

Biodiversity Net Gain Assessment

Site Address:

Land off Archway Road, Huyton, Merseyside L36 9XD

Client:

Genr8 Kajima Regeneration (Huyton) Limited

Assessment Date:

11th February 2026

Project:

This report is prepared to inform a planning application with the Liverpool City Council. The proposal is described as:

Detailed application for the erection of a new Council Headquarters, hotel, public realm change of use of Cavendish Walk to flexible Class E and/or F1 uses, site-wide enabling and associated works following demolition of existing buildings. Outline application comprising details of access, with all other matters reserved for a mixed-use development comprising residential (Classes C2 and C3) uses, commercial and community uses (Classes E and F1), replacement car parking provision at Lathom Road, public realm and associated works, with provision for meanwhile uses.

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	Kat Aburrow BSc, Consultant Ecologist	21/08/2025
Proof	0.2	Craig Williams BSC (Hons), MSc, DIC, MRSB, Technical Manager (Ecology)	21/08/2025
Final	1.0	Kat Aburrow BSc, Consultant Ecologist	21/08/2025
Amended	1.1	Kat Aburrow BSc, Consultant Ecologist	10/10/2025
Amended	2.0	Anna Dolby, BSc (Hons), Consultant Ecologist	11/02/2026
Amended	2.1	Anna Dolby, BSc (Hons), Consultant Ecologist	02/04/2026
Amended	2.2	Paige Robertson, BSc (Hons), Graduate Ecologist	29/07/2026

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.

Genr8 Kajima Regeneration (Huyton) Limited

Land off Archway Road, Huyton, Merseyside L36 9XD

© 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 SJ 44183 90863 and has an area of approximately 2.8ha.

The site comprises multiple buildings (B1-5), associated hardstanding and landscaping including grassland, ornamental shrubs, tree lines and hedgerows. The site is adjacent to Huyton Village Shopping Centre to the south, within the town of Huyton. The surrounding landscape is comprised of urban development including tarmacked roads subject to heavy traffic, urban buildings and residential dwellings with associated vegetated gardens. There are amenity green spaces including that associated with Lord Derby Academy situated ~400m east and Bowring Park and Golf Course situated ~800m west.

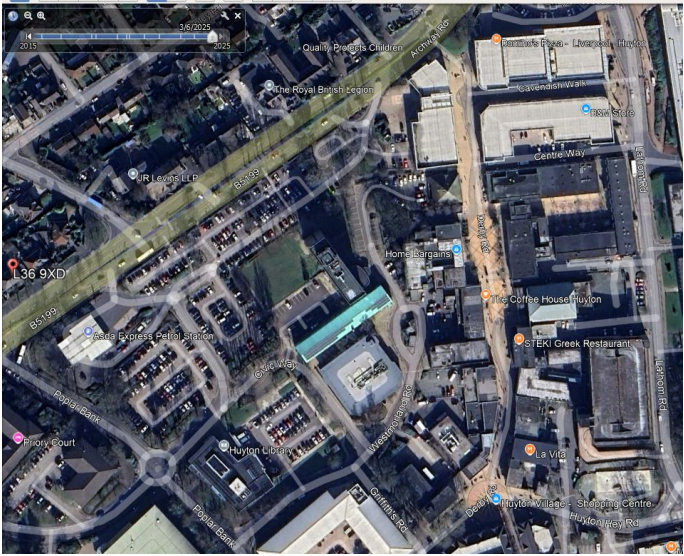
This report should be read in conjunction with the following documents:

- ❖ Statutory BNG Metric – Land of Archway Road, L36 9XD – V4 (Arbtech Consulting Ltd., 2026)
- ❖ Proposed Plan (Lucid Design Studio, 2026)
- ❖ Preliminary Ecological Appraisal (PEA) Land of Archway Road, L36 9XD – V1 (Arbtech Consulting Ltd., 2026)
- ❖ Tree Survey Report - Land of Archway Road, L36 9XD – V1 (Arbtech Consulting Ltd., 2025 and 2026)

