

Biodiversity Net Gain Assessment

Survey site:

Land at Pound Farm, Bedford Road, Ickleford, Hitchin, North Hertfordshire, SG5 3RS

Client:

Bugler Homes Ltd

Survey date:

27th November 2025

Project:

This report is prepared to inform a planning application with the North Hertfordshire District Council.

BNG assessment methodology and legislation can be found in the Arbtech Supplement: **BNG Methodology and Legislation – 2025**.

The results and recommendations contained within this report are valid for 18 months. An updated site visit and BNG assessment may be required if the report is to be used any longer than 18 months after completion.

Version Control			
Status	Issue	Name	Date
Draft	0.1	Harry Brindle, BSc (Hons), Consultant Ecologist	27/11/2025
Final	1.0	Harry Brindle, BSc (Hons), Consultant Ecologist	12/12/2025
Updated	2.0	Harry Brindle, BSc (Hons), Consultant Ecologist	04/02/2026

Limitations and Copyright

Legal

Arbtech Consulting Limited has prepared this report for the sole use of the above-named client or their agents in accordance with our General Terms and Conditions, under which our services are performed. It is expressly stated that no other warranty, expressed or implied, is made as to the professional advice included in this report or any other services provided by us. This report may not be relied upon by any other party without the prior and express written agreement of Arbtech Consulting Limited. The conclusions and recommendations contained in this report are based upon information provided by third parties. Information obtained from third parties has not been independently verified by Arbtech Consulting Limited.

Arbtech cannot be held responsible for any project management failures, delays or unforeseen costs arising from failure to read and ensure understanding of the content with in, nor is Arbtech responsible for any adverse outcomes arising from failure to account for ecological advice given at any stage throughout the project collaboration.

© This report is the copyright of Arbtech Consulting Limited. Any unauthorised reproduction or usage by any person other than the addressee is strictly prohibited.

Site Location and Context

A baseline habitat map is provided in **Appendix 1**, a post development habitat map in **Appendix 2**, a proposed development plan in **Appendix 3**, headline BNG results in **Appendix 4**, and condition assessments in **Appendix 5**.

The survey site is centred on National Grid Reference TL 17506 31634 and has an area of approximately 20ha. The site is a large agricultural field south of Pound Farm, with the eastern boundary following the Beford Road. It is situated on the outskirts of Ickleford, north of Hitchin. There are scattered trees within the site as well as native hedgerow extending into the local garden landscape. Aerial imagery shows the local landscape to have an agricultural landscape, with several very small woodland swathes in close proximity to the site. Many minor watercourses can be seen within close proximity to site as well as the River Oughton. Such features likely enhance the area for a variety of species, including bats, amphibians and reptiles. The site is situated upon slightly acid loamy and clayey soils with impeded drainage upon the Gault Formation – mudstone.

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

- ❖ Statutory BNG Metric - Land at Pound Farm, SG5 3RD – v2 (Arbtech Consulting Ltd., 2025)
- ❖ Proposed Plan (2025)
- ❖ Preliminary Ecological Appraisal (PEA) - Land at Pound Farm, SG5 3RD – v1 (Arbtech Consulting Ltd., 2025)

