

Biodiversity Net Gain Assessment

Survey site:

Site on Schofield Street, Heywood, Rochdale, Lancashire, OL10 1DH

Client:

B & L Homes Limited

Report date:

31st March 2025 (Updated 27/05/2025)

Project:

This report is prepared to inform a planning application with the Rochdale Metropolitan Borough Council. The proposal is described as:

“The erection of 9 (no.) dwellings with associated landscaping and car parking.”

Survey methodology and legislation can be found in the Arbtech Supplement: [PEA Methodology and Legislation - 2024.](#)

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Industry Guidelines and Standards

This report has been written with due consideration to:

- British Standard 42020 (2013). Biodiversity – Code of Practice for Planning and Development.
- British Standard 8683:2021 (2021). Process for Designing and Implementing Biodiversity Net Gain.
- Chartered Institute of Ecology and Environmental Management (2017). Guidelines for Preliminary Ecological Appraisal. 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management (2017). Guidelines on Ecological Report Writing. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management (2018). Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine. Version 1.1. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management (2020). Guidelines for Accessing, Using and Sharing Biodiversity Data in the UK. 2nd Edition. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management, Construction Industry Research and Information Association & Institute of Environmental Management and Assessment (2019). Biodiversity Net Gain – Good Practice Principles for Development.

Proportionality

The work involved in preparing and implementing all ecological surveys, impact assessments and measures for avoidance, mitigation, compensation and enhancement should be proportionate to the predicted degree of risk to biodiversity and to the nature and scale of the proposed development. Consequently, the decision-maker should only request supporting information and conservation measures that are relevant, necessary and material to the application in question. Similarly, the decision-maker and their consultees should ensure that any comments and advice made over an application are also proportionate.

The desk studies and field surveys undertaken to provide a Preliminary Ecological Appraisal (PEA) might in some cases be all that is necessary.

(BS 42020, 2013)

Executive Summary

Arbtech Consulting Limited was instructed by B & L Homes Limited to undertake a Biodiversity Net Gain (BNG) Assessment at Site on Schofield Street, Heywood, Rochdale, Lancashire, OL10 1DH (hereafter referred to as “the site”). The assessment was required to inform a planning application for the erection of nine dwellings with associated landscaping and car parking.

The proposed development results in **+13.59%** biodiversity net gain of habitat/area units.

The hedgerow units increase from 0 to 0.01. Mandatory net gain of linear units has been achieved.

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1.0 Introduction and Context

1.1 Background

Arbtech Consulting Limited was instructed by B & L Homes Limited to undertake a Biodiversity Net Gain (BNG) Assessment at Site on Schofield Street, Heywood, Rochdale, Lancashire, OL10 1DH (hereafter referred to as “the site”). The assessment was required to inform a planning application for the erection of nine dwellings with associated landscaping and car parking. A plan showing the proposed development is provided in Appendix 1.

This report should be read in conjunction with the following documents:

- Defra Statutory Biodiversity Metric – OL10 1DH
- PEA Report for the site.

1.2 Site Location, Geology and Landscape Context

The survey site is centred on National Grid Reference: SD 85915 10497 and has an area of approximately ~0.188ha. The site comprises bare soil substrate with gravel, rubble, sparse vegetation, and hardstanding, surrounded by fencing in Heywood, Rochdale. Adjacent to the west of the site is Schofield Street, adjacent to the south is Mount Street, adjacent to the east are dwellings and gardens, and adjacent to the north is a vacant building and hardstanding. The site is situated in an urban area in Heywood, with dwellings and gardens, access roads, and scattered small fragments of urban greenspace including trees and grassland in the nearby vicinity. Within the wider vicinity are larger areas of greenspace and rural areas including patches of woodland, grassland, agricultural fields with linear hedgerow networks and scattered trees, north, south, and southeast between Heywood and Oldham. A site location plan can be found in Appendix 2.

