighting (score) ranging from 1 - 3, which is used within the Statutory Biodiversity Metric. The scores for each are set out in the tables below.

Condition categories for hedgerows without trees			
Category	Category Requirements	Metric Score	
Good	No more than 2 failures in total; AND No more than 1 failure in any functional group.	3	
Moderate	No more than 4 failures in total; AND <u>Does not fail both attributes</u> in more than one functional group (for example, fails attributes A1, A2, B1 and C2 = Moderate condition).	2	

Poor	Fails a total of more than 4 attributes; OR <u>Fails both attributes</u> in more than one functional group (for example, fails attributes A1, A2, B1 and B2 = Poor condition).	1	
Score achieved:		N/A	
Condition categories for hedgerows with trees			
Category	Category Requirements	Metric score	
Good	No more than 2 failures in total; AND No more than 1 failure in any functional group.	3	
Moderate	No more than 5 failures in total; AND <u>Does not fail both attributes</u> in more than one functional group (for example, fails attributes A1, A2, B1, C2 and E1 = Moderate condition).	2	
Poor	Fails a total of more than 5 attributes; OR <u>Fails both attributes</u> in more than one functional group (for example, fails attributes A1, A2, B1 and B2 = Poor condition).	1	
Score achieved:		H1 = 3	

Habitat	Lines of Trees	Parcel Reference										Notes
Condition Assessment Criteria		TL1										
		Criterion passed (Yes or No)										Notes (such as justification)
A	At least 70% of trees are native species.	Y										
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.	Y										
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.	Y										
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 .	N										
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.	Y										
Number of criteria passed		4										
Result	Condition Assessment Score	Score Achieved x/√										
Passes 5 criteria	Good (3)											
Passes 3 or 4 criteria	Moderate (2)	✓										
Passes 2 or fewer criteria	Poor (1)											

Habitat	Other Neutral Grassland	Parcel Reference										Notes
Condition Assessment Criteria		Retained	Enhanced	Proposed								
												Notes (such as justification)
A	The parcel represents a good example of its habitat type, with a consistently high proportion of characteristic indicator species present relevant to the specific habitat type (and relative to Footnote 3 suboptimal species which may be listed in the UKHab description). ¹ Note - this criterion is essential for achieving Moderate or Good condition for non-acid grassland types only.	N	Y	Y								
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 insects, birds and small mammals to live and breed.	N	N	N								
C	Cover of bare ground is between 1% and 5%, including localised areas, for example, rabbit warrens ² .	Y	Y	Y								
D	Cover of bracken <i>Pteridium aquilinum</i> is less than 20% and cover of scrub (including bramble <i>Rubus fruticosus</i> agg.) is less than 5%.	Y	Y	Y								
E	Combined cover of species indicative of suboptimal condition ³ and physical damage (such as excessive poaching, damage from machinery use or storage, damaging levels of access, or any other damaging management activities) accounts for less than 5% of total area. If any invasive non-native plant species ⁴ (as listed on Schedule 9 of WCA ⁵) are present, this criterion is automatically failed.	N	N	N								
F	There are 10 or more vascular plant species per m ² present, including forbs that are characteristic of the habitat type (species referenced in Footnote 3 and 5 cannot contribute towards this count). Note - this criterion is essential for achieving Good condition for non-acid grassland types only.	N	N	N								
Essential criterion for Good condition achieved (for non-acid grassland) (Yes or No)		N	N	N								
Number of criteria passed		3	3	3								

Condition Assessment Result	Condition Assessment Score	Score Achieved x/√									
Non-acid grassland types (Result out of 6 criteria)											
Passes 5 or 6 criteria, including essential criterion A and additional criterion F.	Good (3)										
Passes 3 - 5 criteria, including essential criterion A.	Moderate (2)		√	√							
Passes 2 or fewer criteria; OR Passes 3 or 4 criteria excluding criterion A and F.	Poor (1)	√									