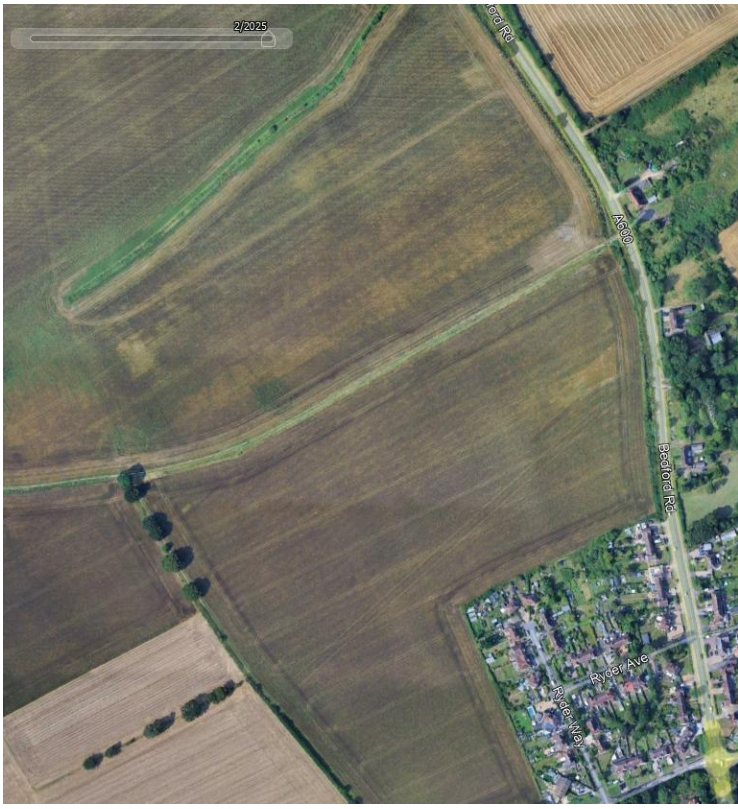
Executive Summary

The current landscaping proposal generates a net gain of area-based habitat units (+20.56%), a net gain of linear-based habitat units (+115.49%) and a net gain in watercourse units (16%). As such, the proposed development is compliant with current legislation (Environment Act 2021) and planning policies (National Planning Policy Framework, 2025) as a minimum biodiversity net gain of +10% was achieved for both area- and linear-based habitat units.

All trading conditions have been satisfied.

A Biodiversity Gain Plan (BGP) and Habitat Management and Monitoring Plan (HMMP) must be produced for the site. This should include recommendations for the implementation, management and monitoring of the site for at least 30 years to ensure that biodiversity net gain is delivered.

Introduction

BNG Informative		
Habitat Degradation Statement	Date reflected by BNG calculations	3rd November 2025
	The baseline biodiversity value of the site is derived from the site as observed during the PEA field survey (Arbtech Consulting Ltd., 2025). As evident in the screenshots of satellite imagery obtained from GoogleEarth dated June 2021 and February 2025, the site does not appear to have undergone any degradation. The habitats on site, and therefore biodiversity value of the site, is not considered to have undergone degradation since 30th January 2020.	
		

Irreplaceable Habitat Statement	No irreplaceable habitats as listed under the Biodiversity Gain Requirements (Irreplaceable Habitat) Regulations (2024) are currently present nor were present before 30 th January 2020.
Metric Version & Publication Date	Statutory Biodiversity Metric Calculation Tool first published 29 th November 2023 with last updates to metric tools and user guides on 3 rd July 2025.
BNG Target Uplift	+10%
National Character Area (NCA)	110 - Chilterns
Strategic Significance	Hertfordshire Nature Recovery Partnership and the Local Nature Recovery Strategy
Limitations	
There were no specific limitations to the assessment.	

Baseline

Baseline Biodiversity Value: On-Site

Area-Based Habitats (A-1)

Habitat	Area (ha)	Description	Condition Assessment	Strategic Significance
Artificial unvegetated, unsealed surface	0.0879	A short artificial track that runs through the centre of the site.	Habitat condition pre-determined as ' N/A ' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	Low Strategic Significance
Cereal crops	8.6167	The dominant habitat of the site is other cereal crop which makes up the entire internal area of the site other than the footpath. The crop is consistent throughout the whole site in type and length. The length was about 3 inches at the time of the survey.		
Modified grassland	1.1542	Modified grassland was observed as edges to the footpath separating the northern and southern sides of the site. This area receives a moderate amount of footfall and is used as a private access road occasionally.	Poor: Fails essential criteria A.	
Bramble scrub	0.1146	A short area of bramble scrub was present in a ten-metre gap in the native hedgerow	Habitat condition pre-determined as ' N/A ' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	
Rural tree	0.0885	Groups of trees along the eastern and southern boundary of the site comprising 12 small and 1 large tree.	Moderate: passes 3 or 4 of 6 criteria.	
Rural tree	0.0765	One extra large ash tree located within the southeast corner of the site.	Good: passes 5 of 6 criteria.	

Linear-Based Habitats (B-1)

Habitat	Length (km)	Description	Condition Assessment	Strategic Significance
Native hedgerow	0.3178	Native species dominated hedgerow along the southern boundary of the site and backing onto private garden. Native species dominated hedgerow along the eastern boundary of the site and backing onto Bedford Road.	Good: Passes 7 of 8 criteria	Low Strategic Significance
Native hedgerow with trees	0.1024	A hornbeam (<i>Carpinus betulus</i>) hedgerow along a ditch on the northern boundary of the site. Only one species was present, and it was about 2.5m tall and 1 metre wide. The hedgerow was also not very dense.	Poor: Fails two criteria within the same bracket.	

