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NATURAL PROGRESSION

# **Lindfield Close, Portslade, East Sussex**

**Biodiversity Net Gain Assessment**

**November 2023**

# Lindfield Close, Portslade, East Sussex

## Biodiversity Net Gain Assessment

<b>Client:</b>	Miller Bourne Architects	
<b>Report No.:</b>	UE0558_LindfieldClose_BNG_1_231124	
<b>Author:</b> Tim Lees BA (Hons) MSc MCIEEM	<b>Proofed:</b> Nick Pincombe MSc CEnv MIEMA MCIEEM	<b>Approved:</b> Nick Pincombe MSc CEnv MIEMA MCIEEM
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## 0 Executive Summary

- 0.1.1 Biodiversity Net Gain is an approach to development which leaves the natural environment in a better state than beforehand. Defra has published a metric by which the biodiversity losses and gains associated with a particular development can be calculated. Urban Edge Environmental Consulting was commissioned by Miller Bourne Architects ('the Applicant') to undertake a Biodiversity Net Gain assessment using the Defra Metric 4.0 for the site of a proposed residential development at Lindfield Close, Portslade, East Sussex.
- 0.1.2 The 2023 National Planning Policy Framework advocates that planning policies and decisions should take opportunities to achieve net environmental and biodiversity gains, such as developments that would enable habitat creation. It also advocates that, when making planning decisions, local planning authorities should encourage biodiversity enhancements, especially where this can secure measurable gains for biodiversity. In 2018 the Government published its '25 Year Environment Plan' which set out an ambition to embed mandatory biodiversity net gain into all development projects. The Environment Act 2021 will mandate a minimum of 10% BNG for all development following a two-year transition period. Adopted Policy CP10 Biodiversity within the Brighton & Hove City Plan Part One and Part Two District Planning Framework, requires that development proposals should maximise opportunities to maintain, restore and enhance habitats and ecological networks, and where possible achieve a net gain in biodiversity.
- 0.1.3 The Biodiversity Net Gain assessment has been carried out using the 2023 Defra Biodiversity Metric 4.0 which uses habitats as a proxy for wider biodiversity. Pre-intervention Biodiversity Units (BU) calculations were informed by walkover site visits on 30 November 2022, 19 January 2023 and 15 November 2023 to establish the habitat parcels present within the development site, their size and condition. Post-intervention BU were calculated based upon the Landscape Masterplan and liaison with the client team.
- 0.1.4 There is a calculated **net gain of +0.69 BU for area habitats, equivalent to +29.38%**, associated with the current development proposals.
- 0.1.5 There is a calculated **net gain of +0.33 BU for linear habitats, equivalent to +34.59%**, associated with the current development proposals.
- 0.1.6 The proposed development will also satisfy trading rules associated with each habitat distinctiveness group.

# 1 Introduction

## 1.1 Purpose of the Report

- 1.1.1 Urban Edge Environmental Consulting (UEEC) has been commissioned by Miller Bourne Architects ('the Applicant') to undertake a Biodiversity Net Gain (BNG) assessment for the site of a proposed residential development at Lindfield Close, Portslade, East Sussex (Grid Reference: 525514, 106148).
- 1.1.2 The Application Site lies to the south of Portslade village in the city of Brighton and Hove, East Sussex (Grid reference: TQ 25514 06156). The survey area comprises c.0.63ha of developed land, currently dominated by a village hall with nearby garages, hardstanding, amenity grassland, scrub, hedgerows and scattered trees. The extent of the survey area is outlined in red on Figure 1.1.

## 1.2 Proposed Construction Activities

- 1.2.1 Planning consent is being sought for the demolition of the existing buildings and construction of a residential development together with access, parking, landscaping and associated facilities. A Landscape Masterplan for the Proposed Development is shown at Figure 1.2.

## 1.3 Biodiversity Net Gain and the Defra Metric

- 1.3.1 Biodiversity is the variety of life on earth; it includes all living things and the places in which they live. It is essential to sustain our society, well-being and economy. Biodiversity in the UK and internationally is declining as it comes under increasing pressure from development and land management practices. Enhancing biodiversity is integral to sustainable development, and BNG is an approach to development which leaves the natural environment in a measurably better state than beforehand.
- 1.3.2 In 2023 Defra published the Biodiversity Metric 4.0 ('the Metric') (Natural England, 2023a). The metric provides a means of evaluating biodiversity losses and gains through development in a robust and consistent manner. The metric enforces the mitigation hierarchy whereby impacts to biodiversity should first be avoided, then minimised and mitigated, before being compensated where losses cannot be avoided. The Metric calculates the biodiversity value of a site before and after development to establish the change in biodiversity attributable to a particular development project.

# Lindfeld Close Portslade Brighton & Hove

 Site boundary

**Figure 1.1: Site location plan**



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Scale (at A4): 1:5,000 Created by: MT

Date: Nov 2023 Reviewed by: NP

Drawing number:

UE0558ECO-LindfeldClose\_SiteLocation\_231124





Figure 1.2: Landscape Masterplan





## 2 Policy Background

### 2.1 National Planning Policy

2.1.1 The revised National Planning Policy Framework (NPPF; MHCLG, 2023) advocates biodiversity and environmental gains<sup>1</sup> in the following paragraphs:

- ▶ Paragraph 120: *“Planning policies and decisions should a) encourage multiple benefits from both urban and rural land...and taking opportunities to achieve net environmental gains - such as developments that would enable new habitat creation...”*
- ▶ Paragraph 174: *“Planning policies and decisions should contribute to and enhance the natural and local environment by d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.”*
- ▶ Paragraph 175: *“Plans should...plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries”*
- ▶ Paragraph 179: *“To protect and enhance biodiversity and geodiversity, plans should b)...pursue opportunities for securing measurable net gains for biodiversity.”*
- ▶ Paragraph 180: *“When determining planning applications, local planning authorities should apply the following principles d)...opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity.”*

2.1.2 The Government’s ‘25 Year Environment Plan’ (HMG, 2018) set out a policy ambition to consult on mandatory BNG for development and to embed environmental net gain principle into the planning system. A Defra consultation on mandatory BNG, advocating a minimum of 10% BNG for all development, took place in December 2018<sup>2</sup> with the responses published in July 2019<sup>3</sup>. The Environment Act 2021 will mandate a minimum of 10% BNG for all development following a two-year transition period.

### 2.2 Local Planning Policy

2.2.1 Adopted Policy CP10 Biodiversity of the *Brighton & Hove City Plan Part 1* (Brighton & Hove City Council, 2016) states that

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<sup>1</sup> Environmental gains extend beyond biodiversity gains to also include social, economic, amenity and natural capital gains.

<sup>2</sup> Defra (2018): *Net Gain – Consultation proposals*. Available online: <https://consult.defra.gov.uk/land-use/net-gain/>.

<sup>3</sup> Defra (2019): *Net Gain – Summary of responses and government response*. Available online:

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/819823/net-gain-consult-sum-resp.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/819823/net-gain-consult-sum-resp.pdf).

*“The council will develop programmes and strategies which aim to conserve, restore and enhance biodiversity and promote improved access to it through the following:*

*1. Working with neighbouring local authorities, contribute to the delivery of biodiversity improvements within the South Downs Way Ahead Nature Improvement Area (NIA), which incorporates parts of the urban area, the urban fringe, the seafront and surrounding downland. Within the NIA, a strategic approach to nature conservation enhancement will be taken, with the objectives of:*

- linking and repairing habitats and nature conservation sites to achieve landscape scale improvements to biodiversity;*
- conserving, restoring, recreating and managing priority habitats and protecting and recovering priority species populations to contribute to Local Biodiversity Action Plan targets;*
- enabling people to have improved access to and understanding of local habitats and species; and*
- ensuring development delivers measurable biodiversity improvements.*

*2. Ensure that all development proposals:*

*a) Provide adequate up-to-date information about the biodiversity which may be affected;*

*b) Conserve existing biodiversity, protecting it from the negative indirect effects of development, including noise and light pollution;*

*c) Provide net gains for biodiversity wherever possible, taking account of the wider ecological context of the development and of local Biosphere objectives; and*

*d) Contribute positively to ecosystem services, by minimising any negative impacts and seeking to improve the delivery of ecosystem services by a development.*

*3. Establish criteria-based policies against which development proposals affecting designated sites of international, national and local importance; protected species; and biodiversity in the wider environment will be judged. Such policies will distinguish between the relative importance of each of these nature conservation features to provide clarity about when development may be permitted and about any mitigation, conservation and enhancement which may be required.*

*4. Monitor progress with the delivery of biodiversity objectives through suitably devised indicators.”*

2.2.2 The entire site lies within land designated by Brighton & Hove City Council as a Nature Improvement Area associated with policy CP10<sup>4</sup>.