Habitat	Scrub	Parcel Reference										Notes
Condition Assessment Criteria		S4	Proposed									
												Notes (such as justification)
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 species², - No single species comprises more than 75% of the cover (except hazel <i>Corylus avellana</i>, common juniper <i>Juniperus communis</i>, sea buckthorn <i>Hippophae rhamnoides</i> (only in its restricted native range), or box <i>Buxus sempervirens</i>, which can be up to 100% cover).	Y	Y									
B	Seedlings, saplings, young shrubs and mature (or ancient or veteran ³) shrubs are all present.	Y	N									
C	There is an absence of invasive non-native plant species ⁴ (as listed on Schedule 9 of WCA ⁵) and species indicative of suboptimal condition ⁶ make up less than 5% of ground cover.	Y	Y									
D	The scrub has a well-developed edge with scattered scrub and tall grassland and or forbs present between the scrub and adjacent habitat.	N	Y									

E	There are clearings, glades or rides present within the scrub, providing sheltered edges.	N	N										
Number of criteria passed		3	3										
Condition Assessment Result (out of 5 criteria)		Condition Assessment Score		Score Achieved ×/√									
Passes 5 criteria		Good (3)											
Passes 3 or 4 criteria		Moderate (2)		✓	✓								
Passes 2 or fewer criteria		Poor (1)											

Habitat	Trees	Parcel Reference										Notes
Condition Assessment Criteria		T8	T13	Proposed (open space; x61)	Proposed (apartments; x11)							
												Notes (such as justification)
A	The tree is a native species (or at least 70% within the block are native species).	N	N	Y	Y							
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).	Y	Y	Y	Y							
C	The tree is mature (or more than 50% within the block are mature) ¹ .	N	N	N	N							
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.	Y	Y	N	N							
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	N	N	N	N							
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	Y	Y	Y	Y							
Number of criteria passed		3	3	3	3							
Result	Condition Assessment Score	Score Achieved x/√										
Passes 5 or 6 criteria	Good (3)											
Passes 3 or 4 criteria	Moderate (2)	✓	✓	✓	✓							
Passes 2 or fewer criteria	Poor (1)											

Habitat	Hedgerows			Parcel Reference										Notes
Condition Assessment Criteria				Proposed medium distinctiveness	Proposed very high distinctiveness									
Core groups - applicable to all hedgerow types				Criterion passed (Yes or No)										Notes (such as justification)
A1.	Height	>1.5 m average along length	The average height of woody growth estimated from base of stem to the top of the shoots, excluding any bank beneath the hedgerow, any gaps or isolated trees. Newly laid or coppiced hedgerows are indicative of good management and pass this criterion for up to a maximum of four years (if undertaken according to good practice). A newly planted hedgerow does not pass this criterion (unless it is >1.5 m height).	Y	Y									

A2.	Width	>1.5 m average along length	The average width of woody growth estimated at the widest point of the canopy, excluding gaps and isolated trees. Outgrowths (such as blackthorn <i>Prunus spinosa</i> suckers) are only included in the width estimate when they are >0.5 m in height. Laid, coppiced, cut and newly planted hedgerows are indicative of good management and pass this criterion for up to a maximum of four years (if undertaken according to good practice).	N	N										
B1.	Gap - hedge base	Gap between ground and base of canopy <0.5 m for >90% of length	This is the vertical 'gappiness' of the woody component of the hedgerow, and its distance from the ground to the lowest leafy growth. Certain exceptions to this criterion are acceptable (see page 65 of the Hedgerow Survey Handbook).	Y	Y										

B2.	Gap - hedge canopy continuity	Gaps make up <10% of total length; and No canopy gaps >5 m	This is the horizontal 'gappiness' of the woody component of the hedgerow. Gaps are complete breaks in the woody canopy (no matter how small). Access points and gates contribute to the overall 'gappiness' but are not subject to the >5 m criterion (as this is the typical size of a gate).	Y	Y											
C1.	Undisturbed ground and perennial vegetation	>1 m width of undisturbed ground with perennial herbaceous vegetation for >90% of length: · Measured from outer edge of hedgerow; and · Is present on one side of the hedgerow (at least).	This is the level of disturbance (excluding wildlife disturbance) at the base of the hedgerow. Undisturbed ground is present for at least 90% of the hedgerow length, greater than 1 m in width and must be present along at least one side of the hedgerow. This criterion recognises the value of the hedgerow base as a boundary habitat with the capacity to support a wide range of species. Cultivation, heavily trodden footpaths, poached ground etc. can limit available habitat niches.	Y	Y											