Executive Summary

- ❖ The current landscaping proposal generates a net gain of area-based habitat units (-14.27%) and a net gain of linear-based habitat units (+38.00%) with unmet trading rules.
- ❖ In order to achieve a +10% biodiversity net gain for area-based habitats, a minimum area-based unit score of 25.37 will need to be achieved. At present, there is a unit deficit of **5.60** units. These units must be of individual trees to satisfy trading rules.
- ❖ 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 calculations4th February 2026 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 25th June 2018 (left) and 6th June 2025 (right), 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 30th January 2020.
	Metric Version & Publication Date Statutory Biodiversity Metric Calculation Tool first published 29th November 2023 with last updates to metric tools and user guides on 3rd July 2025.

BNG Target Uplift	+10%		
National Character Area (NCA)	58 – Merseyside Conurbation		
Strategic Significance	Draft Liverpool Local Nature Recovery Strategy - https://www.liverpoolcityregion-ca.gov.uk/local-nature-recovery-strategy		
	Habitat	Baseline / Post-Development	Justification
	Mixed scrub	Post-development	Moderate Strategic Significance Within Pre-consultation measures of the Draft LNRS.
	Biodiverse green roof	Post-development	Moderate Strategic Significance Within Pre-consultation measures of the Draft LNRS.
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
Sealed surface	3.27536	All buildings and hardstanding across the entire site.	Habitat condition pre-determined as ' N/A - Other ' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	Low Strategic Significance
Modified Grassland	0.31592	Areas of poor condition modified grassland across the site.	Poor: passes 3 of 7 criteria excluding essential criterion A. Assessed using the 'Grasslands Low Distinctiveness' habitat type condition sheet.	Low Strategic Significance
Bramble scrub	0.02224	Area of bramble scrub along the western boundary.	Habitat condition pre-determined as ' Condition assessment - N/A ' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	Low Strategic Significance
Introduced shrub	0.16793	Areas of introduced shrub across the site.	Habitat condition pre-determined as ' N/A ' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	Low Strategic Significance
Urban Tree	2.7514	212 moderate condition urban trees across the site of varying species (further details are available in the Tree survey report and PEA report, Arbtech 2026).	Moderate: passes 3 or 4 of 6 criteria. Assessed using the 'Individual Trees' habitat type condition sheet.	Low Strategic Significance

Baseline Biodiversity Value: On-Site				
Linear-Based Habitats (B-1)				
Habitat	Length (km)	Description	Condition Assessment	Strategic Significance
Native hedgerow	0.275	Native hedgerows are present across the site (further details are available in the Tree survey report and PEA report, Arbtech 2025).	Moderate: metric score 2 Assessed using the 'Hedgerows' habitat type condition sheet.	Low Strategic Significance
Non-native hedgerow	0.062	Non-native hedgerow predominantly ornamental species are present within the site boundary (further details are available in the Tree survey report and PEA report, Arbtech 2025). Non-native hedgerow within areas of introduced shrub have been included as introduced shrub.	Habitat condition pre-determined as ' Poor ' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	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)	Sealed surface	0.09526	Areas of retained buildings across the site.	Habitat condition pre-determined as ' N/A - Other ' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	Low Strategic Significance
	Modified grassland	0.03702	An area of modified grassland will be retained towards the centre of the site.	Poor: passes 3 of 7 criteria excluding essential criterion A. Assessed using the 'Grasslands Low Distinctiveness' habitat type condition sheet.	Low Strategic Significance
	Urban tree	1.8191	Urban trees retained across the site: 37 small trees, 82 medium trees, 7 large trees and 1 very large tree.	Moderate: passes 3 or 4 of 6 criteria. Assessed using the 'Individual Trees' habitat type condition sheet.	Low Strategic Significance
Created (A-2)	Other neutral grassland	0.06149	Wildflower meadow created in the northwestern corner	Moderate: anticipated to score 5 out of 6 criteria Assessed using the 'Grasslands Med, High and V. High Distinctiveness' habitat type condition sheet.	Low Strategic Significance