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<sup>4</sup> Interview Adopted Policies Map available at:

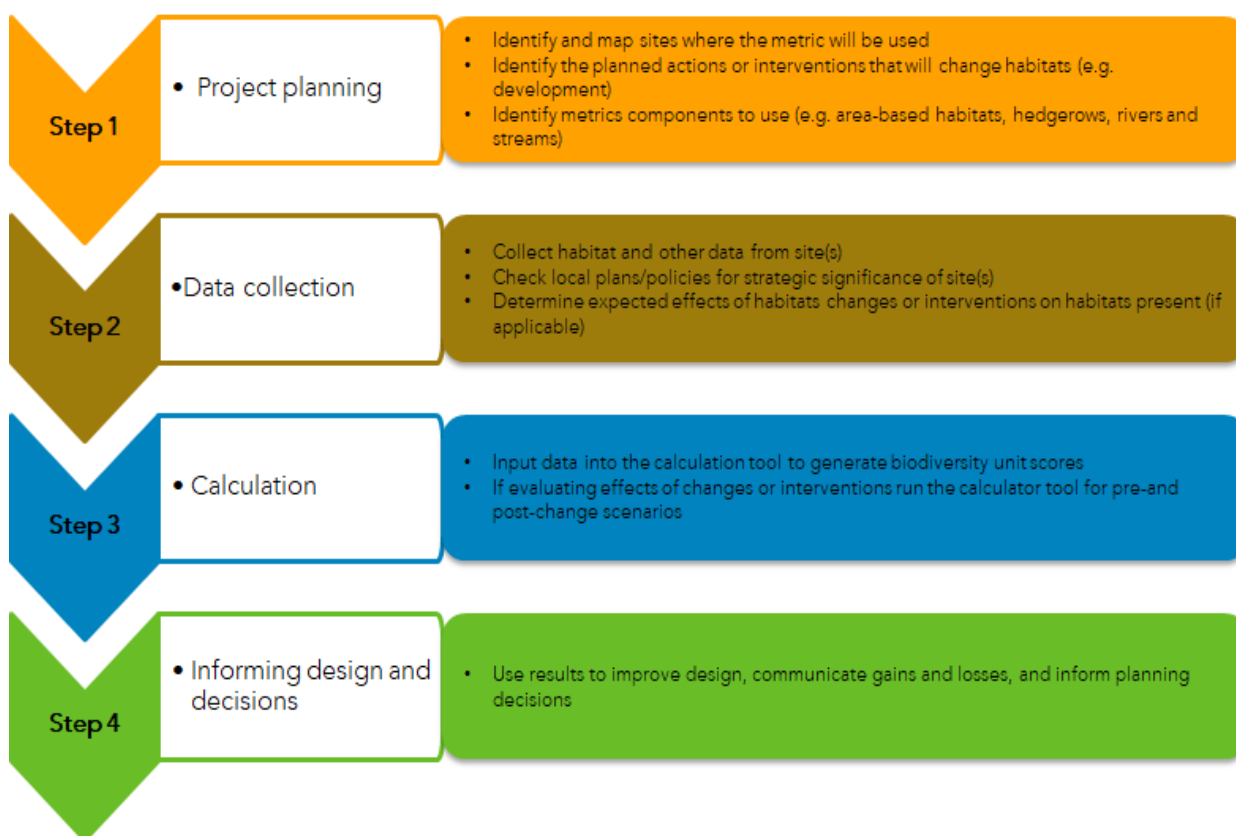
<https://bhcc.maps.arcgis.com/apps/webappviewer/index.html?id=aa076c468ec74c0a806087a6b09ddebcc>

## 3 Methodology

### 3.1 Overview

3.1.1 The BNG assessment has been carried out using the 2023 Defra Biodiversity Metric 4.0 and accompanying User Guide (Natural England, 2023b). The Metric uses habitats as a proxy for wider biodiversity with different habitat types scored according to their relative biodiversity value. This value is then adjusted depending on the condition and location of the habitat, to calculate 'Biodiversity Units' (BU) for the specific development site. Pre-intervention BU are subtracted from the post-intervention BU to determine the change in biodiversity value attributable to the development.

3.1.2 There are four key steps to using the Metric which are illustrated in Figure 3.1 and described further in the following sections.



*Figure 3.1: Key Steps to Apply the Defra Metric*

### 3.2 Project Planning (Step 1)

3.2.1 The development site for which the BNG assessment has been undertaken includes the red line boundary shown on Figure 1.1. The Landscape Masterplan for the development is shown at

Figure 1.2 and includes the proposed interventions for the site as described in Section 1. The existing habitats within the development site include both area and linear habitats, and therefore both components of the Metric have been applied, as discussed further in section 3.4.

### 3.3 Data Collection (Step 2)

#### ***Pre-development habitats***

- 3.3.1 UEEC deployed an experienced ecologist on 30 November 2022 to identify the habitats according to the UK Habitat Classification System (UKHab Ltd, 2023). A further survey was undertaken by the same ecologist on 19 January 2023 to assess new areas created by revisions to the Application Site boundary and a subsequent visit was carried out on 15 November 2023, focussing upon status of hedgerows within the survey area. The site was divided into land parcels, based on the different habitats present. For each habitat, lists of plant species (where applicable) were also recorded, as well as an indication of their relative frequency and abundance (using the DAFOR<sup>5</sup> scale). The divergence from this methodology is in relation to individual trees, whereby these features are recorded and mapped separately from the baseline habitat that they sit within; and hedgerows which follow the classification methodology outlined within *The Biodiversity Metric 4.0 User Guide* (Natural England, 2023b). The surveys established the extent and classification of habitats on site, in addition to collecting data relevant to each Condition Assessment Sheet from within The Biodiversity Metric 4.0 Technical Annex 1 (Natural England, 2023c).
- 3.3.2 Annotated field maps were then digitised in ArcGIS 10.7 to produce the UKHab Pre-development plan shown at Appendix I. Each habitat polygon was clipped to the red line planning application boundary, and its area/length then calculated in GIS and exported to MS Excel for use in BNG baseline calculations. The size of each habitat parcel was recorded in hectares (ha) or kilometres (km). Each habitat parcel was assigned a condition score of Low, Medium or High, informed by the site survey and Condition Assessment Sheets.

#### ***Post-development habitats***

- 3.3.3 The expected effects of habitat changes and interventions on existing habitats were established based upon the Landscape Masterplan, together with conversations with the client and landscape architect. The Landscape Masterplan was imported into ArcGIS, and each proposed habitat area / length was calculated and exported to MS Excel for use in BNG post-development calculations. Each habitat parcel/length was assigned a target condition score of Low, Medium or High, informed by conversations with the landscape architect and Condition Assessment Sheets.

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<sup>5</sup> D – Dominant; A – Abundant; F – Frequent; O – Occasional; R – Rare.

### 3.4 Calculation (Step 3)

#### **Calculation Tool**

3.4.1 The Metric is accompanied by a calculation tool which uses a number of input fields in order to calculate pre- and post-intervention biodiversity units, including:

- ▶ **Habitat types:** As described in the UK Habitat Classification System.
- ▶ **Area of habitats and length of linear habitats:** In hectares and kilometres.
- ▶ **Habitat condition:** Parcels of habitat will be in different ecological conditions. In addition, interventions to improve habitats will not always involve taking a habitat in poor condition and improving it to good condition. The metric therefore takes account of variants in habitat condition.
- ▶ **Strategic significance:** The idea of strategic significance works at a landscape scale. It gives additional unit value to habitats that are located in preferred locations for biodiversity and other environmental objectives as set out in published local plans.

3.4.2 Habitat type, area / length and condition were established via the site survey and condition assessment described in section 3.3.

3.4.3 The Calculation Tool also includes a number of pre-assigned fields which are automatically populated based on habitat type inputs:

- ▶ **Habitat distinctiveness:** Based on an assessment of the distinguishing features of a habitat or linear feature, including the consideration of species richness, rarity (at local, regional, national and international scales), and the degree to which a habitat supports species rarely found in other habitats.
- ▶ **Risk multipliers (Post-intervention only):** Three different risks are recognised in the Metric: difficulty of habitat creation and restoration; temporal risk i.e. the time it takes for a newly created habitat to reach target condition; and off-site risk which accounts for decreasing ecosystem services provided to the local community with compensation provided further from the development site.

#### **Calculation of Biodiversity Units**

3.4.4 Using the factors described above, equivalent BU were calculated for the development site pre- and post-intervention. No offsite habitat creation or enhancement is currently proposed.

3.4.5 The following formula was used to calculate the change in BU as a consequence of the proposed development:

$$\text{POST-INTERVENTION BIODIVERSITY UNITS} - \text{PRE-INTERVENTION BIODIVERSITY UNITS} = \text{CHANGE IN BIODIVERSITY UNITS}$$

3.4.6 Where the resulting score is negative there is a net loss in biodiversity. If the score is zero, there is no net loss in biodiversity. Where the resulting score is positive, there is a net gain in biodiversity.

### 3.5 Informing Design and Decisions (Step 4)

- 3.5.1 In this case the scheme layout had already been fixed prior to undertaking the BNG assessment, albeit with only indicative landscaping. Recommendations have been provided to maximise realistic gains in BUs following conversations with the client and landscape architect. The BNG calculations provide an overview of net gains or losses resulting from the scheme.