C2.	Nutrient-enriched perennial vegetation	Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground.	The indicator species used are nettles <i>Urtica</i> spp., cleavers <i>Galium aparine</i> and docks <i>Rumex</i> spp. Their presence, either singly or together, does not exceed the 20% cover threshold.	N	N									
D1.	Invasive and neophyte 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.	Recently introduced species refer to plants that have naturalised in the UK since AD 1500 (neophytes). Archaeophytes count as natives. For information on archaeophytes and neophytes see the JNCC website ⁴ , as well as the BSBI website ⁵ where the 'Online Atlas of the British and Irish Flora' ⁶ contains an up-to-date list of the status of species. For information on invasive non-native species see the GB Non-Native Secretariat website ⁷ .	Y	Y									

D2.	Current damage	>90% of the hedgerow or undisturbed ground is free of damage caused by human activities.	This criterion addresses damaging activities that may have led to or lead to deterioration in other attributes. This could include evidence of pollution, piles of manure or rubble, or inappropriate management practices (for example, excessive hedgerow cutting).	N	N										
Additional group - applicable to hedgerows with trees only															
E1.	Tree class	There is more than one age-class (or morphology) of tree present (for example: young, mature, veteran and or ancient ⁸), and there is on average at least one mature, ancient or veteran tree present per 20 - 50m of hedgerow.	This criterion addresses if there are a range of age-classes or morphologies which allow for replacement of trees and provide opportunities for different species.		N										

E2.	Tree health	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 from livestock or wild animals, pests or diseases, or human activity.	This criterion identifies if the trees are subject to damage which compromises the survival and health of the individual specimens.		Y											
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The hedgerow condition assessment generates a weighting (score) ranging from 1 - 3, which is used within the Statutory Biodiversity Metric. The scores for each are set out in the tables below.

Condition categories for hedgerows without trees			
Category	Category Requirements	Metric Score	
Good	No more than 2 failures in total; AND No more than 1 failure in any functional group.	3	
Moderate	No more than 4 failures in total; AND <u>Does not fail both attributes</u> in more than one functional group (for example, fails attributes A1, A2, B1 and C2 = Moderate condition).	2	

Poor	Fails a total of more than 4 attributes; OR <u>Fails both attributes</u> in more than one functional group (for example, fails attributes A1, A2, B1 and B2 = Poor condition).	1	
Score achieved:		Proposed medium distinctiveness = 2	
Condition categories for hedgerows with trees			
Category	Category Requirements	Metric score	
Good	No more than 2 failures in total; AND No more than 1 failure in any functional group.	3	
Moderate	No more than 5 failures in total; AND <u>Does not fail both attributes</u> in more than one functional group (for example, fails attributes A1, A2, B1, C2 and E1 = Moderate condition).	2	
Poor	Fails a total of more than 5 attributes; OR <u>Fails both attributes</u> in more than one functional group (for example, fails attributes A1, A2, B1 and B2 = Poor condition).	1	
Score achieved:		Proposed very high distinctiveness = 2	

Habitat	Lines of Trees	Parcel Reference										Notes
Condition Assessment Criteria		TL1										
		Criterion passed (Yes or No)										Notes (such as justification)
A	At least 70% of trees are native species.	Y										
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.	Y										
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.	Y										
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 .	N										
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.	Y										
Number of criteria passed		4										
Result	Condition Assessment Score	Score Achieved x/√										
Passes 5 criteria	Good (3)											
Passes 3 or 4 criteria	Moderate (2)	✓										
Passes 2 or fewer criteria	Poor (1)											



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