1.3 BNG Informative

BNG is a specific, measurable outcome of project activities that deliver demonstrable and quantifiable benefits to biodiversity compared to the baseline situation. In order to achieve BNG, a project must be able to demonstrate that it has followed all 10 of the Principles of Biodiversity Net Gain (as outlined in the British Standard 8683:2021 Process for Designing and Implementing Biodiversity Net Gain).

The legalised Environment Act (2021) requires developments in England to demonstrate a measurable net gain in biodiversity and sets a target of a minimum of 10% BNG for all developments. It also stipulates that a management plan with a minimum 30-year term, should be adopted to ensure biodiversity net gain can be delivered. The Environment Act (2021) states biodiversity net gain is mandatory for sites over 0.5ha as of February 2024. The requirement for biodiversity net gain is also enshrined within the National Planning Policy Framework (NPPF, 2021). The DEFRA Statutory Biodiversity Metric is the widely accepted tool used to calculate BNG. It enables the calculation of habitat value pre- and post-development in order to determine the overall change in biodiversity value as a result of the proposed development. The Biodiversity Metric has separate BNG assessments for areas of habitat, hedgerows and watercourses. The biodiversity value of a site should be maximised. However, it may not always be possible to achieve a 10% biodiversity net gain within a site and therefore the Statutory Biodiversity Metric can also account

for offsite habitat creation, where land is available. Alternatively, developers can seek to provide an agreed financial contribution to an appropriate third party (such as the Local Authority, the UK Government or another landowner) to deliver the required biodiversity net gain elsewhere on their behalf.

2.0 Methodology

2.1 Baseline Biodiversity Value

Baseline habitats recorded within the Preliminary Ecological Appraisal (Arbtech, 2024) include artificial, unvegetated, unsealed surface and developed land, sealed surface. These habitats have no biodiversity value. However, a review of historic areal imagery indicates the presence of vegetation since January 2020. Therefore, historic areal imagery has been used to inform the baseline BNG Calculation. A baseline habitat plan is provided in Appendix 3.

Habitat Classification

The Preliminary Ecological Appraisal classified the habitats on site according to The UK Habitat Classification Habitat Definitions Version 2.0 (The UK Habitat Classification Working Group, July 2023). Habitats identified by the areal imagery were assigned the closest UK Habitat Classification.

Habitat Area/Length

The area or length of each habitat was calculated using qGIS software. In calculating the area or length of each habitat, habitats which occur as two or more isolated parcels across the site were combined, where they were deemed to be of a similar composition and condition. Distinctions were made between habitats to be retained (i.e. left as found in baseline), enhanced (i.e. improved condition) or lost (i.e. destroyed by proposed development).

Areas of scattered trees were calculated using the Tree Helper tool within the Statutory Biodiversity Metric. Class sizes for urban trees are set out in Table 8-1 of the Statutory Biodiversity Metric User Guide (Natural England, 2023).

Habitat Condition

Habitat condition was assessed using the relevant condition assessment sheets found in the Statutory Biodiversity Metric User Guide (Natural England, 2023).

Strategic Significance

Strategic significance was assigned for each habitat based upon a review of the following:

- Ecological value
- Function within the landscape
- Any site or habitat allocations under the local plan

2.2 Post Development Biodiversity Value

The post development BNG Calculation was informed by the proposed plan which is included in Appendix 1. A post development habitat plan is provided in Appendix 4.

Habitat Classification

Proposed habitats were translated to their equivalents in the UK Habitat Classification using The UK Habitat Classification Habitat Definitions Version 2.0 (The UK Habitat Classification Working Group, July 2023) and the information provided within the proposed plan.

Habitat Area/Length

The area or length of each proposed habitat was calculated using qGIS software. In calculating the area or length of each habitat, habitats which occur as two or more isolated parcels across the site were combined, where they were deemed to be of similar composition and condition. Distinctions were made between habitats to be retained (i.e. left as found in baseline), enhanced (i.e. improved condition) or newly created.

Areas of scattered trees were calculated using the Tree Helper tool within the Statutory Biodiversity Metric. Class sizes for urban trees are set out in Table 8-1 of the Statutory Biodiversity Metric User Guide (Natural England, 2023).