### 3.6 Assumptions and Limitations

- 3.6.1 The Landscape Masterplan only shows the habitats on site following the proposed development. The net gain assessment has been calculated based upon assumptions regarding the condition of each habitat created to give an indication of the likely biodiversity gain / loss post-development. Finalised management proposals to achieve the proposed condition of habitats, will need to be prepared prior to development of the site.
- 3.6.2 Two areas of common ivy *Hedera helix* were mapped atop the garages in the south-east of the Application Site. There is no direct translation of this habitat type, therefore these areas were mapped as bramble scrub to recognise their value as a medium distinctiveness habitat in poor condition.
- 3.6.3 A section of H1 has been retained along the southern boundary as the Landscape Masterplan includes a hedgerow in this area. In order for this section of hedgerow to be classed as retained, it must be suitably protected during the construction phase, as recommended within the Ecological Walkover Survey report (JEEC, 2023).
- 3.6.4 Tree T1 within the Arboricultural Survey & Report (MWA, 2023) currently exists within hedgerow H3 and as such is not mapped separately on the pre-intervention map. This tree is due to be retained as an Urban tree and accordingly, the time to target condition is set 27 years in advance as it presently fits the criteria for the target condition specified.
- 3.6.5 New trees plotted on the Landscape Masterplan have been labelled as either 'Small' or 'Medium' to reflect the classification within *The Biodiversity Metric 4.0 User Guide* (Natural England, 2023b) i.e. small = greater than 7cm and less than or equal to 30cm / Medium = greater than 30cm and less than or equal to 90cm.
- 3.6.6 See Appendix XI for general Legal and Technical Limitations which apply to this document.

## 4 Results

- 4.1.1 The pre-development habitats were digitised in accordance with UKHab for use in the DEFRA Biodiversity Metric 4.0, as shown in Appendix I. Appendix II shows the post-development habitats using UKHab classifications, based on the Landscape Masterplan. The data used to inform the condition assessments for the habitats pre- and post-development are provided in Appendix III to Appendix X, together with calculations extracted from the Biodiversity Metric 4.0.
- 4.1.2 The extract overleaf from the Biodiversity Metric 4.0 - Calculation Tool illustrates the headline results for the proposed development. This shows that with the implementation of the Landscape Masterplan and achievement of the condition of the proposed habitats (Appendices VIII & X), the development proposals will achieve:
- ▶ A **net gain of +0.69 BU for area habitats, equivalent to +29.38%**; and
  - ▶ A **net gain of +0.33 BU for linear habitats, equivalent to +34.59%**.
- 4.1.3 The proposed development will also satisfy trading rules associated with each habitat distinctiveness group.

On-site baseline	<i>Habitat units</i>	2.36
	<i>Hedgerow units</i>	0.94
	<i>Watercourse units</i>	0.00
On-site post-intervention (Including habitat retention, creation & enhancement)	<i>Habitat units</i>	3.05
	<i>Hedgerow units</i>	1.27
	<i>Watercourse units</i>	0.00
On-site net change (units & percentage)	<i>Habitat units</i>	0.69
	<i>Hedgerow units</i>	0.33
	<i>Watercourse units</i>	0.00
Off-site baseline	<i>Habitat units</i>	0.00
	<i>Hedgerow units</i>	0.00
	<i>Watercourse units</i>	0.00
Off-site post-intervention (Including habitat retention, creation & enhancement)	<i>Habitat units</i>	0.00
	<i>Hedgerow units</i>	0.00
	<i>Watercourse units</i>	0.00
Off-site net change (units & percentage)	<i>Habitat units</i>	0.00
	<i>Hedgerow units</i>	0.00
	<i>Watercourse units</i>	0.00
Combined net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	<i>Habitat units</i>	0.69
	<i>Hedgerow units</i>	0.33
	<i>Watercourse units</i>	0.00
Spatial risk multiplier (SRM) deductions	<i>Habitat units</i>	0.00
	<i>Hedgerow units</i>	0.00
	<i>Watercourse units</i>	0.00
<b>FINAL RESULTS</b>		
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	<i>Habitat units</i>	0.69
	<i>Hedgerow units</i>	0.33
	<i>Watercourse units</i>	0.00
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	<i>Habitat units</i>	29.38%
	<i>Hedgerow units</i>	34.59%
	<i>Watercourse units</i>	0.00%
Trading rules satisfied?	Yes ✓	



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# Appendix I: UKHab Pre-development Plan

# Lindfeld Close Portslade Brighton & Hove

-  Site boundary
-  Modified grassland
-  Bramble scrub
-  Mixed scrub
-  Developed land, sealed surface
-  Introduced shrub
-  Native Hedgerow
-  Hedge Ornamental Non Native
-  Native Hedgerow with trees
-  Urban - Built linear feature
-  Urban tree, medium
-  Urban tree, small



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Scale (at A4): 1:750      Created by: MT  
Date: Nov 2023      Reviewed by: NP








Drawing number:  
UE0558ECO-LindfieldClose\_HabitatMap\_231124



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## Appendix II: UKHab Post-development Plan

# Lindfeld Close Portslade Brighton & Hove

-  Site boundary
-  Other neutral grassland
-  Modified grassland
-  Mixed scrub
-  Developed land, sealed surface
-  Artificial unvegetated, unsealed surface
-  Introduced shrub
-  Native Hedgerow
-  Hedge Ornamental Non Native
-  Native Hedgerow with trees
-  Facade-bound green wall
-  Urban tree (retained)
-  Urban tree (small)
-  Urban tree (medium)
-  Urban tree (retained hedge specimen)



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Scale (at A4): 1:750      Created by: MT

Date: Nov 2023      Reviewed by: NP

Drawing number:  
UE0558ECO-LindfeldClose\_PostDev\_231124



## Appendix III: Pre-development Habitat Condition Sheets (Area baseline)

Condition Sheet: GRASSLAND Habitat Type (low distinctiveness)		
UK Habitat Classification (UKHab) Habitat Type(s)		
Grassland - Modified grassland		
Condition Assessment Criteria		Criterion passed (Yes or No)
A	<p>There are 6-8 vascular plant species per m<sup>2</sup> present, including at least 2 forbs (this may include those listed in Footnote 1). <b>Note - this criterion is essential for achieving Moderate or Good condition.</b></p> <p>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<sup>2</sup> (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.</p>	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 vertebrates and invertebrates to live and breed.	N
C	<p>Some scattered scrub (including bramble <i>Rubus fruticosus</i> agg.) may be present, but scrub accounts for less than 20% of total grassland area.</p> <p>Note - patches of scrub with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.</p>	Y
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.	Y
E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens) <sup>2</sup> .	Y
F	Cover of bracken <i>Pteridium aquilinum</i> is less than 20%.	Y
G	There is an absence of invasive non-native plant species <sup>3</sup> (as listed on Schedule 9 of WCA <sup>4</sup> ).	Y
Essential criterion achieved (Yes or No)		N
Number of criteria passed		5
Condition Assessment Result	Condition Assessment Score	Score Achieved x/√
Passes 6 or 7 criteria including passing essential criterion A	Good (3)	

Passes 4 or 5 criteria including passing essential criterion A	Moderate (2)	
Passes 3 or fewer criteria; OR Passes 4 - 6 criteria (excluding criterion A)	Poor (1)	✓
<b>Notes</b>		
<p><b>Footnote 1</b> – Creeping thistle <i>Cirsium arvense</i>, spear thistle <i>Cirsium vulgare</i>, curled dock <i>Rumex crispus</i>, broad-leaved dock <i>Rumex obtusifolius</i>, common nettle <i>Urtica dioica</i>, creeping buttercup <i>Ranunculus repens</i>, greater plantain <i>Plantago major</i>, white clover <i>Trifolium repens</i> and cow parsley <i>Anthriscus sylvestris</i>.</p> <p><b>Footnote 2</b> – For example, this could include small, scattered areas of bare ground allowing establishment of new species, or localised patches where not exceeding 10% cover.</p> <p><b>Footnote 3</b> – 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.</p> <p><b>Footnote 4</b> – Wildlife and Countryside Act 1981 (as amended).</p>		

<b>Condition Sheet: SCRUB Habitat Type</b>				
UKHab Habitat Type				
<b>Heathland and shrub - Mixed scrub</b>				
Condition Assessment Criteria			Criterion passed (Yes or No)	
A	The scrub is a good representation of the habitat type it has been identified as, based on its UKHab description (where in its natural range). The appearance and composition of the vegetation closely matches the characteristics of the specific scrub type.		N	
	At least 80% of scrub is native, and there are at least three native woody species <sup>1</sup> , with no single species comprising more than 75% of the cover (except hazel <i>Corylus avellana</i> , common juniper <i>Juniperus communis</i> , sea buckthorn <i>Hippophae rhamnoides</i> or box <i>Buxus sempervirens</i> , which can be up to 100% cover).			
B	Seedlings, saplings, young shrubs and mature (or ancient or veteran <sup>2</sup> ) shrubs are all present.		N	
C	There is an absence of invasive non-native plant species <sup>3</sup> (as listed on Schedule 9 of WCA <sup>4</sup> ) and species indicative of sub-optimal condition <sup>5</sup> make up less than 5% of ground cover.		N	
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			0	
Condition Assessment Result (out of 5 criteria)		Condition Score	Assessment Score	Score Achieved x/✓
Passes 5 criteria		Good (3)		
Passes 3 or 4 criteria		Moderate (2)		
Passes 2 or fewer criteria		Poor (1)		✓