	Biodiverse green roof	0.113	Sections of green roof will be planted along the roof of each created building. This will include wildflower planting.	Moderate: passes 3 of 4 criteria. Assessed using the 'Urban' habitat type condition sheet.	Moderate Strategic Significance
	Rain garden	0.18438	Rain gardens will be created across the sites near areas of amenity grassland.	Moderate: anticipated to score 3 out of 5 criteria Assessed using the 'Urban' habitat type condition sheet.	Low Strategic Significance
	Modified grassland	0.1296	Areas of amenity lawn will be created across the site.	Poor: anticipated to score 4 out of 7 criteria Assessed using the 'Urban' habitat type condition sheet.	Low Strategic Significance
	Introduced shrubs	0.49239	Areas of ornamental planting will be included around the site; this will include non-native species.	Habitat condition pre-determined as ' N/A - Other ' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	Low Strategic Significance
	Sealed surface	2.65552	New buildings and associated hardstanding for the development.	Habitat condition pre-determined as ' N/A - Other ' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	Low Strategic Significance
	Urban tree	0.7044	173 small urban trees will be planted across the site	Moderate: anticipated to pass 4 of 6 criteria. Assessed using the 'Individual Trees' habitat type condition sheet.	Low Strategic Significance
Enhanced (A-3)	Mixed scrub	0.02224	Area of bramble scrub will be enhanced to mixed scrub.	Moderate: anticipated to pass 3 of 5 criteria Assessed using the 'Scrub' habitat type condition sheet.	Low Strategic Significance

Post-Development Biodiversity Value: On-Site**Linear-Based Habitats**

	Habitat	Length (km)	Description	Condition Assessment	Strategic Significance
Retained (B-1)	Native hedgerow	0.152	Native hedgerows will be retained within the site boundary.	Moderate: metric score 2	Low Strategic Significance
	Non-native hedgerow	0.055	Areas of non-native hedgerow will be retained across the site.	Habitat condition pre-determined as ' Poor ' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	Low Strategic Significance
Created (B-2)	Native hedgerow	0.281	New hedgerow will be planted across the site and likely subject to frequent management.	Moderate: metric score 2	Low Strategic Significance

