



BIODIVERSITY NET GAIN STATEMENT

The Convent of Mercy, Hillside Drive, Gravesend

New Homes

On behalf of: Sisters of Mercy

Client:	Sisters of Mercy			
Project:	The Convent of Mercy, Hillside Drive, Gravesend			
Reference:	LLD3294-ECO-REP-005-00-BNG New Homes			
Revision:	Date:	Author	Proof	Approved
00	17/12/2024	Sam Hall BSc (Hons) MSc	Catherine O'Reilly MCIEEM	Catherine O'Reilly MCIEEM

Disclaimer:

The information provided within this report has been prepared and provided in accordance with the Chartered Institute of Ecology and Environmental Management's (CIEEM) Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bona fide opinions.

This report is intended for the sole use of the Client and their agents in accordance with the agreement under which our services were performed. Unauthorised communication, reproduction or usage of this report by any party other than the aforementioned is prohibited. No liability is accepted by Lizard Landscape Design and Ecology for any use of this report, other than for the purposes for which it was originally prepared and provided. This report does not constitute legal advice. No warranty, express or implied, is made as to the advice in this report or any other service provided by us.

Validity:

This report is valid for 18 months from the date of the final survey visit. If works have not commenced by this date, an updated site visit should be carried out by a suitably qualified ecologist to assess any changes in the habitats present on site, to inform whether surveys should be updated.



Contents

	Page No.
1.0 Introduction	01
2.0 Methodology	02
3.0 Results	04
4.0 Measures to Achieve Minimum Required Levels of BNG	08
5.0 Conclusion	09
6.0 References	10

FIGURES

Figure No.01 – Baseline Habitat Plan

Figure No.02 – Proposed Habitat Plan

APPENDICES

Appendix A – Condition Assessment for Existing Habitats

Appendix B – Target Condition Assessment for Proposed Habitats



1.0 INTRODUCTION

1.1 Lizard Landscape Design and Ecology (LLDE) has been commissioned to provide a Biodiversity Net Gain Statement for the proposed development of The Convent of Mercy, Hillside Drive, Gravesend. This report has been written with due regard to best practice guidance for ecological report writing (CIEEM, 2017) and the Biodiversity Net Gain: Good Practice Principles for Development (CIEEM, 2019) and the Biodiversity Net Gain User Guide (DEFRA, 2023).

1.2 The development does not appear to qualify under any exemption and will therefore be subject to the standard Biodiversity Gain condition.

Site Overview

1.3 The site is located within the town of Gravesend in the county of Kent and encompasses a c. 0.49 Ha plot that includes a portion of the gardens associated with the Convent of Mercy and hardstanding access including Hillside Drive. The site is dominated by regularly managed lawns with scattered trees, hedgerows, ornamental planting and a small ornamental pond. The site is bordered on all sides by residential development. Soil on site is described as freely draining slightly acid loamy soils.

Surrounding Landscape

1.4 The surrounding landscape is urban and dominated by residential development with the built mass of Gravesend extending out at least 1.4km in all directions. The river Thames is located c. 1.5km north of the site.

Development Proposals

1.5 It is understood that the proposals are for the construction of 4no. new residential properties within the existing grassland, including the provision of sealed surface access and Grasscrete parking areas.

2.0 METHODOLOGY

2.1 Assigning Strategic Significance

- 2.1.1 Due to the lack of Local Nature Recovery Strategy (LNRS) within Kent, strategic significance has been assessed using the Biodiversity Net Gain Guidance Note produced by Kent County Council (2024). This document provides Table No. 01 and Table No. 02 below.

Table No. 01 – Strategic significance for area habitat units

High (1.15)	• Kent Biodiversity Strategy² priority habitats (see Appendix B) located within a Biodiversity Opportunity Area³ • Habitats of importance identified within Biodiversity Opportunity Area descriptions (see Appendix A) • Widely dispersed habitats of importance identified within Biodiversity Opportunity Area descriptions located across the whole of Kent and Medway⁴ • National and International statutory protected sites (Ramsar, SAC, SPA, SSSI, NNR)* • Local Nature Reserves (LNRs)* • Local Wildlife Sites (LWSs)* • Roadside Nature Reserves (RNRs)* • Irreplaceable habitats^{5*}
Medium (1.1)	• Kent Biodiversity Strategy priority habitats outside of the Biodiversity Opportunity Areas • Any Section 41 priority habitat that do not meet the criteria for high strategic significance
Low (1.0)	• All other area-based habitats

Note: the strategic significance score of individual trees should be assigned using the same methodology as for hedgerow units, i.e. the strategic significance category (high, medium or low) for individual trees should be the same as the distinctiveness score.