Notes
<p><b>Footnote 1</b> – 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).</p>
<p><b>Footnote 2</b> – See gov.uk standing advice on ancient and veteran species. Available from: <a href="https://publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/100000/ancient-woodland-ancient-trees-and-veteran-trees-advice-for-making-planning-decisions-2017.pdf">Keepers of time: ancient and native woodland and trees policy in England (publishing.service.gov.uk)</a> and <a href="https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/612227/ancient-woodland-ancient-trees-and-veteran-trees-advice-for-making-planning-decisions-2017.pdf">Ancient woodland, ancient trees and veteran trees: advice for making planning decisions - GOV.UK (www.gov.uk)</a></p>
<p><b>Footnote 3</b> – 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.</p>
<p><b>Footnote 4</b> – Wildlife and Countryside Act 1981 (as amended).</p>
<p><b>Footnote 5</b> – Species indicative of sub-optimal condition for this habitat type may include: non-native conifers, tree-of-heaven <i>Alianthus altissima</i>, holm oak <i>Quercus ilex</i>, European turkey oak <i>Quercus cerris</i>, cherry laurel <i>Prunus laurocerasus</i>, snowberry <i>Symphoricarpos</i> spp., shallon <i>Gaultheria shallon</i>, American skunk cabbage <i>Lysichiton americanus</i>, buddleia <i>Buddleja</i> spp., cotoneaster <i>Cotoneaster</i> spp., Spanish bluebell <i>Hyacinthoides hispanica</i> and hybrid bluebells <i>Hyacinthoides x massartiana</i>. There may be additional relevant species local to the region and or site.</p>

Condition Sheet: INDIVIDUAL TREES Habitat Type			
Habitat Type(s)			
Individual trees - Urban tree <sup>6</sup>			
Condition Assessment Criteria		Criterion passed	
		Yes	No
A	The tree is a native species (or at least 70% within the block are native species).	T2, T3, T4, T16	T5, T6, T15
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).	T2, T3, T4, T5, T6, T15, T16	
C	The tree is mature (or more than 50% within the block are mature).		T2, T3, T4, T5, T6, T15, T16
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.	T2, T3, T4, T5, T6, T15, T16	
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.		T2, T3, T4, T5, T6, T15, T16
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	T2, T3, T4, T5,	

<sup>6</sup> Tree numbers taken from MWA (2023): Courthope Centre, Lindfield, Portslade BN41 2LZ - Arboricultural Survey & Report

		T6, T15, T16	
<b>Number of criteria passed</b>		T2, T3, T4, T16 – 4 / T5, T6, T15 - 3	
<b>Condition Assessment Result (out of 6 criteria)</b>	<b>Condition Assessment Score</b>	<b>Score achieved x/✓</b>	
Passes 5 or 6 criteria	Good (3)		
Passes 3 or 4 criteria	Moderate (2)	✓	
Passes 2 or fewer criteria	Poor (1)		
Note that 'Fairly Good and Fairly Poor' condition categories are not available for this broad habitat type.			
<b>Notes</b>			
<p><b>Footnote 1</b> – See gov.uk standing advice on ancient and veteran trees. Available from:  <a href="https://publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/101222/Keepers_of_time_-_ancient_and_native_woodland_and_trees_policy_in_England.pdf">Keepers of time: ancient and native woodland and trees policy in England (publishing.service.gov.uk)</a>  and  <a href="https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/101222/Ancient_woodland,_ancient_trees_and_veteran_trees_advice_for_making_planning_decisions.pdf">Ancient woodland, ancient trees and veteran trees: advice for making planning decisions - GOV.UK (www.gov.uk)</a></p>			

## **Appendix IV: A-1 Site Habitat Baseline**

Ref	Existing area habitats			Distinctiveness		Condition		Strategic significance			Required Action to Meet Trading Rules	Ecological baseline
	Broad Habitat	Habitat Type	Area (hectares)	Distinctiveness	Score	Condition	Score	Strategic significance	Strategic significance	Strategic Significance multiplier		Total habitat units
1	Urban	Developed land; sealed surface	0.37	V.Low	0	N/A - Other	0	Formally identified in local strategy	High strategic significance	1.15	Compensation Not Required	0.00
2	Grassland	Modified grassland	0.25	Low	2	Poor	1	Formally identified in local strategy	High strategic significance	1.15	Same distinctiveness or better habitat required $\geq$	0.58
3	Heathland and shrub	Bramble scrub	0.005	Medium	4	Condition Assessment N/A	1	Formally identified in local strategy	High strategic significance	1.15	Same broad habitat or a higher distinctiveness habitat required ( $\geq$ )	0.02
4	Urban	Introduced shrub	0.003	Low	2	Condition Assessment N/A	1	Formally identified in local strategy	High strategic significance	1.15	Same distinctiveness or better habitat required $\geq$	0.01
5	Heathland and shrub	Mixed scrub	0.001	Medium	4	Poor	1	Formally identified in local strategy	High strategic significance	1.15	Same broad habitat or a higher distinctiveness habitat required ( $\geq$ )	0.00
6	Individual trees	Urban tree	0.19	Medium	4	Moderate	2	Formally identified in local strategy	High strategic significance	1.15	Same broad habitat or a higher distinctiveness habitat required ( $\geq$ )	1.75
<b>Total habitat area</b>			<b>0.82</b>									<b>2.36</b>

<b>Site Area (Excluding area of Individual trees)</b>	<b>0.63</b>
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Retention category biodiversity value						
Ref	Area retained	Area enhanced	Baseline units retained	Baseline units enhanced	Area habitat lost	Units lost
1	0.00	0.00	0.00	0.00	0.37	0.00
2	0.00	0.00	0.00	0.00	0.25	0.53
3	0.00	0.00	0.00	0.00	0.01	0.02
4	0.00	0.00	0.00	0.00	0.00	0.01
5	0.00	0.00	0.00	0.00	0.00	0.00
6	0.04	0.00	0.37	0.00	0.15	1.38
	<b>0.04</b>	<b>0.00</b>	<b>0.37</b>	<b>0.00</b>	<b>0.78</b>	<b>1.99</b>

## Appendix V: Pre-development Habitat Condition Sheets (Linear baseline)

Condition sheet: HEDGEROW Habitat Types					
Habitat Type					
Native hedgerow with trees					
Condition Assessment Criteria					
<p>A series of ten attributes, representing key physical characteristics are used for this assessment. This assessment is based on the Hedgerow Survey Handbook<sup>1</sup> and Favourable Conservation Status document<sup>2</sup>. For further clarification please refer to the Hedgerow Survey Handbook.</p> <p>Each attribute is assigned to one of five functional groups (A – E) and the condition of a hedgerow is assessed according to the number of attributes from these functional groups which pass or fail the 'favourable condition' criteria.</p>					
Hedgerow favourable condition attributes					
Attributes and functional groupings (A, B, C, D & E)	Criteria (the minimum requirements for 'favourable condition'	Description	Criterion passed		
			Y	N	
Core groups - applicable to all hedgerow types					
A1.	Height	>1.5 m average along length	<p>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.</p> <p>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).</p> <p>A newly planted hedgerow does not pass this criterion (unless it is &gt;1.5 m height).</p>	H1, H3	
A2.	Width	>1.5 m average along length	<p>The average width of woody growth estimated at the widest point of the canopy, excluding gaps and isolated trees.</p> <p>Outgrowths (such as blackthorn <i>Prunus spinosa</i> suckers) are only included in</p>	H1	H3

			<p>the width estimate when they are &gt;0.5 m in height.</p> <p>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).</p>		
B1.	Gap - hedge base	Gap between ground and base of canopy <0.5 m for >90% of length	<p>This is the vertical 'gappiness' of the woody component of the hedgerow, and its distance from the ground to the lowest leafy growth.</p> <p>Certain exceptions to this criterion are acceptable (see page 65 of the Hedgerow Survey Handbook).</p>	H1, H3	
B2.	Gap - hedge canopy continuity	Gaps make up <10% of total length; and No canopy gaps >5 m	<p>This is the horizontal 'gappiness' of the woody component of the hedgerow. Gaps are complete breaks in the woody canopy (no matter how small).</p> <p>Access points and gates contribute to the overall 'gappiness' but are not subject to the &gt;5 m criterion (as this is the typical size of a gate).</p>	H1	H3
C1.	Undisturbed ground and perennial vegetation	<p>&gt;1 m width of undisturbed ground with perennial herbaceous vegetation for &gt;90% of length:</p> <ul style="list-style-type: none"> <li>- measured from outer edge of hedgerow, and</li> <li>- is present on one side of the hedge (at least)</li> </ul>	<p>This is the level of disturbance (excluding wildlife disturbance) at the base of the hedgerow.</p> <p>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.</p> <p>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.</p>		H1, H3