Watercourse-Based Habitats (C-1)				
Habitat	Length (km)	Description	Condition Assessment	Strategic Significance
Ditches	0.2386	A ditch that runs along the north of the site.	Poor: Passes 4 of 8 criteria	Low Strategic Significance

Post-Development

Post-Development Biodiversity Value: On-Site

Area-Based Habitats

	Habitat	Area (ha)	Description	Condition Assessment	Strategic Significance
Retained (A-1)	Rural tree	0.0774	Retained trees.	Moderate: passes 3 or 4 of 6 criteria.	Low Strategic Significance
	Rural tree	0.0765		Good: passes 5 of 6 criteria.	
Created (A-2)	Developed land; sealed surface	0.8061	Proposed buildings.	Habitat condition pre-determined as 'N/A' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	
	Developed land; sealed surface	4.0947	Proposed hardstanding around the site including roads, drive ways, and artificial turf.		
	Vegetated garden	0.8968	Proposed gardens for residential builds.		
	Sustainable drainage system	0.4151	SuDS system located around the board of the site.	Moderate: Passes 2 of 3 criteria.	
	Modified grassland	1.6852	Areas of modified grassland found throughout the site.	Moderate: Passes 5 of 7 criteria.	
	Other neutral grassland	1.2395	Areas of neutral grassland planted with wildflowers to bolster species biodiversity.	Moderate: Passes 5 of 6 criteria.	
	Mixed scrub	0.4566	Areas of native scrub planting.	Moderate: Passes 4 of 5 criteria.	
	Rain garden/shale	0.2503	Areas of shale/rain gardens around the site and SuDS areas.	Moderate: Passes 2 of 3	
	Reedbeds	0.1291	Areas of reedbed and wet forbe planting around the edges of SuDS basins.	Moderate: Passes 4 of 7	
	Urban tree	1.0342	Trees scattered throughout the site.	Poor: Passes 2 of 6 criteria.	

Linear-Based Habitats					
	Habitat	Length (km)	Description	Condition Assessment	Strategic Significance
Retained (B-1)	Native hedgerow	0.2957	Retained hedgerow.	Good: Passes 7 of 8 criteria	Low Strategic Significance
	Native hedgerow with trees	0.1024		Poor: Fails two criteria within the same bracket.	
Created (B-2)	Non-native and ornamental hedgerow	0.224	Areas of ornamental hedgerow planted within the school.	Poor: As default in the BNG statutory metric.	
	Native hedgerow with trees	0.4626	Native hedgerow planted throughout the site with incorporated trees.	Moderate: Passes 6 of 10 criteria.	
Watercourse Habitats					
	Habitat	Length (km)	Description	Condition Assessment	Strategic Significance
Enhanced (B-1)	Ditches	0.2386	The ditch will be retained and naturally enhanced through the creation of the scrub and wet zone, creating a more natural riparian zone.	Poor: Passes 4 of 8 criteria	Low Strategic Significance