Table No. 02 – Strategic significance for hedgerow units

High (1.15)	• All very high and high distinctiveness hedgerows as defined by Statutory The Biodiversity Metric
Medium (1.1)	• All medium distinctiveness hedgerows as defined by The Statutory Biodiversity Metric
Low (1.0)	• All low and very low distinctiveness hedgerows as defined by The Statutory Biodiversity Metric

2.2 Biodiversity Net Gain Assessment

- 2.2.1 A baseline habitat assessment in accordance with the UK Habitats Classification Manual (UKHabs Ltd., 2023) was undertaken on the 19th of July 2024 by Sam Hall (Consultant Ecologist, LLDE). No habitat degradation had taken place prior to the survey and the baseline data is considered to be an accurate reflection of the ecological value of the site. Full details of the habitats present are contained within the Ecological Impact Assessment (LLD3294-ECO-REP-002-00-EcIA) and summarised herein.
- 2.2.2 All area-based and linear habitats were mapped on site with the aid of aerial imagery and topographical survey where available. The condition of habitats was assessed in accordance with *The Statutory Biodiversity Metric - Technical Annex 1: Condition Assessment Sheets and Methodology* (DEFRA, 2023). No watercourse habitats were identified.
- 2.2.3 The habitats, their condition and strategic importance were input into the Statutory Biodiversity Metric Calculation Tool (DEFRA, 2023). The area/length of habitats which would be retained or enhanced based upon the current proposals was also added to the calculator. This allowed the existing baseline value and loss of biodiversity units to be established.
- 2.2.4 The proposed habitat areas and linear habitat lengths was calculated, and target condition determined based upon the existing and proposed management regimes of the site, in consideration with what could realistically be expected to be achieved. Once input into The Biodiversity Metric Calculation, the overall change in value of the site could then be determined.

2.3 Survey Constraints / Considerations

- 2.3.1 Areas and linear lengths have been rounded to the nearest 10m² and measurements input to the metric using three decimal places. Due to the output of the Metric being displayed to two decimal places, slight imprecision in output may occur.

3.0 RESULTS

3.1 Strategic Significance and Irreplaceable Habitat

3.1.1 The site does not fall within a Biodiversity Opportunity Area (BOA), or any other protected site listed in Table No. 01. Nor are any existing or proposed habitats listed as 'a priority for Kent within the Kent Biodiversity Strategy' within Table 5 of the Kent County Council's BNG Guidance Note (2024). Individual trees have been assigned medium significance as per Table No. 01, all hedgerows have been assigned low significance as per Table No. 02 and all other habitats have been assigned low strategic significance.

3.1.2 No irreplaceable habitat has been identified on-site.

3.2 Baseline Habitat Value

Habitat Degradation

3.2.1 No site clearance or habitat degradation was evident, and the baseline information gathered is considered to be a true presentation of the on-site habitats at the time of the survey.

On-Site Habitats

3.2.2 The Biodiversity Net Gain (BNG) assessment concluded that the existing baseline biodiversity value of the site was **2.24** Habitat Units, consisting of:

- 0.107ha of developed land sealed surface providing 0.0 habitat units (condition assessment N/A).
- 0.002ha of introduced shrub providing 0.0 habitat units (condition assessment N/A).
- 0.019ha of bare ground in poor condition providing 0.04 habitat units in poor condition.
- 0.357ha of modified grassland in poor condition providing 0.71 habitat units.
- 0.0002ha of ornamental lake or pond in moderate condition providing 0.0 habitat units.
- 0.0651ha of individual trees (12no. small, 1no. medium) in poor condition providing 0.29 habitat units.

- 0.0936ha of individual trees (6no. small, 1no. large, 2no. medium) in moderate condition providing 0.82 habitat units.
- 0.0285ha of individual trees (3no. small, 1no. medium) in good condition providing 0.38 habitat units.