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.		H1, H3
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 <sup>3</sup> ) 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 <sup>4</sup> , as well as the BSBI website <sup>5</sup> where the 'Online Atlas of the British and Irish Flora' <sup>6</sup> 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 <sup>7</sup> .	H1	H3
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 (e.g., excessive hedgerow cutting).	H1, H3	
<b>Additional group - applicable to hedgerows with trees only</b>					
E1.	class	There is more than one age-class (or morphology) of tree present (for example: young, mature, veteran and or ancient <sup>8</sup> ), 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.	H1	H3
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	This criterion identifies if the trees are subject to damage which compromises the survival and health of the individual specimens.	H1, H3	

		from livestock or wild animals, pests or diseases, or human activity.		
The hedgerow condition assessment generates a weighting (score) ranging from 1 - 3, which is used within the metric. The scores for each are set out in the tables below.				
<b>Condition categories for hedgerows without trees</b>				
<b>Category</b>	<b>Category Requirements</b>		<b>Metric Score</b>	
Good	No more than 2 failures in total; <b>AND</b> No more than 1 failure in any functional group.		3	
Moderate	No more than 5 failures in total; <b>AND</b> <u>Does not fail both attributes</u> in more than one functional group (e.g., fails attributes A1, A2, B1, C2 and E1 = Moderate condition).		2	
Poor	Fails a total of more than 5 attributes; <b>OR</b> <u>Fails both attributes</u> in more than one functional group (e.g. fails attributes A1, A2, B1 and B2 = Poor condition).		1	
			<b>Score achieved:</b>	H1 – 2 / H3 – 1
<b>Notes</b>				
<p><b>Footnote 1</b> – DEFRA (2007) Hedgerow Survey Handbook. A standard procedure for local surveys in the UK. [online] Available on: <a href="http://layout(hedgelinek.org.uk)">layout (hedgelinek.org.uk)</a></p> <p><b>Footnote 2</b> – STALEY, J.T. ET AL. (2020) Definition of Favourable Conservation Status for Hedgerows. [online] Available on: <a href="http://Definition of Favourable Conservation Status for Hedgerows - RP2943 (naturalengland.org.uk)">Definition of Favourable Conservation Status for Hedgerows - RP2943 (naturalengland.org.uk)</a></p> <p><b>Footnote 3</b> – Wildlife and Countryside Act 1981 (as amended).</p> <p><b>Footnote 4</b> – CHEFFINGS, C. M. et al. (2005) The Vascular Plant Red Data List for Great Britain. Species Status 7: 1-116. [online] Available on: <a href="http://The Vascular Plant Red Data List for Great Britain (Species Status No. 7)   JNCC Resource Hub">The Vascular Plant Red Data List for Great Britain (Species Status No. 7)   JNCC Resource Hub</a></p> <p><b>Footnote 5</b> – BOTANICAL SOCIETY OF BRITAIN AND IRELAND (BSBI). Definitions: wild, native or alien? [online] Available on: <a href="http://Definitions: wild, native or alien? – Botanical Society of Britain &amp; Ireland (bsbi.org)">Definitions: wild, native or alien? – Botanical Society of Britain &amp; Ireland (bsbi.org)</a></p> <p><b>Footnote 6</b> – BSBI and Biological Records Centre (BRC) (2022) Online Atlas of the British and Irish Flora. [online] Available on: <a href="http://Acknowledgements   Online Atlas of the British and Irish Flora (brc.ac.uk)">Acknowledgements   Online Atlas of the British and Irish Flora (brc.ac.uk)</a></p> <p><b>Footnote 7</b> – GB NON-NATIVE SPECIES SECRETARIAT (GBNNS) (2022) Available on: <a href="http://Home » NNSS (nonnativespecies.org)">Home » NNSS (nonnativespecies.org)</a></p> <p><b>Footnote 8</b> – See gov.uk standing advice on ancient and veteran trees. Available from: <a href="http://Keepers of time: ancient and native woodland and trees policy in England (publishing.service.gov.uk)">Keepers of time: ancient and native woodland and trees policy in England (publishing.service.gov.uk)</a> and <a href="http://Ancient woodland, ancient trees and veteran trees: advice for making planning decisions - GOV.UK (www.gov.uk)">Ancient woodland, ancient trees and veteran trees: advice for making planning decisions - GOV.UK (www.gov.uk)</a></p>				



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# Appendix VI: B-1 Site Hedge Baseline

Ref	Existing hedgerow habitats			Distinctiveness		Condition		Strategic significance			Required Action to Meet Trading Rules	Ecological baseline
	Hedge number	Hedgerow type	Length (km)	Distinctiveness	Score	Condition	Score	Strategic significance	Strategic significance	Strategic position multiplier		Total hedgerow units
1	H1	Native hedgerow with trees	0.07	Medium	4	Moderate	2	Formally identified in local strategy	High strategic significance	1.15	Same distinctiveness band or better	0.64
2	H2, H4	Non-native and ornamental hedgerow	0.06	V.Low	1	Poor	1	Formally identified in local strategy	High strategic significance	1.15	Same distinctiveness band or better	0.07
3	H3	Native hedgerow with trees	0.05	Medium	4	Poor	1	Formally identified in local strategy	High strategic significance	1.15	Same distinctiveness band or better	0.23
			<b>0.18</b>									<b>0.94</b>

Retention category biodiversity value						
Ref	Length retained	Length enhanced	Baseline units retained	Baseline units enhanced	Length lost	Units lost
1	0.04	0.00	0.37	0.00	0.03	0.28
2	0.06	0.00	0.07	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.05	0.23
	<b>0.10</b>	<b>0.00</b>	<b>0.44</b>	<b>0.00</b>	<b>0.08</b>	<b>0.51</b>

## Appendix VII: Post-development Habitat Condition Sheets (Area creation)

Condition Sheet: GRASSLAND Habitat Type (low distinctiveness)		
UK Habitat Classification (UKHab) Habitat Type(s)		
Grassland - Modified grassland		
Condition Assessment Criteria		Criterion passed (Yes or No)
A	<p>There are 6-8 vascular plant species per m<sup>2</sup> present, including at least 2 forbs (this may include those listed in Footnote 1). <b>Note - this criterion is essential for achieving Moderate or Good condition.</b></p> <p>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<sup>2</sup> (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.</p>	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 vertebrates and invertebrates to live and breed.	N
C	<p>Some scattered scrub (including bramble <i>Rubus fruticosus</i> agg.) may be present, but scrub accounts for less than 20% of total grassland area.</p> <p>Note - patches of scrub with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.</p>	Y
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.	Y
E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens) <sup>2</sup> .	Y
F	Cover of bracken <i>Pteridium aquilinum</i> is less than 20%.	Y
G	There is an absence of invasive non-native plant species <sup>3</sup> (as listed on Schedule 9 of WCA <sup>4</sup> ).	Y
Essential criterion achieved (Yes or No)		N
Number of criteria passed		5
Condition Assessment Result	Condition Assessment Score	Score Achieved x/√
Passes 6 or 7 criteria including passing essential criterion A	Good (3)	

Passes 4 or 5 criteria including passing essential criterion A	Moderate (2)	
Passes 3 or fewer criteria; OR Passes 4 - 6 criteria (excluding criterion A)	Poor (1)	✓
<b>Notes</b>		
<p><b>Footnote 1</b> – Creeping thistle <i>Cirsium arvense</i>, spear thistle <i>Cirsium vulgare</i>, curled dock <i>Rumex crispus</i>, broad-leaved dock <i>Rumex obtusifolius</i>, common nettle <i>Urtica dioica</i>, creeping buttercup <i>Ranunculus repens</i>, greater plantain <i>Plantago major</i>, white clover <i>Trifolium repens</i> and cow parsley <i>Anthriscus sylvestris</i>.</p> <p><b>Footnote 2</b> – For example, this could include small, scattered areas of bare ground allowing establishment of new species, or localised patches where not exceeding 10% cover.</p> <p><b>Footnote 3</b> – 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.</p> <p><b>Footnote 4</b> – Wildlife and Countryside Act 1981 (as amended).</p>		

<b>Condition Sheet: URBAN Habitat Type</b>		
<b>Habitat Type</b>		
<b>Sparsely vegetated land – Tall forbs</b>		
<b>Condition Assessment Criteria</b>		<b>Criterion passed (Yes or No)</b>
A	Vegetation structure is varied, providing opportunities for vertebrates and invertebrates to live, eat and breed. A single structural habitat component or vegetation type does not account for more than 80% of the total habitat area.	N
B	The habitat parcel contains different plant species that are beneficial for wildlife, for example flowering species providing nectar sources for a range of invertebrates at different times of year.	N
C	Invasive non-native plant species (listed on Schedule 9 of WCA <sup>1</sup> ) and others which are to the detriment of native wildlife (using professional judgement) <sup>2</sup> cover less than 5% of the total vegetated area <sup>3</sup> .	Y
<b>Essential criteria relevant for habitat type achieved (Yes or No)</b>		Y
<b>Number of criteria passed</b>		1
<b>Condition Assessment Result</b>	<b>Condition Assessment Score</b>	<b>Score Achieved x/✓</b>
<ul style="list-style-type: none"> <li>• Passes all 3 core criteria;</li> </ul> AND <ul style="list-style-type: none"> <li>• Meets the requirements for Good condition within criterion C.</li> </ul>	Good (3)	
<ul style="list-style-type: none"> <li>• Passes 2 of 3 core criteria;</li> </ul> OR <ul style="list-style-type: none"> <li>• Passes 3 of 3 core criteria but does not meet the requirements for Good condition within criterion C.</li> </ul>	Moderate (2)	
<ul style="list-style-type: none"> <li>• Passes 0 or 1 of 3 core criteria.</li> </ul>	Poor (1)	✓