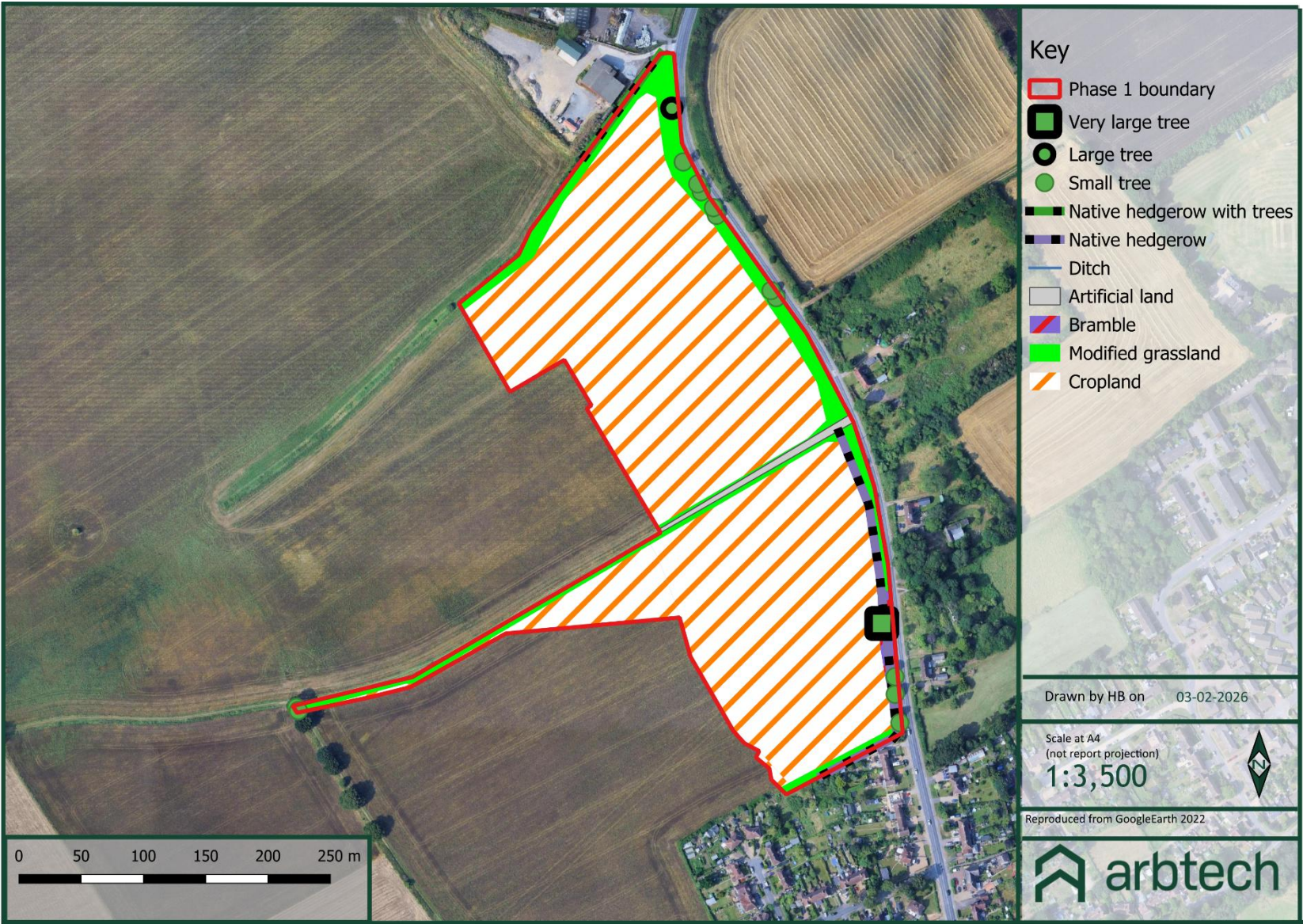
Change of Biodiversity Value

		Biodiversity Units		
		Area-Based	Linear-Based	Watercourse-Based
On-Site	Baseline	21.63 units	2.32 units	0.72 units
	Post-Development	26.07 units	4.99 units	0.83 units
	Net Change	4.45 units (+20.56%)	2.68 units (+115.49%)	0.11 units (+16%)
Off-Site	Baseline	N/A	N/A	N/A
	Post-Development	N/A	N/A	N/A
	Net Change	N/A	N/A	N/A
Overall Net Change		4.45 units (+20.56%)	2.68 units (+115.49%)	0.11 units (+16%)