3.2.3 Some of the existing habitat on site is to be retained in its current condition, meaning the retention of **1.05** habitat units comprised of:

- 0.107ha of developed land sealed surface
- 0.013ha of modified grassland in poor condition
- 0.0326ha of individual trees in poor condition (4no. small, 1no. medium)
- 0.0692ha of individual trees in moderate condition (4no. small, 1no. large, 1no. medium)
- 0.0204ha of individual trees in good condition (1no. small, 1no. medium)

3.2.4 A full condition assessment for each existing habitat type is detailed in Appendix A.

3.3 Baseline Hedgerow Value

3.3.1 The Biodiversity Net Gain (BNG) assessment concluded that the existing baseline biodiversity value of the site was **0.08** Habitat Units, consisting of:

- 0.02km of non-native and ornamental hedgerow auto assigned poor condition providing 0.02 hedgerow units.
- 0.03km of native hedgerow in poor condition providing 0.06 hedgerow units.

3.3.2 A full condition assessment for each existing habitat type is detailed in Appendix A.

3.4 Baseline Watercourse Value

3.4.1 No watercourses are present on site.

3.5 Proposed Habitat Creation

3.5.1 Proposals are to result in the creation of new habitat on site, delivering **1.05** habitat units comprised of:

- 0.099ha of developed land, sealed surface (condition assessment N/A) – proposed dwellings, access and parking areas.
- 0.191ha of vegetated garden (condition assessment N/A) – proposed private garden areas.
- 0.053ha of mixed scrub in moderate condition – proposed along the eastern site boundary.
- 0.0448ha of individual trees in moderate condition – 9no. proposed small trees located within the enhanced grassland and 2 within the proposed mixed scrub.
- 0.0326ha of individual trees in moderate condition – 8no. proposed small trees located within the retained grassland areas to the north of the proposed access road.
- 0.0163ha of individual trees in poor condition – representing the retention of tree T8, a medium sized tree within the proposed private garden area.

3.5.2 A full condition assessment for each proposed habitat type is detailed in Appendix B. The tree T8 will be retained, and it is proposed that it would be subject to a TPO or other agreement that ensures its retention. Its management cannot be secured, so it has been shown as lost in medium condition and then created at poor condition with 30+ years selected for the *Habitat created in advance* metric option.

3.5.3 Please note that the areas of proposed Grasscrete have been measured as 50% develop land sealed surface and 50% modified grassland in poor condition to capture its low ecological contribution.

3.6 Proposed Hedgerows

3.6.1 Proposals are to result in the creation of new hedgerow on site, delivering **0.1** hedgerow units comprised of:

- 0.03km of native hedgerow in **moderate** condition – proposed along the southern site boundary within the proposed enhanced modified grassland.

3.7 Proposed Watercourses

3.7.1 No watercourses are proposed on-site.

3.8 Proposed Habitat Enhancements

3.8.1 A total of 0.017ha of modified grassland within the site shall be enhanced from poor to good condition. A native flowering lawn mix will be used to enhance the species diversity.

3.8.2 A full target condition assessment for the proposed habitat enhancement is detailed in Appendix B. Enhancement measures shall result in the delivery of **0.7** habitat units.

3.9 Overall Results

3.9.1 Once all retention, enhancement and habitat creation measures are taken into account, the scheme shall result in **2.17** habitat units and **0.1** hedgerow units; a net decrease of **0.07** habitat units and net increase of **0.04** hedgerow units, resulting in a **3.25% Biodiversity Net Loss** in Habitat Units and a **25.52% Biodiversity Net Gain** in hedgerow units across the site.

4.0 MEASURES TO ACHIEVE MINIMUM REQUIRED LEVELS OF BNG

- 4.1 The scheme currently meets the mandatory minimum 10% net gain in hedgerow units with all hedgerow trading rules satisfied.
- 4.2 Proposal currently result in a deficit of 0.3 habitat units. Trading rules for hedgerows have been met, however trading rules for both medium and low distinctiveness habitats are not currently met due to the deficit in units, and the loss of individual trees on site.
- 4.3 The purchase of units from a private habitat provider, such as the Environment Bank, shall be sought post-planning approval to allow the shortfall in units to be addressed. Purchased units shall include a minimum of 0.15 units of either individual trees or a higher distinctiveness habitat type and 0.15 units of any low distinctiveness (or higher) habitat type to ensure that all trading rules are met. This approach is in accordance with Government guidelines, with the completion of a full metric with inclusion of off-site habitats provided pre-commencement as part of the standard Biodiversity Gain Condition.