Notes
<p><b>Footnote 1</b> – Wildlife and Countryside Act 1981 (as amended).</p> <p><b>Footnote 2</b> – Sources of information about detrimental non-native species can be found on the GB Non-native Species Secretariat (GBNNS) website:  <a href="https://www.nnss.gov.uk/">Home » NNSS (nonnativespecies.org)</a>                      and Natural England Access to Evidence page should also be checked for up-to-date information:  <a href="https://www.naturalengland.org.uk/information-and-advice/management-and-restoration/habitat-management/habitat-scanning-for-invasive-non-native-plants-in-great-britain">Horizon-scanning for invasive non-native plants in Great Britain - NECR053 (naturalengland.org.uk)</a></p>

Condition Sheet: SCRUB Habitat Type			
UKHab Habitat Type			
Heathland and shrub - Mixed scrub			
Condition Assessment Criteria			Criterion passed (Yes or No)
A	The scrub is a good representation of the habitat type it has been identified as, based on its UKHab description (where in its natural range). The appearance and composition of the vegetation closely matches the characteristics of the specific scrub type.  At least 80% of scrub is native, and there are at least three native woody species <sup>1</sup> , with no single species comprising more than 75% of the cover (except hazel <i>Corylus avellana</i> , common juniper <i>Juniperus communis</i> , sea buckthorn <i>Hippophae rhamnoides</i> 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 <sup>2</sup> ) shrubs are all present.		Y
C	There is an absence of invasive non-native plant species <sup>3</sup> (as listed on Schedule 9 of WCA <sup>4</sup> ) and species indicative of sub-optimal condition <sup>5</sup> 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
<b>Number of criteria passed</b>			3
Condition Assessment Result (out of 5 criteria)	Condition Score	Assessment	Score Achieved x/✓
Passes 5 criteria	Good (3)		
Passes 3 or 4 criteria	Moderate (2)		✓
Passes 2 or fewer criteria	Poor (1)		
Notes			
<p><b>Footnote 1</b> – 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).</p> <p><b>Footnote 2</b> – See gov.uk standing advice on ancient and veteran species. Available from: <a href="https://www.gov.uk/government/standing-advice/advice-on-ancient-and-veteran-species">Keepers of time: ancient and native woodland and trees policy in England (publishing.service.gov.uk)</a> and <a href="https://www.gov.uk/government/standing-advice/advice-on-ancient-woodland-ancient-trees-and-veteran-trees">Ancient woodland, ancient trees and veteran trees: advice for making planning decisions - GOV.UK (www.gov.uk)</a></p>			

**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 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 4** – Wildlife and Countryside Act 1981 (as amended).

**Footnote 5** – Species indicative of sub-optimal 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.

<b>Condition Sheet: GRASSLAND Habitat Type (medium, high &amp; very high distinctiveness)</b>		
<b>UK Habitat Classification (UKHab) Habitat Type(s)</b>		
<b>Grassland - Other neutral grassland</b>		
<b>Condition Assessment Criteria</b>		<b>Criterion passed (Yes or No)</b>
A	The grassland is a good representation of the habitat type it has been identified as, based on its UKHab description - the appearance and composition of the vegetation closely matches the characteristics of the specific grassland habitat type. Indicator species listed by UKHab for the specific grassland habitat type are consistently present.  <b>Note - this criterion is essential for achieving Moderate or Good condition for non-acid grassland types only.</b>	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.	Y
C	Cover of bare ground is between 1% and 5%, including localised areas, for example, rabbit warrens <sup>1</sup> .	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
E	Combined cover of species indicative of sub-optimal condition <sup>2</sup> 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 <sup>3</sup> (as listed on Schedule 9 of WCA <sup>4</sup> ) are present, this criterion is automatically failed.	Y
<b>Additional Criterion - must be assessed for all non-acid grassland types</b>		
F	There are 10 or more vascular plant species per m <sup>2</sup> present, including forbs that are characteristic of the habitat type (species referenced in Footnote 2 and 4 cannot contribute towards this count).  <b>Note - this criterion is essential for achieving Good condition for non-acid grassland types only.</b>	N

<b>Essential criterion for Good condition achieved (for non-acid grassland) (Yes or No)</b>		N
<b>Number of criteria passed</b>		5
<b>Condition Assessment Result</b>	<b>Condition Assessment Score</b>	<b>Score Achieved x/✓</b>
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)	
<b>Notes</b>		
<p><b>Footnote 1</b> – For example, this could include small, scattered areas of bare ground allowing for plant colonisation, or localised patches not exceeding 5% cover.</p> <p><b>Footnote 2</b> – Species indicative of sub-optimal condition for this habitat type include: creeping thistle <i>Cirsium arvense</i>, spear thistle <i>Cirsium vulgare</i>, curled dock <i>Rumex crispus</i>, broad-leaved dock <i>Rumex obtusifolius</i>, common nettle <i>Urtica dioica</i>, creeping buttercup <i>Ranunculus repens</i>, greater plantain <i>Plantago major</i>, white clover <i>Trifolium repens</i> and cow parsley <i>Anthriscus sylvestris</i>. There may be additional relevant species local to the region and or site.</p> <p><b>Footnote 3</b> – 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, by applying professional judgement.</p> <p><b>Footnote 4</b> – Wildlife and Countryside Act 1981 (as amended).</p>		

<b>Condition Sheet: INDIVIDUAL TREES Habitat Type</b>		
<b>Habitat Type(s)</b>		
<b>Individual trees - Urban tree</b>		
<b>Condition Assessment Criteria</b>		<b>Criterion passed (Yes or No)</b>
A	The tree is a native species (or at least 70% within the block are native species).	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
C	The tree is mature (or more than 50% within the block are mature).	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
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	N
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	Y
<b>Number of criteria passed</b>		4

Condition Assessment Result (out of 6 criteria)	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)	
Note that 'Fairly Good and Fairly Poor' condition categories are not available for this broad habitat type.		
Notes		
<b>Footnote 1</b> – See gov.uk standing advice on ancient and veteran trees. Available from: <a href="https://publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/101222/ancient-woodland-and-trees-policy-in-england.pdf">Keepers of time: ancient and native woodland and trees policy in England (publishing.service.gov.uk)</a> and <a href="https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/101222/ancient-woodland-ancient-trees-and-veteran-trees-advice-for-making-planning-decisions.pdf">Ancient woodland, ancient trees and veteran trees: advice for making planning decisions - GOV.UK (www.gov.uk)</a>		

\*Excluding the retained tree from H3, which failed criterion A, but achieved Moderate condition by passing 3 remaining criteria.



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# Appendix VIII: A-2 Site Habitat Creation

Post development/ post intervention habitats																			
Broad Habitat	Proposed habitat	Area (ha)	Distinctiveness		Condition		Strategic significance			Temporal multiplier				Difficulty multipliers				Habitat units delivered	
			Distinctiveness	Score	Condition	Score	Strategic significance	Strategic significance	Strategic position multiplier	Standard time to target condition/ years	Standard or adjusted time to target condition	Final time to target condition/ years	Final time to target multiplier	Standard difficulty of creation	Applied difficulty multiplier	Final difficulty of creation	Difficulty multiplier applied		
Urban	Developed land; sealed surface	0.35	V.Low	0	N/A - Other	0	Formally identified in local strategy	High strategic significance	1.15	0	Standard time to target condition applied	0	1.000	Low	Standard difficulty applied	Medium	0.67	0.00	
Grassland	Modified grassland	0.14	Low	2	Poor	1	Formally identified in local strategy	High strategic significance	1.15	1	Standard time to target condition applied	1	0.965	Low	Standard difficulty applied	Low	1	0.31	
Urban	Facade-bound green wall	0.07	Low	2	Poor	1	Formally identified in local strategy	High strategic significance	1.15	1	Standard time to target condition applied	1	0.965	Medium	Standard difficulty applied	Medium	0.67	0.10	
Heathland and shrub	Mixed scrub	0.05	Medium	4	Moderate	2	Formally identified in local strategy	High strategic significance	1.15	5	Standard time to target condition applied	5	0.837	Low	Standard difficulty applied	Low	1	0.38	
Urban	Artificial unvegetated, unsealed surface	0.04	V.Low	0	N/A - Other	0	Formally identified in local strategy	High strategic significance	1.15	0	Standard time to target condition applied	0	1.000	Low	Standard difficulty applied	Low	1	0.00	
Grassland	Other neutral grassland	0.04	Medium	4	Moderate	2	Formally identified in local strategy	High strategic significance	1.15	5	Standard time to target condition applied	5	0.837	Low	Standard difficulty applied	Low	1	0.31	
Urban	Introduced shrub	0.005	Low	2	Condition Assessment N/A	1	Formally identified in local strategy	High strategic significance	1.15	1	Standard time to target condition applied	1	0.965	Low	Standard difficulty applied	Low	1	0.01	
Individual trees	Urban tree	0.34	Medium	4	Moderate	2	Formally identified in local strategy	High strategic significance	1.15	27	Standard time to target condition applied	27	0.382	Low	Standard difficulty applied	Low	1	1.20	
Individual trees	Urban tree	0.04	Medium	4	Moderate	2	Formally identified in local strategy	High strategic significance	1.15	27	Check details - Is there evidence that habitat has reached target condition? ⚠	0	1.000	Low	Low Difficulty - only applicable if all habitat created before losses	Low	1	0.37	
	<b>Total habitat area</b>	<b>1.08</b>																<b>Total Units</b>	<b>2.68</b>
	<b>Site Area (Excluding Individual trees)</b>	<b>0.63</b>																	