Habitat Condition

Target habitat condition for each proposed habitat was determined assessed using the Temporal Multipliers Tool and the Enhancement Temporal Multipliers Tool included in the Statutory Biodiversity Metric spreadsheet as well as the relevant condition assessment sheets found in the Statutory Biodiversity Metric User Guide (Natural England, 2023). This is based on the assumption that a 30-year management plan will be adopted for the site.

Strategic Significance

Strategic significance was assigned for each proposed habitat based upon a review of the following:

- Likely ecological value
- Function within the landscape
- Any site or habitat allocations under the local plan

2.3 Limitations

The baseline vegetative habitats were not present on site during the preliminary ecological appraisal. Therefore, the baseline has been based on historic areal imagery, and therefore, the species present and therefore habitat classification is a best estimate.

3.0 Results

3.1 Baseline Habitats

Table 1 details the baseline habitats present within the site along with their area/length, condition and strategic significance.

Table 1: Baseline Biodiversity Value

Habitat	Area (ha)/ Length (km)	Description	Condition Assessment	Strategic Significance
Developed land, sealed surface	0.0654	Hard-standing	N/A	Area/compensation not in local strategy/ no local strategy
Sparsely vegetated urban land	0.1196	Urban land with vegetation cover 10-50%	Poor	Area/compensation not in local strategy/ no local strategy

3.2 Post Development Habitats

Table 2 details the post development habitats present within the site along with their area/length, condition and strategic significance. An assessment of the anticipated condition for each habitat (where relevant) is provided.

Table 2: Proposed Biodiversity Value

Habitat	Area (ha) / Length (km)	Description	Target Condition	Strategic Significance
Building	0.0369	Proposed buildings	N/A	Area/compensation not in local strategy/ no local strategy
Developed land, sealed surface	0.0774	Proposed pathways, parking, patio, bin stores and access road.	N/A	Area/compensation not in local strategy/ no local strategy
Vegetated Garden	0.0513	Private gardens with amenity lawns and shrubs	N/A	Area/compensation not in local strategy/ no local strategy
Modified Grassland	0.0158	Communal area of grassland	Moderate	Area/compensation not in local strategy/ no local strategy
Individual tree	0.0366	Nine small trees	Moderate	Area/compensation not in local strategy/ no local strategy
Native hedgerow	0.05	Proposed 5m of native hedgerow	Poor	Area/compensation not in local strategy/ no local strategy

Areas of Habitat

The baseline area/habitat value of the site is 0.24 units, comprised of 0.24 units of sparsely vegetated land, and 0 units of building and developed land, sealed surface (no biodiversity value).

The post development habitat value of the site is 0.27 units comprised of 0.1 units of vegetated garden, 0.05 units of modified grassland, 0.12 units of new trees and 0 units of building and developed land, sealed surface (no biodiversity value)

This results in **+13.59% biodiversity net gain. Mandatory 10% net gain of habitat/area units is achieved.**

Hedgerows

The baseline linear/hedgerow value of the site is 0 units, as there are no hedgerows or lines of trees present.

The post development habitat value of the site is 0.01 units, comprised of 5m of native hedgerow. **Mandatory net gain of habitat/area units is achieved.**

4.0 Recommendations to Deliver BNG

4.1 Discussion

The proposed development results in +13.59% biodiversity net gain of habitat/area units.

The hedgerow units increase from 0 to 0.01. Mandatory net gain of linear units has been achieved.

4.2 Landscaping

To maximise the biodiversity value of the site itself, the following alterations to the current landscaping proposals could be considered:

- The addition of bird boxes and bat boxes integrated into the proposed buildings (No impact to the biodiversity metric)