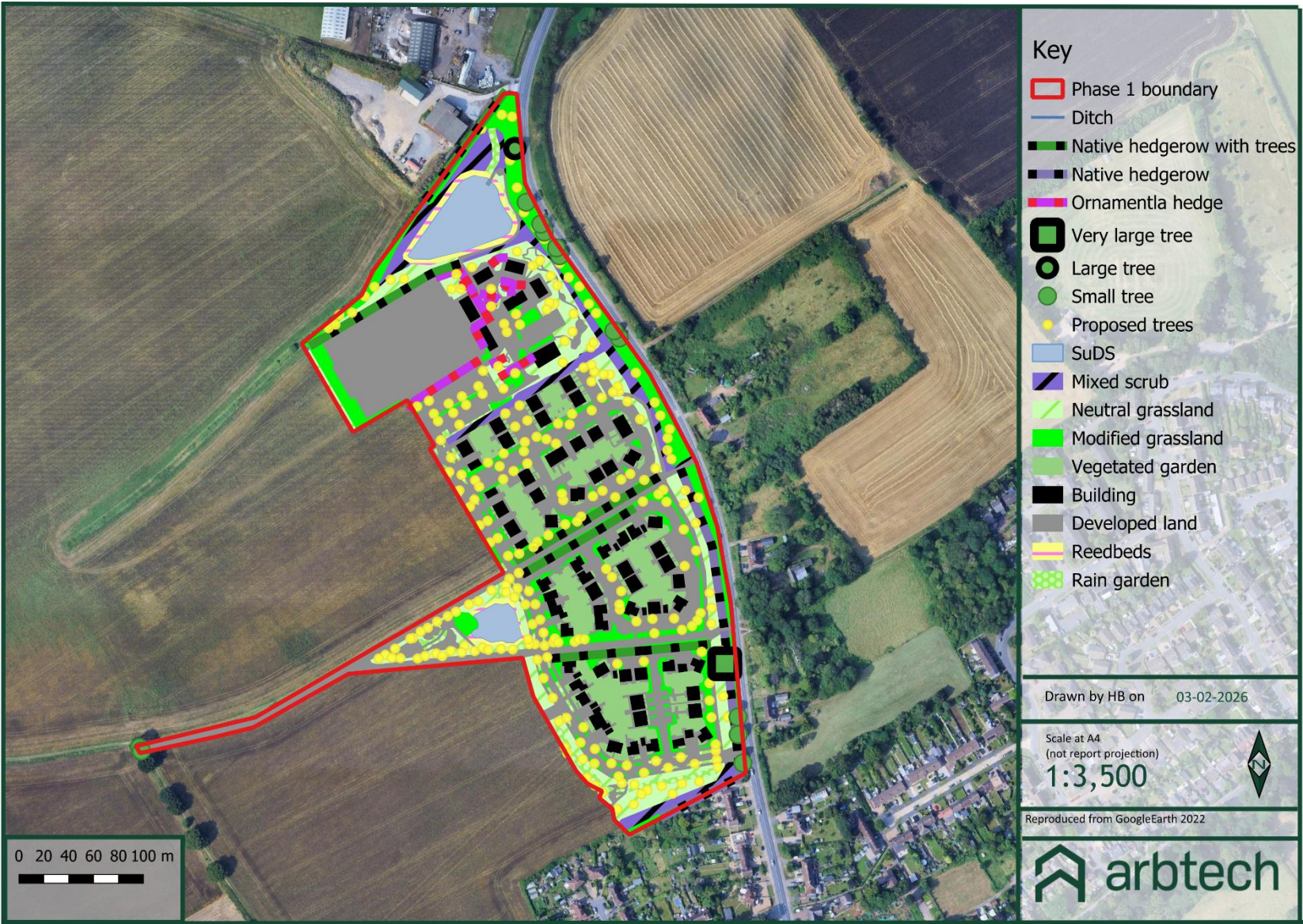
Results, Discussion, and Next Steps

BNG Informative	
Results and Next Steps	The current landscaping proposal generates a net gain of area-based habitat units (+20.56%), a net gain of linear-based habitat units (+115.49%) and a net gain in watercourse units (16%). As such, the proposed development is compliant with current legislation (Environment Act 2021) and planning policies (National Planning Policy Framework, 2025) as a minimum biodiversity net gain of +10% was achieved for both area- and linear-based habitat units. All trading conditions have been satisfied. A Biodiversity Gain Plan (BGP) and Habitat Management and Monitoring Plan (HMMP) must be produced for the site. This should include recommendations for the implementation, management and monitoring of the site for at least 30 years to ensure that biodiversity net gain is delivered.

Appendix 1: Baseline Habitat Plan



Appendix 2: Post-Development Habitat Plan



Appendix 3: Proposed Development Plan





Appendix 4: Headline BNG Results

The Defra Statutory Biodiversity Metric is provided as a separate excel spreadsheet.