# Appendix IX: Post-development Habitat Condition Sheets (Linear creation)

Condition sheet: HEDGEROW Habitat Types			
Habitat Type			
Native hedgerow with trees			
Condition Assessment Criteria			
<p>A series of ten attributes, representing key physical characteristics are used for this assessment. This assessment is based on the Hedgerow Survey Handbook<sup>1</sup> and Favourable Conservation Status document<sup>2</sup>. For further clarification please refer to the Hedgerow Survey Handbook.</p> <p>Each attribute is assigned to one of five functional groups (A – E) and the condition of a hedgerow is assessed according to the number of attributes from these functional groups which pass or fail the 'favourable condition' criteria.</p>			
Hedgerow favourable condition attributes			
Attributes and functional groupings (A, B, C, D & E)	Criteria (the minimum requirements for 'favourable condition')	Description	Criterion passed (yes or No)
Core groups - applicable to all hedgerow types			
A1.	Height	<p>&gt;1.5 m average along length</p> <p>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.</p> <p>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).</p> <p>A newly planted hedgerow does not pass this criterion (unless it is &gt;1.5 m height).</p>	Y
A2.	Width	<p>&gt;1.5 m average along length</p> <p>The average width of woody growth estimated at the widest point of the canopy, excluding gaps and isolated trees.</p> <p>Outgrowths (such as blackthorn <i>Prunus spinosa</i> suckers) are only included in</p>	Y

			<p>the width estimate when they are &gt;0.5 m in height.</p> <p>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).</p>	
B1.	Gap - hedge base	Gap between ground and base of canopy <0.5 m for >90% of length	<p>This is the vertical 'gappiness' of the woody component of the hedgerow, and its distance from the ground to the lowest leafy growth.</p> <p>Certain exceptions to this criterion are acceptable (see page 65 of the Hedgerow Survey Handbook).</p>	Y
B2.	Gap - hedge canopy continuity	Gaps make up <10% of total length; and No canopy gaps >5 m	<p>This is the horizontal 'gappiness' of the woody component of the hedgerow. Gaps are complete breaks in the woody canopy (no matter how small).</p> <p>Access points and gates contribute to the overall 'gappiness' but are not subject to the &gt;5 m criterion (as this is the typical size of a gate).</p>	Y
C1.	Undisturbed ground and perennial vegetation	<p>&gt;1 m width of undisturbed ground with perennial herbaceous vegetation for &gt;90% of length:</p> <ul style="list-style-type: none"> <li>- measured from outer edge of hedgerow, and</li> <li>- is present on one side of the hedge (at least)</li> </ul>	<p>This is the level of disturbance (excluding wildlife disturbance) at the base of the hedgerow.</p> <p>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.</p> <p>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.</p>	N

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
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 <sup>3</sup> ) 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 <sup>4</sup> , as well as the BSBI website <sup>5</sup> where the 'Online Atlas of the British and Irish Flora' <sup>6</sup> 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 <sup>7</sup> .	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 (e.g., excessive hedgerow cutting).	Y
<b>Additional group - applicable to hedgerows with trees only</b>				
E1.	class	There is more than one age-class (or morphology) of tree present (for example: young, mature, veteran and or ancient <sup>8</sup> ), 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	This criterion identifies if the trees are subject to damage which compromises the survival and health of the individual specimens.	Y

		from livestock or wild animals, pests or diseases, or human activity.		
The hedgerow condition assessment generates a weighting (score) ranging from 1 - 3, which is used within the metric. The scores for each are set out in the tables below.				
<b>Condition categories for hedgerows without trees</b>				
<b>Category</b>	<b>Category Requirements</b>		<b>Metric Score</b>	
Good	No more than 2 failures in total; <b>AND</b> No more than 1 failure in any functional group.		3	
Moderate	No more than 5 failures in total; <b>AND</b> <u>Does not fail both attributes</u> in more than one functional group (e.g., fails attributes A1, A2, B1, C2 and E1 = Moderate condition).		2	
Poor	Fails a total of more than 5 attributes; <b>OR</b> <u>Fails both attributes</u> in more than one functional group (e.g. fails attributes A1, A2, B1 and B2 = Poor condition).		1	
			<b>Score achieved:</b>	2
<b>Notes</b>				
<p><b>Footnote 1</b> – DEFRA (2007) Hedgerow Survey Handbook. A standard procedure for local surveys in the UK. [online] Available on: <a href="http://layout(hedgelinek.org.uk)">layout(hedgelinek.org.uk)</a></p> <p><b>Footnote 2</b> – STALEY, J.T. ET AL. (2020) Definition of Favourable Conservation Status for Hedgerows. [online] Available on: <a href="http://Definition of Favourable Conservation Status for Hedgerows - RP2943 (naturalengland.org.uk)">Definition of Favourable Conservation Status for Hedgerows - RP2943 (naturalengland.org.uk)</a></p> <p><b>Footnote 3</b> – Wildlife and Countryside Act 1981 (as amended).</p> <p><b>Footnote 4</b> – CHEFFINGS, C. M. et al. (2005) The Vascular Plant Red Data List for Great Britain. Species Status 7: 1-116. [online] Available on: <a href="http://The Vascular Plant Red Data List for Great Britain (Species Status No. 7)   JNCC Resource Hub">The Vascular Plant Red Data List for Great Britain (Species Status No. 7)   JNCC Resource Hub</a></p> <p><b>Footnote 5</b> – BOTANICAL SOCIETY OF BRITAIN AND IRELAND (BSBI). Definitions: wild, native or alien? [online] Available on: <a href="http://Definitions: wild, native or alien? – Botanical Society of Britain &amp; Ireland (bsbi.org)">Definitions: wild, native or alien? – Botanical Society of Britain &amp; Ireland (bsbi.org)</a></p> <p><b>Footnote 6</b> – BSBI and Biological Records Centre (BRC) (2022) Online Atlas of the British and Irish Flora. [online] Available on: <a href="http://Acknowledgements   Online Atlas of the British and Irish Flora (brc.ac.uk)">Acknowledgements   Online Atlas of the British and Irish Flora (brc.ac.uk)</a></p> <p><b>Footnote 7</b> – GB NON-NATIVE SPECIES SECRETARIAT (GBNNS) (2022) Available on: <a href="http://Home » NNSS (nonnativespecies.org)">Home » NNSS (nonnativespecies.org)</a></p> <p><b>Footnote 8</b> – See gov.uk standing advice on ancient and veteran trees. Available from: <a href="http://Keepers of time: ancient and native woodland and trees policy in England (publishing.service.gov.uk)">Keepers of time: ancient and native woodland and trees policy in England (publishing.service.gov.uk)</a> and <a href="http://Ancient woodland, ancient trees and veteran trees: advice for making planning decisions - GOV.UK (www.gov.uk)">Ancient woodland, ancient trees and veteran trees: advice for making planning decisions - GOV.UK (www.gov.uk)</a></p>				

<b>Condition sheet: HEDGEROW Habitat Types</b>
<b>Habitat Type</b>
<b>Species-rich native hedgerow</b>

Condition Assessment Criteria			
<p>A series of ten attributes, representing key physical characteristics are used for this assessment. This assessment is based on the Hedgerow Survey Handbook<sup>1</sup> and Favourable Conservation Status document<sup>2</sup>. For further clarification please refer to the Hedgerow Survey Handbook.</p> <p>Each attribute is assigned to one of five functional groups (A – E) and the condition of a hedgerow is assessed according to the number of attributes from these functional groups which pass or fail the 'favourable condition' criteria.</p>			
Hedgerow favourable condition attributes			
Attributes and functional groupings (A, B, C, D & E)	Criteria (the minimum requirements for 'favourable condition')	Description	Criterion passed (yes or No)
Core groups - applicable to all hedgerow types			
A1.	Height	<p>&gt;1.5 m average along length</p> <p>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.</p> <p>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).</p> <p>A newly planted hedgerow does not pass this criterion (unless it is &gt;1.5 m height).</p>	Y
A2.	Width	<p>&gt;1.5 m average along length</p> <p>The average width of woody growth estimated at the widest point of the canopy, excluding gaps and isolated trees.</p> <p>Outgrowths (such as blackthorn <i>Prunus spinosa</i> suckers) are only included in the width estimate when they are &gt;0.5 m in height.</p> <p>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).</p>	Y