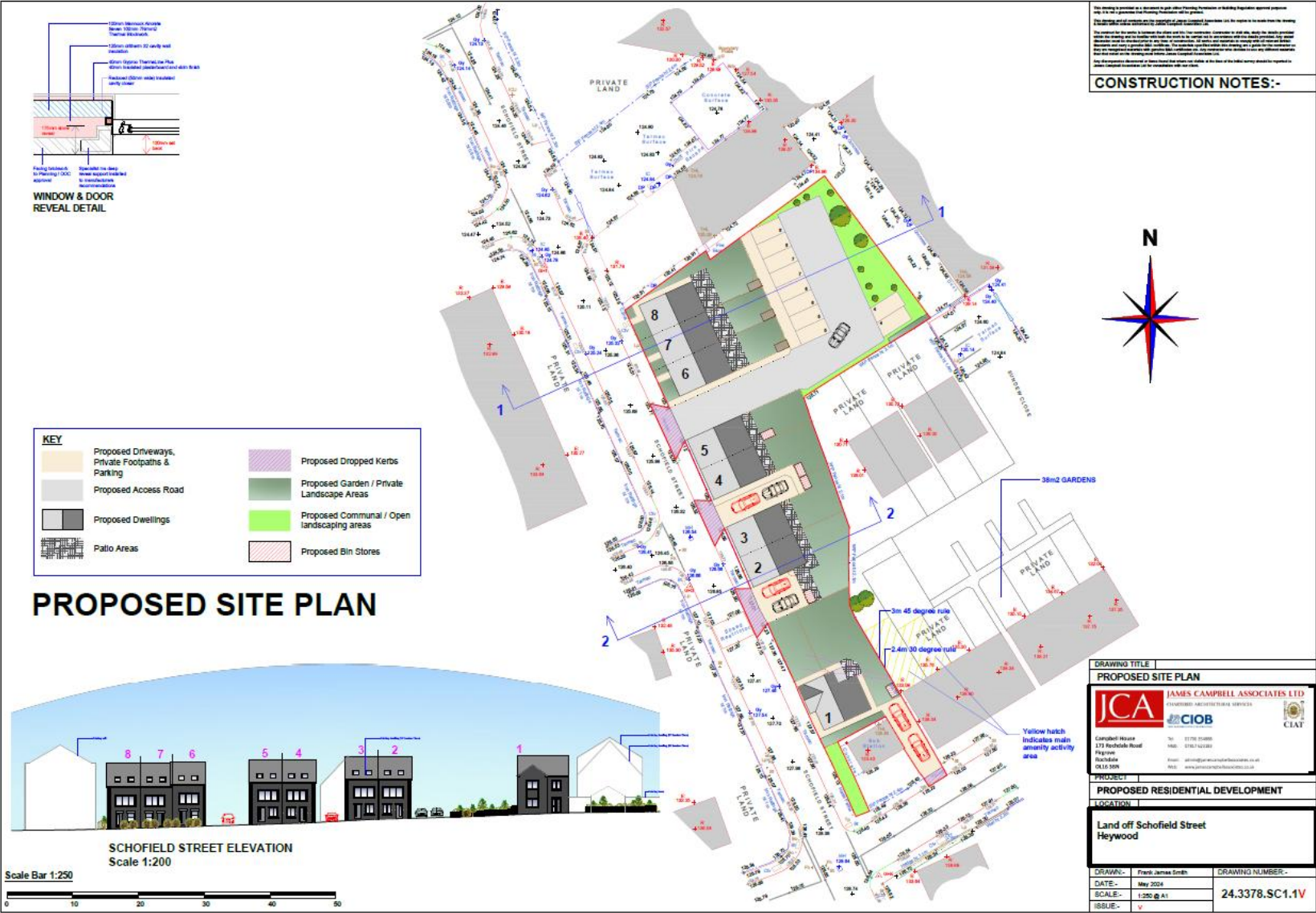
4.3 Post Development

- A Biodiversity Net Gain (BNG) Management Plan must be produced for the site. This should include recommendations for the implementation, management and monitoring of the site for at least 30 years.