FINAL RESULTS				
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)			Area habitat units	4.45
			Hedgerow units	2.68
			Watercourse units	0.11
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)			Area habitat units	20.56%
			Hedgerow units	115.49%
			Watercourse units	16.00%
Trading rules satisfied?			Yes ✓	
Unit Type	Target	Baseline Units	Units Required	Unit Deficit
Area habitat units	10.00%	21.63	23.79	0.00
Hedgerow units	10.00%	2.32	2.55	0.00
Watercourse units	10.00%	0.72	0.79	0.00

Appendix 5a: Baseline Habitat Condition Assessment Sheets

Condition Sheet: GRASSLAND Habitat Type (low distinctiveness)			
Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
	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	
A	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.	yes	
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	
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	
E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens) ² .	yes	
F	Cover of bracken <i>Pteridium aquilinum</i> is less than 20%.	yes	
G	There is an absence of invasive non-native plant species ³ (as listed on Schedule 9 of WCA ⁴).	yes	
Essential criterion achieved (Yes or No)			
Number of criteria passed			
Condition Assessment Result (out of 7 criteria)	Condition Assessment Score	Score Achieved */✓	
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)	Yes	

Condition Sheet: INDIVIDUAL TREES Habitat Type

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	
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	
C	The tree is mature (or more than 50% within the block are mature) ¹ .	yes	
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.	yes	
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	no	
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	yes	
Number of criteria passed			
Condition Assessment Result (out of 6 criteria)		Condition Assessment Score	Score Achieved x/✓
Passes 5 or 6 criteria		Good (3)	yes
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.			

Condition Sheet: INDIVIDUAL TREES Habitat Type

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	
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	
C	The tree is mature (or more than 50% within the block are mature) ¹ .	no	
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.	yes	
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	no	
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	yes	
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)	yes
Passes 2 or fewer criteria		Poor (1)	
Note that 'Fairly Good and Fairly Poor' condition categories are not available for this broad habitat type.			

Condition Sheet: DITCH Habitat Type

Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
A	The ditch is of good water quality, with clear water (low turbidity) indicating no obvious signs of pollution.	no	
B	A range of emergent, submerged and floating-leaved plants are present. As a guide >10 species of emergent, floating or submerged plants present in a 20 m ditch length.	no	
C	There is less than 10% cover of filamentous algae and or duckweed <i>Lemna</i> spp. (these are signs of eutrophication).	yes	
D	A fringe of aquatic marginal vegetation is present along more than 75% of the ditch.	no	
E	Physical damage is evident along less than 5% of the ditch, with examples of damage including: excessive poaching, damage from machinery use or storage, or any other damaging management activities.	yes	
F	Sufficient water levels are maintained - as a guide a minimum summer depth of approximately 50 cm in minor ditches and 1 m in main drains.	no	
G	Less than 10% of the ditch is heavily shaded.	yes	
H	There is an absence of non-native plant and animal species ¹ .	yes	
Number of criteria passed			
Condition Assessment Result (out of 8 criteria)	Condition Assessment Score	Score Achieved x/✓	
Passes 8 criteria	Good (3)		
Passes 6 or 7 criteria	Moderate (2)		
Passes 5 or fewer criteria	Poor (1)	yes	

Condition sheet: HEDGEROW Habitat Types

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	
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	
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	
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	
C1.	Undisturbed ground and perennial vegetation	>1m 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 1m 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	
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.	yes	
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 ⁷) 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 ⁸ , as well as the BSBI website ⁹ 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	
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	

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 Does not fail both attributes 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 Fails both attributes in more than one functional group (for example, fails attributes A1, A2, B1 and B2 = Poor condition).	1
Score achieved:		Good

Condition sheet: HEDGEROW Habitat Types

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	
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>Rhus 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	
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	
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).	no	
C1. Undisturbed ground and perennial vegetation	>1m 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 1m 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.	yes	
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.	yes	
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 ⁶) 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 ⁵ , as well as the BSBi website ⁶ 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	
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	

Additional group – applicable to hedgerows with trees only				
E1. Tree class	There is more than one age-class (or morphology) of tree present (for example: young, mature, veteran and or ancient ⁸), and there is on average at least one mature, ancient or veteran tree present per 20 – 50m of hedgerow.	This criterion addresses if there are a range of age-classes or morphologies which allow for replacement of trees and provide opportunities for different species.	no	
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.	yes	