Change of Biodiversity Value

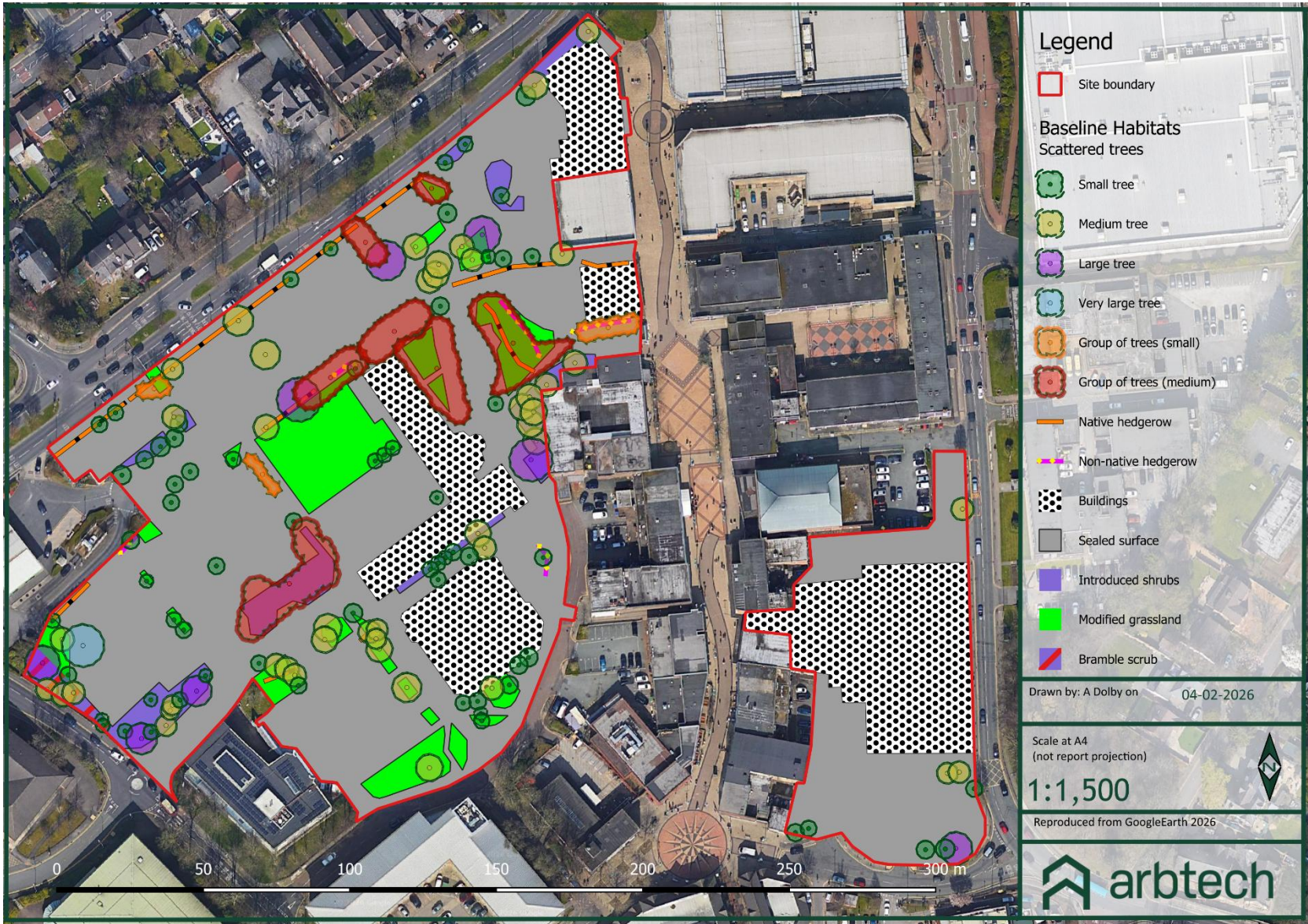
		Biodiversity Units		
		Area-Based	Linear-Based	Watercourse-Based
On-Site	Baseline	23.07	1.16	N/A
	Post-Development	19.78	1.60	
	Net Change	-3.29	0.44	
Overall Net Change		-14.27%	+38.00%	

Results, Discussion, and Next Steps

BNG Informative														
Results	The current landscaping proposal generates a net gain of area-based habitat units (-14.27%) and a net gain of linear-based habitat units (+38.00%) with unmet trading rules. In line with the Statutory Biodiversity Metric User Guide (2024), any loss of a habitat must be replaced on a like-for-like or like-for-better principle. At present, trading conditions are not satisfied for the loss of 54no. urban trees (medium distinctiveness). With unmet trading conditions and a net loss, the proposal fails principal Rules 1 and 2 of BNG and is not compliant with current legislation (Environment Act 2021) and planning policies (National Planning Policy Framework, 2024; Liverpool Local Plan 2013 - 2033). In order to achieve a +10% biodiversity net gain for area-based habitats, a minimum area-based unit score of 18.49 will need to be achieved. At present, there is a unit deficit of 5.60 units. These units must be of individual trees to satisfy trading rules.													
Recommendations and Next Steps	Based on the proposed plans, it is unlikely that net gain will be achieved by ways of further habitat creation/enhancement without significant changes to the proposals on site or require unfeasible commitments off-site. As such, a financial contribution to off-site ecological enhancements (i.e. purchasing biodiversity units) within an approved scheme is required to make up the +10% net gain for area-based habitat units. The mechanism for securing this off-setting will need to be proposed to and confirmed by the LPA and would be linked to the application through a planning obligation Section 106 (s106) agreement. The proposed habitat compensation must be of an appropriate distinctiveness to meet the trading rules of BNG. A summary as to what off-site units will be required is detailed in the table below. <table><tr><th></th><th>Distinctiveness</th><th>Broad Habitat Group</th><th>Habitat</th><th>Units Required</th></tr><tr><td>Area-Based</td><td>Medium</td><td>Individual Trees</td><td>Urban Tree</td><td>5.30</td></tr></table>					Distinctiveness	Broad Habitat Group	Habitat	Units Required	Area-Based	Medium	Individual Trees	Urban Tree	5.30
	Distinctiveness	Broad Habitat Group	Habitat	Units Required										
Area-Based	Medium	Individual Trees	Urban Tree	5.30										