5.0 Bibliography

- Arbtech (2024) Preliminary Ecological Appraisal and Preliminary Roost Assessment
- British Standard 8683:2021 (2021). Process for Designing and Implementing Biodiversity Net Gain.
- CIEEM-CIRIA-IEMA (2019) Biodiversity Net Gain – Good Practice Principles for Development.
- Joint Nature Conservation Committee (2010). Handbook for Phase 1 habitat survey a technique for environmental audit.
http://jncc.defra.gov.uk/PDF/pub10_handbookforphase1habitatsurvey.pdf
- Natural England (2023). The Statutory Biodiversity Metric (JP039).
- Natural England (2023). The Statutory Biodiversity Metric User Guide (JP039).
- Natural England (2023). The Statutory Biodiversity Metric Technical Annex 1 - Condition Assessment Sheets and Methodology (JP039).
- Natural England (2023). The Statutory Biodiversity Metric Technical Annex 2 – Technical Information (JP039).
- The UK Habitat Classification Habitat Definitions Version 2.0 (The UK Habitat Classification Working Group, July 2023)

Appendix 1: Proposed Development Plan



Appendix 2: Site Location Plan



Appendix 3: Baseline Habitat Plan



Appendix 4: Proposed Habitat Plan



Appendix 5: Metric Headline Results

FINAL RESULTS		
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	0.03
	Hedgerow units	0.01
	Watercourse units	0.00
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	13.59%
	Hedgerow units	N/A
	Watercourse units	0.00%
Trading rules satisfied?	Yes ✓	

0 baseline units - % cannot be calculated

Unit Type	Target	Baseline Units	Units Required	Unit Deficit
Habitat units	10.00%	0.24	0.26	0.00
Hedgerow units	10.00%	0.00	0.00	0.00
Watercourse units	10.00%	0.00	0.00	0.00

No additional area habitat units required to meet target ✓
No additional hedgerow units required to meet target ✓
No additional watercourse units required to meet target ✓

Appendix 6: Condition Sheets

Individual Trees

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).	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) ¹ .	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.	Y	
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	N	
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)	✓	
Passes 2 or fewer criteria	Poor (1)		

Modified Grassland

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.	✓	
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.	✓	
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).	✓	
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.		
E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens) ² .		
F	Cover of bracken <i>Pteridium aquilinum</i> is less than 20%.	✓	
G	There is an absence of invasive non-native plant species ³ (as listed on Schedule 9 of WCA ⁴).	✓	
Essential criterion achieved (Yes or No)			
Number of criteria passed			
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)		

Sparsely Vegetated Land

Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
A	The parcel is a good representation of the sparsely vegetated 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 habitat type. Indicator species for the specific sparsely vegetated habitat type listed by UKHab are consistently present.	N	
B	The cover of bracken <i>Pteridium aquilinum</i> , scrub and trees is less than 25%.	N	
C	There is an absence of invasive non-native plant species ¹ (as listed on Schedule 9 of WCA2) and species indicative of sub-optimal condition ³ make up less than 5% of vegetated ground cover.	Y	
D	Vegetation cover of vascular and non-vascular plants is between 5 and 50%.	Y	
		Essential criterion achieved (Yes or No)	
		Number of criteria passed	
Condition Assessment Result (out of 7 criteria)	Condition Assessment Score	Score Achieved ×/✓	
Passes 4 criteria	Good (3)		
Passes 3 criteria	Moderate (2)		
Passes 2 criteria	Poor (1)	✓	

Hedgerow Condition Assessment

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).		✓
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).		✓
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).	✓	
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).	✓	
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	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		✓

		· Is present on one side of the hedgerow (at least).	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.		
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.		✓
D1.	Invasive and neophyte species	>90% of the hedgerow and undisturbed ground is free of invasive non-native plant species (including those listed on Schedule 9 of WCA ³) and recently introduced species.	Recently introduced species refer to plants that have naturalised in the UK since AD 1500 (neophytes). Archaeophytes count as natives. For information on archaeophytes and neophytes see the JNCC website ⁴ , as well as the BSBI website ⁵ where the 'Online Atlas of the British and Irish Flora' ⁶ contains an up-to-date list of the status of species. For information on invasive non-native species see the GB Non-Native Secretariat website ⁷ .	✓	
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).		✓

The hedgerow condition assessment generates a weighting (score) ranging from 1 - 3, which is used within the Statutory Biodiversity Metric. The scores for each are set out in the tables below.

Condition categories for hedgerows without trees

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