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

Appendix 5b: Post-Development Habitat Condition Assessment Sheets

Condition Sheet: GRASSLAND Habitat Type (low distinctiveness)			
Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
	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	
A	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.		
	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	
B			
	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	
C			
	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	
D			
	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens) ² .	no	
E			
	Cover of bracken <i>Pteridium aquilinum</i> is less than 20%.	yes	
F			
	There is an absence of invasive non-native plant species ³ (as listed on Schedule 9 of WCA ⁴).	yes	
G			
Essential criterion achieved (Yes or No)			
Number of criteria passed			
Condition Assessment Result (out of 7 criteria)	Condition Assessment Score	Score Achieved x/7	
Passes 6 or 7 criteria including passing essential criterion A	Good (3)		
Passes 4 or 5 criteria including passing essential criterion A	Moderate (2)	yes	
Passes 3 or fewer criteria; OR Passes 4 - 6 criteria (excluding criterion A)	Poor (1)		

Condition Sheet: GRASSLAND Habitat Type (medium, high and very high distinctiveness)		
Condition Assessment Criteria	Criterion passed (Yes or No)	Notes (such as justification)
A The parcel represents a good example of its habitat type, with a consistently high proportion of characteristic indicator species present relevant to the specific habitat type (and relative to Footnote 3 suboptimal species which may be listed in the UKHab description).¹ Note - this criterion is essential for achieving Moderate or Good condition for non-acid grassland types only.	yes	
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.	yes	
C Cover of bare ground is between 1% and 5%, including localised areas, for example, rabbit warrens².	yes	
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%.	yes	
E Combined cover of species indicative of suboptimal condition³ 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 species⁴ (as listed on Schedule 9 of WCA⁵) are present, this criterion is automatically failed.	yes	
Additional Criterion - must be assessed for all non-acid grassland types		
F There are 10 or more vascular plant species per m² present, including forbs that are characteristic of the habitat type (species referenced in Footnote 3 and 5 cannot contribute towards this count). Note - this criterion is essential for achieving Good condition for non-acid grassland types only.	no	
Essential criterion for Good condition achieved (for non-acid grassland) (Yes or No)		
Number of criteria passed		
Condition Assessment Result	Condition Assessment Score	Score Achieved x/4
Acid grassland types (Result out of 5 criteria)		
Passes 5 criteria	Good (3)	
Passes 3 or 4 criteria	Moderate (2)	
Passes 2 or fewer criteria	Poor (1)	
Non-acid grassland types (Result out of 6 criteria)		
Passes 5 or 6 criteria, including essential criterion A and additional criterion F.	Good (3)	
Passes 3 - 5 criteria, including essential criterion A.	Moderate (2)	Yes

Condition Sheet: INDIVIDUAL TREES Habitat Type

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	
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	
C	The tree is mature (or more than 50% within the block are mature) ¹ .	no	
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.	yes	
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	no	
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	yes	
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)	yes
Passes 2 or fewer criteria		Poor (1)	
Note that 'Fairly Good and Fairly Poor' condition categories are not available for this broad habitat type.			

Condition Sheet: POND Habitat Type			
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	
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	
C	Less than 10% of the water surface is covered with duckweed <i>Lemna</i> spp. or filamentous algae.	no	
D	The pond is not artificially connected to other waterbodies, such as agricultural ditches or artificial pipework.	yes	
E	Pond water levels can fluctuate naturally throughout the year. No obvious artificial dams ² , pumps or pipework.	yes	
F	There is an absence of listed non-native plant and animal species ³ .	yes	
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	
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.		
I	The pond surface is no more than 50% shaded by adjacent trees and scrub.		
Number of criteria passed			
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)	yes
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)	
Passes 5 or fewer criteria		Poor (1)	

Condition Sheet: SCRUB Habitat Type			
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	
B	Seedlings, saplings, young shrubs and mature (or ancient or veteran ³) shrubs are all present.	no	
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	
D	The scrub has a well-developed edge with scattered scrub and tall grassland and or forbs present between the scrub and adjacent habitat.	yes	
E	There are clearings, glades or rides present within the scrub, providing sheltered edges.	yes	
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)	yes
Passes 2 or fewer criteria		Poor (1)	