5.0 CONCLUSION

- 5.1 Metric calculations have identified that the proposed scheme would result in a **3.25% net loss** in habitat units and a **25.52% net gain** in hedgerow units. Alongside the provision of a legal agreement / conservation covenant to guarantee the delivery of proposed on-site habitats for at least 30 years, purchase of off-site units will be required to meet the mandated +10% Biodiversity Net Gain and to comply with the current Local Planning policy.
- 5.2 To ensure the proposed post-development on-site habitats are managed into the future, a suitable management plan shall be produced. This shall include management prescriptions for the proposed habitat creation and enhancement including aspects such as pruning and mowing regimes, which shall ensure the target conditions are achieved.

6.0 REFERENCES

CIEEM. (2017). Guidelines on Ecological Report Writing. Chartered Institute of Ecology and Environmental Management, Winchester.

CIEEM. (2019). Biodiversity Net Gain: Good Practice Principles for Development. Winchester

Department for Environment Food and Rural Affairs (2023). *The Statutory Biodiversity Metric Calculation Tool.*

Department for Environment Food and Rural Affairs (2023). *The Statutory Biodiversity Metric - Technical Annex 1: Condition Assessment Sheets and Methodology.*

Kent County Council (2024). *Biodiversity Net Gain Guidance Note. Interim Strategic Significance Guidance for Biodiversity Net Gain in Kent and Medway.*

UKHab Ltd (2023). *UK Habitat Classification Version 2.1*

Appendix A – Condition Assessment for Existing Habitats

Modified Grassland in Poor Condition:

Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
A	There are 6-8 vascular plant species per m ² present, including at least 2 forbs (these may include those listed in Footnote 1). Note - this criterion is essential for achieving Moderate or Good condition.	No	Average of 5/m ²
	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 ² (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.		
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.	No	All grass maintained as tight low lawn sward
C	Any scrub present accounts for less than 20% of the total grassland area. (Some scattered scrub such as bramble <i>Rubus fruticosus</i> agg. may be present). Note - patches of scrub with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.	Yes	None noted
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.	Yes	Very small areas of damage where grass meets hardstanding
E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens) ² .	Yes	Some rabbit holes noted - no more than 1% coverage
F	Cover of bracken <i>Pteridium aquilinum</i> is less than 20%.	Yes	None noted
G	There is an absence of invasive non-native plant species ³ (as listed on Schedule 9 of WCA ⁴).	Yes	None noted
Essential criterion achieved (Yes or No)			No
Number of criteria passed			5
Condition Assessment Result (out of 7 criteria)	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)	x	

Bare Ground in Poor Condition:

Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
Core Criteria - must be assessed for all urban habitat types :			
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.	No	Veg cover below 5%
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.	No	Sparse limited veg such as common nettle
C	Invasive non-native plant species (listed on Schedule 9 of WCA ¹) and others which are to the detriment of native wildlife (using professional judgement) ² cover less than 5% of the total vegetated area ³ . Note - to achieve Good condition, this criterion must be satisfied by a complete absence of invasive non-native species (rather than <5% cover).	Yes	None noted
Essential criteria relevant for habitat type achieved (Yes or No)			Yes
Number of criteria passed			1
Condition Assessment Result	Condition Assessment Score	Score Achieved x/✓	
Results for habitats requiring assessment of 3 core criteria only (all listed urban habitats except Open mosaic habitat on previously developed land, Bioswale, SuDS and Green roofs):			
• Passes all 3 core criteria; AND • Meets the requirements for Good condition within criterion C.	Good (3)		
• Passes 2 of 3 core criteria; OR • Passes 3 of 3 core criteria but does not meet the requirements for Good condition within criterion C.	Moderate (2)		
• Passes 0 or 1 of 3 core criteria.	Poor (1)	x	

Existing Individual Trees:

Limitations (if applicable)		Habitat parcel reference										
		T1	T2	T5	T6	T7	T8	T9	T10	T11	T12	
Condition Assessment Criteria		Grid reference										Notes (such as justification)
		Criterion passed (Yes or No)										
A	The tree is a native species (or at least 70% within the block are native species).	N	N	Y	Y	Y	N	Y	N	N	N	
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	Y	Y	Y	Y	Y	Y	
C	The tree is mature (or more than 50% within the block are mature) ¹ .	Y	N	Y	Y	Y	Y	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.	N	N	N	N	N	Y	Y	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	Y	N	N	N	N	N	Y	
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
Number of criteria passed		3	2	5	5	4	4	4	3	3	3	
Condition Assessment Result (out of 6 criteria)	Condition Assessment Score	Score Achieved x/√										
Passes 5 or 6 criteria	Good (3)			X	X							
Passes 3 or 4 criteria	Moderate (2)	X				X	X	X	X	X	X	
Passes 2 or fewer criteria	Poor (1)		X									
Note that 'Fairly Good and Fairly Poor' condition categories are not available for this broad habitat type.												

Existing Individual Trees Continued:

Limitations (if applicable)		Habitat parcel reference										Notes (such as justification)
		T13	T14	T15	T16	T17	G3 x2	G5 x9				
Condition Assessment Criteria		Grid reference										Notes (such as justification)
		Criterion passed (Yes or No)										
A	The tree is a native species (or at least 70% within the block are native species).	Y	N	Y	N	Y	N	N				
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	Y	Y	Y				
C	The tree is mature (or more than 50% within the block are mature) ¹ .	Y	N	Y	Y	Y	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.	N	N	N	N	N	N	Y				
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	N	N	N	N	Y	N	N				
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	Y	Y	Y	Y	Y	Y	N				
Number of criteria passed		4	2	4	3	5	2	2				
Condition Assessment Result (out of 6 criteria)	Condition Assessment Score	Score Achieved x/√										
Passes 5 or 6 criteria	Good (3)					X						
Passes 3 or 4 criteria	Moderate (2)	X		X	X							
Passes 2 or fewer criteria	Poor (1)		X				X	X				
Note that 'Fairly Good and Fairly Poor' condition categories are not available for this broad habitat type.												

Ornamental Pond in Moderate Condition:

Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
Core Criteria - applicable to all ponds (woodland¹ and non-woodland):			
A	The pond is of good water quality, with clear water (low turbidity) indicating no obvious signs of pollution. Turbidity is acceptable if the pond is grazed by livestock.	Yes	Water was clear
B	There is semi-natural habitat (moderate distinctiveness or above) completely surrounding the pond, for at least 10 m from the pond edge for its entire perimeter.	No	Pond surrounded by slab paving
C	Less than 10% of the water surface is covered with duckweed <i>Lemna</i> spp. or filamentous algae.	No	>10% coverage
D	The pond is not artificially connected to other waterbodies, such as agricultural ditches or artificial pipework.	Yes	None noted
E	Pond water levels can fluctuate naturally throughout the year. No obvious artificial dams ² , pumps or pipework.	Yes	None noted
F	There is an absence of listed non-native plant and animal species ³ .	Yes	None noted
G	The pond is not artificially stocked with fish. If the pond naturally contains fish, it is a native fish assemblage at low densities.	Yes	None noted
Additional Criteria - must be assessed for all non-woodland ponds:			
H	Emergent, submerged or floating plants (excluding duckweed) ⁴ cover at least 50% of the pond area which is less than 3 m deep.	Yes	Water lily covered at least 70%
I	The pond surface is no more than 50% shaded by adjacent trees and scrub.	Yes	No shading from adjacent trees or shrubs
Number of criteria passed		7	
Condition Assessment Result		Condition Assessment Score	Score Achieved x/✓
Results for woodland ponds which require assessment of 7 core criteria			
Passes 7 criteria		Good (3)	
Passes 5 or 6 criteria		Moderate (2)	
Passes 4 or fewer criteria		Poor (1)	
Results for non-woodland ponds which require assessment of 9 criteria			
Passes 9 criteria		Good (3)	
Passes 6 to 8 criteria		Moderate (2)	X
Passes 5 or fewer criteria		Poor (1)	

Native Hedgerow in Poor Condition:

Hedgerow favourable condition attributes					
Attributes and functional groupings (A, B, C, D and E)		Criteria - the minimum requirements for 'favourable condition'	Criteria description	Criterion passed (Yes or No)	Notes (such as justification)
Core groups - applicable to all hedgerow types					
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).	No	height under 0.5m
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).	No	width under 0.5m
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).	No	Most of the length had no leafy growth
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).	Yes	No gaps
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.	No	No undisturbed ground
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.	No	No undisturbed ground
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 ¹) 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 .	Yes	None noted
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).	No	Heavily pruned and mostly dead

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:		1

Appendix B – Target Condition Assessment for Proposed Habitats

Individual Trees – Target Condition Moderate:

Condition Assessment Criteria		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).	Yes	All trees will be native
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).	Yes	Pruning will be limited and only for safety reasons
C	The tree is mature (or more than 50% within the block are mature) ¹ .	No	Not likely
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.	No	Some trees are likely to pass this criterion. However, the placement of some close to access / parking may necessitate further pruning
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	No	Not likely
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	Yes	All trees will be planted in vegetated areas
Number of criteria passed			
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)	x
Passes 2 or fewer criteria		Poor (1)	
Note that 'Fairly Good and Fairly Poor' condition categories are not available for this broad habitat type.			

Mixed Scrub – Target Condition Moderate:

Condition Assessment Criteria		Criterion passed (Yes or No)	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 species ² , - 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).	Yes	Will be planted with a high diversity of woody shrub species and remedial action taken if any species becomes dominant
B	Seedlings, saplings, young shrubs and mature (or ancient or veteran ³) shrubs are all present.	No	Cannot guarantee
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.	Yes	None will be planted. Any colonisers will be removed
D	The scrub has a well-developed edge with scattered scrub and tall grassland and or forbs present between the scrub and adjacent habitat.	No	Not practice
E	There are clearings, glades or rides present within the scrub, providing sheltered edges.	Yes	Clusters of scrub species planted and annual pruning clearing to create openings
Number of criteria passed			
Condition Assessment Result (out of 5 criteria)		Condition Assessment Score	Score Achieved x/✓
Passes 5 criteria		Good (3)	
Passes 3 or 4 criteria		Moderate (2)	X
Passes 2 or fewer criteria		Poor (1)	

Modified Grassland – Target Condition Good:

Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
A	There are 6-8 vascular plant species per m ² present, including at least 2 forbs (these may include those listed in Footnote 1). Note - this criterion is essential for achieving Moderate or Good condition.	Yes	Diverse native flowering lawn mix to be applied and managed appropriately
	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 ² (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.		
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.	No	Will be mown regularly
C	Any scrub present accounts for less than 20% of the total grassland area. (Some scattered scrub such as bramble <i>Rubus fruticosus</i> agg. may be present). Note - patches of scrub with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.	Yes	None at baseline, and will be removed if it colonises
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.	Yes	Such damage not expected and will be remedied if detected
E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens) ² .	Yes	Limited bare ground expected due to possible pedestrian disturbance. Wildlife likely to be deterred by residential nature
F	Cover of bracken <i>Pteridium aquilinum</i> is less than 20%.	Yes	None noted at baseline, will be removed within maintenance
G	There is an absence of invasive non-native plant species ³ (as listed on Schedule 9 of WCA ⁴).	Yes	None noted at baseline, will be removed within maintenance
Essential criterion achieved (Yes or No)			Yes
Number of criteria passed			6
Condition Assessment Result (out of 7 criteria)	Condition Assessment Score	Score Achieved x/✓	
Passes 6 or 7 criteria including passing essential criterion A	Good (3)	x	
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)		

Native Hedgerow – Target Condition Good:

Hedgerow favourable condition attributes				
Attributes and functional groupings (A, B, C, D and E)	Criteria - the minimum requirements for 'favourable condition'	Criteria description	Criterion passed (Yes or No)	Notes (such as justification)
Core groups - applicable to all hedgerow types				
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).	Yes	To be managed for this
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).	Yes	To be managed for this
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).	Yes	Species selection and management to target this
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).	Yes	Species selection and management to target this
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.	No	No undisturbed ground
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.	No	No undisturbed ground
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 BSI website ⁵ where the 'Online Atlas of the British and Irish Flora' 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 .	Yes	None noted at baseline and will be removed in management
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).	Yes	management will target this

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:		3