			Any	0.30	
			Total	5.60	
Pre-Commencement	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. These additional requirements can only be actioned following the finalisation of the BNG assessment – be it on-site or off-site net gains sought.				
BNG Mitigation Hierarchy					
Avoidance	127 urban trees and native hedgerows are being retained where possible.				
Minimisation					
Mitigation	Extensive tree planting; enhancements to existing bramble scrub; and the creation of a wildflower meadow.				
Offset	A5.30 units for individual trees will need to be purchased in offsite credits.				

Appendix 1: Baseline Habitat Plan



Appendix 2: Post-Development Habitat Plan



Appendix 3: Proposed Development Plan



Appendix 4: Headline BNG Results

FINAL RESULTS				
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	-3.29		
	Hedgerow units	0.44		
	Watercourse units	0.00		
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	-14.27%	Total net gain achieved is less than target set ▲	
	Hedgerow units	38.00%		
	Watercourse units	0.00%		
Trading rules satisfied?	No - Check Trading Summaries ▲			
Unit Type	Target	Baseline Units	Units Required	Unit Deficit
Habitat units	10.00%	23.07	25.37	5.60
Hedgerow units	10.00%	1.16	1.28	0.00
Watercourse units	10.00%	0.00	0.00	0.00
				No additional hedgerow units required to meet target ✓
				No additional watercourse units required to meet target ✓
Input errors/rule breaks present in metric ▲				

Appendix 5a: Baseline Habitat Condition Assessment Sheets

Urban Trees; assessed using 'Individual Trees' habitat type condition sheet:

Condition Assessment Criteria		Condition Achieved (Y/N)	Notes/Justification
A	The tree is a native species (or more than 70% within the block are native species).	N	Less than 70% of trees on site are native (1no. native, 1no. non-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).	Y	Trees are individual trees and thus automatically pass this criterion.
C	The tree is mature (or more than 50% within the block are mature).	Y	Mostly mature trees on site.
D	There is little or no evidence of an adverse impact on tree health by anthropogenic activities such as vandalism or herbicide use. There is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.	Y	Little to no evidence of adverse anthropogenic impacts; all trees have retained >75% of their expected canopy.
E	Natural Ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	Y	Knot holes and ivy present on trees
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	N	Less than 20% of the tree canopy area has vegetation underneath.
Number of criteria passed			4
Condition Assessment Result		Condition Assessment Score	Score Achieved ✓
Passes 5 or 6 of 6 criteria		Good (3)	
Passes 3 or 4 of 6 criteria		Moderate (2)	✓
Passes 0, 1 or 2 of 6 criteria		Poor (1)	

Modified Grassland; assessed using 'Grasslands Low Distinctiveness' habitat type condition sheet:

Condition Assessment Criteria:		Condition passed (Yes or No)	Notes/Justification
A	There must be 6-8 vascular plant species per m ² , including at least 2 forbs. Note – this criterion is essential for achieving moderate condition.	N	Fewer than 6 vascular plant species per m ² .
B	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for vertebrates and invertebrates to live and breed.	N	Sward height is uniform
C	Some scattered scrub (including bramble) may be present, but scrub accounts for less than 20% of total grassland area. Note - patches of shrubs with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.	Y	No scattered scrub present (less than 20% coverage).
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.	N	Physical damage present in more than 5% of total grassland area.
E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens).	Y	Bare ground cover between 1% and 10%.
F	Cover of bracken less than 20%.	Y	No bracken observed (less than 20% coverage).
G	There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981).	Y	Absence of invasive species.
Essential criterion achieved (Y/N)			N
Number of criteria passed			4
Condition Assessment Result		Condition Assessment Score	Score Achieved ✓
Passes 6 or 7 of 7 criteria including passing essential criterion A		Good (3)	
Passes 4 or 5 of 7 criteria including passing essential criterion A		Moderate (2)	
Passes 0, 1, 2 or 3 of 7 criteria; OR 4, 5 or 6 of criteria but failing criterion A		Poor (1)	✓

Hedgerow assessed using 'Hedgerow' habitat type condition sheet:

Hedgerow favourable condition attributes				
Attributes and functional groupings (A, B, C, D & E)	Criteria (the minimum requirements for 'favourable condition')	Description	Criterion passed (Yes or No)	Notes/Justification
A1. Height	>1.5 m average along length	The average height of woody growth estimated from base of stem to the top of shoots, excluding any bank beneath the hedgerow, any gaps or isolated trees. Newly laid or coppiced hedgerows are indicative of good management and pass this criterion for up to a maximum of four years (if undertaken according to good practice). A newly planted hedgerow does not pass this criterion (unless it is > 1.5 m height).	Y	Hedgerow averages >1.5m in 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 (e.g. blackthorn suckers) are only included in the width estimate when they >0.5 m in height. Laid, coppiced, cut and newly planted hedgerows are indicative of good management and pass this criterion for up to a maximum of four years (if undertaken according to good practice).	N	Hedgerow averages <1.5m in width.
B1. Gap – hedge base	Gap between ground and base of canopy <0.5 m for >90% of length	This is the vertical 'gappiness' of the woody component of the hedgerow, and its distance from the ground to the lowest leafy growth. Certain exceptions to this criterion are acceptable (see page 65 of the Hedgerow Survey Handbook).	Y	Gap between ground and base of canopy is <0.5m for more than 10% of length.

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).	N	Gaps make up >10% of total length; with canopy gaps >5m.
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 hedge (at least)	This is the level of disturbance (excluding wildlife disturbance) at the base of the hedge. Undisturbed ground should be 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 hedge. This criterion recognises the value of the hedge base as a boundary habitat with the capacity to support a wide range of species. Cultivation, heavily trodden footpaths, poached ground etc. can limit available habitat niches.	Y	<1m width of undisturbed ground with perennial herbaceous vegetation for >90% of length.
C2.	Undesirable 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, should not exceed the 20% cover threshold.	Y	Plant species indicative of nutrient enrichment of soils dominate <20% cover.
D1.	Invasive and neophyte species	>90% of the hedgerow and undisturbed ground is free of invasive non-native and recently introduced species	Recently introduced species refer to plant that have naturalised in the UK since AD 1500 (neophytes). Archaeophytes count as natives.	Y	No invasives observed.
D2.	Current damage	>90% of the hedgerow or undisturbed ground is free of damage caused by human activities	This criterion addresses damaging activities that may have led to or lead to deterioration in other attributes. This could include evidence of pollution, piles of manure or rubble, or inappropriate management practices (e.g. excessive hedge cutting).	N	<90% of hedgerow and understorey is free of damage caused by human activities.
Condition categories for hedgerows with trees					

Category	Maximum number of attributes that can fail to meet 'favourable condition' criteria in Table TS1-2	Weighting (score)	
Good	No more than 2 failures in total AND No more than 1 failure in any functional group	3	
Moderate	No more than 5 failures in total AND <u>Does not fail both attributes</u> in more than one functional group (e.g., fails attributes A1, A2, B1, C2, and E1 = moderate condition)	2	
Poor	Fails a total of more than 5 attributes OR <u>Fails both attributes</u> in more than one functional group (e.g. fails attributes A1, A2, B1 and B2 = poor condition)	1	
Score achieved:	Moderate		