Condition sheet: HEDGEROW Habitat Types

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	>1.5m 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 >1.5m height).	no	
A2. Width	>1.5m 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>Rhus spinoza</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	
B1. Gap – hedge base	Gap between ground and base of canopy <0.5m 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	
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).	no	
C1. Undisturbed ground and perennial vegetation	>1m 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 1m 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.	yes	
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.	yes	
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) 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, as well as the BSB website 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.	yes	
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	

Additional group – applicable to hedgerows with trees only				
E1.	Tree class	There is more than one age-class (or morphology) of tree present (for example: young, mature, veteran and/or ancient ¹), 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.	no
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.	yes
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 Does not fail both attributes 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 Fails both attributes in more than one functional group (for example, fails attributes A1, A2, B1 and B2 = Poor condition).	1		
Score achieved:				
Condition categories for hedgerows with trees				
Category	Category Requirements	Metric score		
Good	No more than 2 failures in total; AND No more than 1 failure in any functional group.	3		
Moderate	No more than 5 failures in total; AND Does not fail both attributes in more than one functional group (for example, fails attributes A1, A2, B1, C2 and E1= Moderate condition).	2		
Poor	Fails a total of more than 5 attributes; OR Fails both attributes in more than one functional group (for example, fails attributes A1, A2, B1 and B2 = Poor condition).	1		
Score achieved: Moderate				

Condition Sheet: WETLAND Habitat Type			
Core Criteria – must be assessed for all wetland habitat types:			
A	The water table is at, or near the surface throughout the year – this could be open water or saturation of soil at the surface. There is no artificial drainage, unless specifically to maintain water levels as specified above. Note – this criterion is essential for achieving Good condition.	Yes	
B	The parcel represents a good example of its specific habitat type – the appearance and composition of the vegetation closely matches its UKHab description, with vascular and non-vascular characteristic indicator species consistently present. ¹	yes	
C	The water supplies (groundwater, surface water and or rainwater) to the wetland are of good water quality, with clear water (low turbidity) indicating no obvious signs of pollution.	no	
D	Cover of scrub and scattered trees are less than 10%.	no	
E	Cover of bare ground is less than 5%.	yes	
F	There is an absence of invasive non-native plant species ² (as listed on Schedule 3 of WCA ³) and species indicative of suboptimal condition ⁴ make up less than 5% of ground cover.	yes	
Additional Criterion – must be assessed for Fen and Purple moor grass and rush pasture habitats only:			
G	No more than 25% of the habitat area has a continuous cover of litter (such as dead vegetation) preventing regeneration.		
Additional Criterion – must be assessed for Bog habitats only:			
H	Sphagnum moss <i>Sphagnum</i> spp. and cottongrasses <i>Eriophorum</i> spp. are at least Frequent ⁵ . Cover of ericaceous dwarf shrubs ⁶ is less than 75%.		
Additional Criterion – must be assessed for Reedbed habitats only:			
I	The reedbed has a diverse structure with between 60% and 80% reeds <i>Phragmites australis</i> . Other areas may include open water (at least 10%), species-rich fen and or wet woodland.	yes	
Additional Criterion – must be assessed for Floodplain wetland mosaic and CFGM only:			
J	All ditches recorded within the habitat achieve Good condition as assessed using the Ditch condition sheet.		
Essential criterion achieved (required for Good condition) Yes or No:			
Number of criteria passed			
Condition Assessment Result	Condition Assessment Score	Score Achieved x1/4	
Results for habitats requiring assessment of 6 criteria (Depression on peat substrates (H7150) and Oceanic valley mire [1] (D2.1)):			
+Passes 5 or 6 core criteria, including criterion A.	Good (3)		
+Passes 3 or 4 core criteria; OR +Passes 5 core criteria but fails criterion A.	Moderate (2)		
+Passes 2 or fewer core criteria.	Poor (1)		
Results for habitats requiring assessment of 7 criteria – core criteria and additional criterion specified for habitat type – all habitat types except Depression on peat substrates (H7150) and Oceanic valley mire [1] (D2.1).			
+Passes 5 or 6 core criteria including criterion A; AND +Passes additional criterion G, H, I or J (choose the one specified for the habitat type).	Good (3)		
+Passes 4 or 5 of 7 criteria; OR +Passes 6 of 7 criteria but fails criterion A or additional criterion G, H, I or J (choose the one specified for the habitat type).	Moderate (2)	yes	
+Passes 3 or fewer criteria.	Poor (1)		