B1.	Gap - hedge base	Gap between ground and base of canopy <0.5 m for >90% of length	<p>This is the vertical 'gappiness' of the woody component of the hedgerow, and its distance from the ground to the lowest leafy growth.</p> <p>Certain exceptions to this criterion are acceptable (see page 65 of the Hedgerow Survey Handbook).</p>	Y
B2.	Gap - hedge canopy continuity	Gaps make up <10% of total length; and No canopy gaps >5 m	<p>This is the horizontal 'gappiness' of the woody component of the hedgerow. Gaps are complete breaks in the woody canopy (no matter how small).</p> <p>Access points and gates contribute to the overall 'gappiness' but are not subject to the &gt;5 m criterion (as this is the typical size of a gate).</p>	Y
C1.	Undisturbed ground and perennial vegetation	<p>&gt;1 m width of undisturbed ground with perennial herbaceous vegetation for &gt;90% of length:</p> <ul style="list-style-type: none"> <li>- measured from outer edge of hedgerow, and</li> <li>- is present on one side of the hedge (at least)</li> </ul>	<p>This is the level of disturbance (excluding wildlife disturbance) at the base of the hedgerow.</p> <p>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.</p> <p>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.</p>	N
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

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 <sup>3</sup> ) 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 <sup>4</sup> , as well as the BSBI website <sup>5</sup> where the 'Online Atlas of the British and Irish Flora' <sup>6</sup> 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 <sup>7</sup> .	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 (e.g., excessive hedgerow cutting).	Y
<b>Additional group - applicable to hedgerows with trees only</b>				
E1.	class	There is more than one age-class (or morphology) of tree present (for example: young, mature, veteran and or ancient <sup>8</sup> ), 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/A
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.	N/A
The hedgerow condition assessment generates a weighting (score) ranging from 1 - 3, which is used within the 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; <b>AND</b> No more than 1 failure in any functional group.	3
Moderate	No more than 4 failures in total; <b>AND</b> <u>Does not fail both attributes</u> in more than one functional group (e.g. fails attributes A1, A2, B1 and C2= Moderate condition).	2
Poor	Fails a total of more than 4 attributes; <b>OR</b> <u>Fails both attributes</u> in more than one functional group (e.g. fails attributes A1, A2, B1 and B2 = Poor condition).	1
<b>Score achieved:</b>		2
Notes		
<p><b>Footnote 1</b> – DEFRA (2007) Hedgerow Survey Handbook. A standard procedure for local surveys in the UK. [online] Available on: <a href="http://layout.hedgelinek.org.uk">layout (hedgelinek.org.uk)</a></p> <p><b>Footnote 2</b> – STALEY, J.T. ET AL. (2020) Definition of Favourable Conservation Status for Hedgerows. [online] Available on: <a href="http://Definition of Favourable Conservation Status for Hedgerows - RP2943 (naturalengland.org.uk)">Definition of Favourable Conservation Status for Hedgerows - RP2943 (naturalengland.org.uk)</a></p> <p><b>Footnote 3</b> – Wildlife and Countryside Act 1981 (as amended).</p> <p><b>Footnote 4</b> – CHEFFINGS, C. M. et al. (2005) The Vascular Plant Red Data List for Great Britain. Species Status 7: 1-116. [online] Available on: <a href="http://The Vascular Plant Red Data List for Great Britain (Species Status No. 7)   JNCC Resource Hub">The Vascular Plant Red Data List for Great Britain (Species Status No. 7)   JNCC Resource Hub</a></p> <p><b>Footnote 5</b> – BOTANICAL SOCIETY OF BRITAIN AND IRELAND (BSBI). Definitions: wild, native or alien? [online] Available on: <a href="http://Definitions: wild, native or alien? – Botanical Society of Britain &amp; Ireland (bsbi.org)">Definitions: wild, native or alien? – Botanical Society of Britain &amp; Ireland (bsbi.org)</a></p> <p><b>Footnote 6</b> – BSBI and Biological Records Centre (BRC) (2022) Online Atlas of the British and Irish Flora. [online] Available on: <a href="http://Acknowledgements   Online Atlas of the British and Irish Flora (brc.ac.uk)">Acknowledgements   Online Atlas of the British and Irish Flora (brc.ac.uk)</a></p> <p><b>Footnote 7</b> – GB NON-NATIVE SPECIES SECRETARIAT (GBNNS) (2022) Available on: <a href="http://Home » NNSS (nonnativespecies.org)">Home » NNSS (nonnativespecies.org)</a></p> <p><b>Footnote 8</b> – See gov.uk standing advice on ancient and veteran trees. Available from: <a href="http://Keepers of time: ancient and native woodland and trees policy in England (publishing.service.gov.uk)">Keepers of time: ancient and native woodland and trees policy in England (publishing.service.gov.uk)</a> and <a href="http://Ancient woodland, ancient trees and veteran trees: advice for making planning decisions - GOV.UK (www.gov.uk)">Ancient woodland, ancient trees and veteran trees: advice for making planning decisions - GOV.UK (www.gov.uk)</a></p>		

## **Appendix X: B-2 Site Hedge Creation**

Proposed habitats			Distinctiveness		Condition		Strategic significance			Temporal multiplier				Difficulty risk multipliers				Hedge units delivered
New hedge number	Habitat type	Length (km)	Distinctiveness	Score	Condition	Score	Strategic significance	Strategic significance	Strategic position multiplier	Standard time to target condition (years)	Standard or adjusted time to target condition	Final time to target condition (years)	Final time to target multiplier	Standard difficulty of creation	Applied difficulty multiplier	Final difficulty of creation	Difficulty multiplier applied	
-	Non-native and ornamental hedgerow	0.1	V.Low	1	Poor	1	Formally identified in local strategy	High strategic significance	1.15	1	Standard time to target condition applied	1	0.965	Low	Standard difficulty applied	Low	1	0.11
-	Native hedgerow with trees	0.1	Medium	4	Moderate	2	Formally identified in local strategy	High strategic significance	1.15	10	Standard time to target condition applied	10	0.700	Low	Standard difficulty applied	Low	1	0.64
-	Native hedgerow	0.02	Low	2	Moderate	2	Formally identified in local strategy	High strategic significance	1.15	5	Standard time to target condition applied	5	0.837	Low	Standard difficulty applied	Low	1	0.08
		<b>0.22</b>																<b>0.83</b>

## Appendix XI: Legal and Technical Limitations

- This report has been prepared by Urban Edge Environmental Consulting Ltd (UEEC Ltd) with all reasonable skill, care and diligence within the terms of the contract made with the Client to undertake this work, and taking into account the information made available by the Client. No other warranty, expressed or implied, is made as to the professional advice included in this report or any other services provided by us.
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- Unless otherwise stated in this report, the assessments made assume that the sites and facilities that have been considered in this report will continue to be used for their current planned purpose without significant change.
- All work carried out in preparing this report has utilised and is based upon UEEC Ltd's current professional knowledge and understanding of current relevant UK standards and codes, technology and legislation. Changes in this legislation and guidance may occur at any time in the future and may cause any conclusions to become inappropriate or incorrect. UEEC Ltd does not accept responsibility for advising the Client or other interested parties of the facts or implications of any such changes;
- Where this report presents or relies upon the findings of ecological field surveys (including habitat, botanical or protected/notable species surveys), its conclusions should not be relied upon for longer than a maximum period of two years from the date of the original field surveys. Ecological change (e.g. colonisation of a site by a protected species) can occur rapidly and this limitation is not intended to imply that a likely absence of, for instance, a protected species will persist for any period of time;
- This report has been prepared using factual information contained in maps and documents prepared by others. No responsibility can be accepted by UEEC Ltd for the accuracy of such information;
- Every effort has been made to accurately represent the location of mapped features, however, the precise locations of features should not be relied upon;
- Populations of animals and plants are often transient in nature and a single survey visit can only provide a general indication of species present on site. Time of year when the survey was carried out, weather conditions and other variables will influence the results of an ecological survey (e.g. it is possible that some flowering plant species which flower at other times of the year were not observed). Every effort has been made to accurately note indicators of presence of protected, rare and notable species within and adjacent to the site but the possibility nonetheless exists for other species to be present which were not recorded or otherwise indicated by the survey;
- Any works undertaken as a consequence of the recommendations provided within this report should be subjected to the necessary health & safety checks and full risk assessments.

## Urban Edge Environmental Consulting Ltd

Unit 5 | Westergate Business Centre | Brighton | BN2 4QN

T: 01273 68 67 66 | E: [enquiries@ueec.co.uk](mailto:enquiries@ueec.co.uk)

[www.ueec.co.uk](http://www.ueec.co.uk) |  [@UrbanEdgeEnviro](https://twitter.com/UrbanEdgeEnviro) | **TEMA**

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Unit 5 | Westergate Business Centre | Brighton | BN2 4QN

T: 01273 68 67 66 | E: [enquiries@ueec.co.uk](mailto:enquiries@ueec.co.uk)

[www.ueec.co.uk](http://www.ueec.co.uk) |  @UrbanEdgeEnviro

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