Appendix 5b: Post-Development Habitat Condition Assessment Sheets

Other Neutral Grassland; assessed using 'Grasslands Medium/High/Very High Distinctiveness' habitat type condition sheet:

Condition Assessment Criteria		Criterion passed (Yes or No)	Notes/Justification
A	The parcel represents a good example of its habitat type, with a consistently high proportion of characteristic indicator species present relative to the specific habitat type. Note – this criterion is essential for achieving moderate or good condition for non-acid grassland types only.	Y	Species composition of proposed seed mixes closely resembles definition of g3c 'other neutral grassland'.
B	Sward height is varied (at least 20% of the sward is less than 7cm and at least 20% is more than 7cm) creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.	Y	Varied sward height of such specifications anticipated.
C	Cover of bare ground is between 1% and 5%, including localised areas, for example, rabbit warrens.	Y	Cover of bare ground anticipated to exceed 5%.
D	Cover of bracken <i>Pteridium aquilinum</i> is less than 20% and cover of scrub (including bramble <i>Rubus fruticosus</i> agg.) is less than 5%.	Y	Management anticipated to control bracken cover, if present.
E	Combined cover of species indicative of sub-optimal condition and physical damage (such as excessive poaching, damage from machinery use or storage, damaging levels of access, or any other damaging management activities) accounts for less than 5% of total area. If any invasive non-native plant species (as listed on Schedule 9 of WCA) are present, this criterion is automatically failed.	Y	Physical damage anticipated to exceed 5% of total area. No invasives anticipated.
Additional Criterion - must be assessed for all non-acid grassland types			
F	There are 10 or more vascular plant species per m ² present, including forbs that are characteristic of the habitat type (species referenced in Footnote 2 and 4 cannot contribute towards this count). Note – this criterion is essential for achieving good condition for non-acid grassland types only.	Y	Species composition of seed mixes suggests there will likely be 10 or more vascular plant species per m ² .
Essential criterion for good condition achieved (for non-acid grassland) (Yes or No)		N	
Number of criteria passed		5	
Condition Assessment Result		Condition Assessment Score	Score Achieved ✓
Non-acid grassland types (result out of 6 criteria)			
Passes 5 or 6 criteria, including essential criterion A and additional criterion F		Good (3)	
Passes 3 - 5 criteria, including essential criterion A		Moderate (2)	✓
Passes 2 or fewer criteria OR Passes 3 or 4 criteria excluding criterion A and F		Poor (1)	

Rain Garden; assessed using the 'Urban' habitat type condition sheet:

Condition Assessment Criteria		Criterion passed (Yes or No)	Notes/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.	N	Varied vegetation structure where vegetation is present.
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.	Y	Different plant species present.
C	Invasive non-native plant species (listed on Schedule 9 of WCA) and others which are to the detriment of native wildlife (using professional judgement) cover less than 5% of the total vegetated area. Note – to achieve good condition, this criterion must be satisfied by a complete absence of invasive non-native species (rather than <5% cover).	Y	None observed.
Essential criteria relevant for habitat type achieved (Yes or No)			Y
Number of criteria passed			2
Condition Assessment Result		Condition Assessment Score	Score Achieved ✓
Results for habitats requiring assessment of 3 core criteria only:			
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)	

Modified Grassland; assessed using 'Grasslands Low Distinctiveness' habitat type condition sheet:

Condition Assessment Criteria:		Condition passed (Yes or No)	Notes/Justification
A	There must be 6-8 vascular plant species per m ² , including at least 2 forbs. Note – this criterion is essential for achieving moderate condition.	N	Fewer than 6 vascular plant species per m ² .
B	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for vertebrates and invertebrates to live and breed.	N	Sward height is uniform
C	Some scattered scrub (including bramble) may be present, but scrub accounts for less than 20% of total grassland area. Note - patches of shrubs with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.	Y	No scattered scrub present (less than 20% coverage).
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.	N	Physical damage present in more than 5% of total grassland area.
E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens).	N	Bare ground cover >10%.
F	Cover of bracken less than 20%.	Y	No bracken observed (less than 20% coverage).
G	There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981).	Y	Absence of invasive species.
Essential criterion achieved (Y/N)			N
Number of criteria passed			3
Condition Assessment Result		Condition Assessment Score	Score Achieved ✓
Passes 6 or 7 of 7 criteria including passing essential criterion A		Good (3)	
Passes 4 or 5 of 7 criteria including passing essential criterion A		Moderate (2)	
Passes 0, 1, 2 or 3 of 7 criteria; OR 4, 5 or 6 of criteria but failing criterion A		Poor (1)	✓

Biodiverse Green Roof; assessed using the 'Urban' habitat type condition sheet:

Condition Assessment Criteria		Criterion passed (Yes or No)	Notes/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.	Y	Species proposed are capable of providing varied vegetation structure.
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.	Y	Species proposed includes different species that flower at different times of the year.
C	Invasive non-native plant species (listed on Schedule 9 of WCA) and others which are to the detriment of native wildlife (using professional judgement) cover less than 5% of the total vegetated area. Note – to achieve good condition, this criterion must be satisfied by a complete absence of invasive non-native species (rather than <5% cover).	Y	Absence of non-native plant species in species list. Management plan addresses removal of invasives if found colonizing green roof.
Additional Criterion – must be assessed for biodiverse green roofs only:			
G	The roof has a varied depth of 80mm–150mm; at least 50% is at 150mm and is planted and seeded with wildflowers and sedums or is pre-prepared with sedums and wildflowers. Note – to achieve good condition some additional habitat, such as sand piles, stones, logs etc. are present.	N	Undulating substrate depth and additional habitats such as sand piles, stones, and logs not anticipated.
Essential criteria relevant for habitat type achieved (Yes or No)			N
Number of criteria passed			3
Condition Assessment Result		Condition Assessment Score	Score Achieved ✓
Results for green roofs (requiring assessment of 4 criteria only - core criteria plus additional criterion specified for habitat type):			
Passes all 3 core criteria AND Meets the requirements for good condition within criterion C AND Passes additional criterion relevant to specific habitat type (G)		Good (3)	
Passes 2 or 3 of 4 criteria OR Passes 4 of 4 criteria but does not meet the requirements for good condition within criterion C		Moderate (2)	✓
Passes 0 or 1 of 4 criteria		Poor (1)	

Urban Trees; assessed using 'Individual Trees' habitat type condition sheet:

Condition Assessment Criteria		Condition Achieved (Y/N)	Notes/Justification
A	The tree is a native species (or more than 70% within the block are native species).	Y	Less than 70% of trees on site are native (1no. native, 1no. non-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).	Y	Trees are individual trees and thus automatically pass this criterion.
C	The tree is mature (or more than 50% within the block are mature).	N	Mostly mature trees on site.
D	There is little or no evidence of an adverse impact on tree health by anthropogenic activities such as vandalism or herbicide use. There is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.	Y	No evidence of vandalism or herbicide use.
E	Natural Ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	N	Knot holes and ivy present on trees
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	Y	More than 20% of the tree canopy area has vegetation underneath.
Number of criteria passed			4
Condition Assessment Result		Condition Assessment Score	Score Achieved ✓
Passes 5 or 6 of 6 criteria		Good (3)	
Passes 3 or 4 of 6 criteria		Moderate (2)	✓
Passes 0, 1 or 2 of 6 criteria		Poor (1)	

Mixed scrub; assessed using 'Scrub' habitat type condition sheet:

Condition Assessment Criteria		Criterion passed (Yes or No)	Notes/Justification
A	The scrub is a good representation of the habitat type it has been identified as, based on its UKHab description (where in its natural range). The appearance and composition of the vegetation closely matches the characteristics of the specific scrub type. At least 80% of scrub is native, and there are at least three native woody species, with no single species comprising more than 75% of the cover (except hazel <i>Corylus avellana</i> , common juniper <i>Juniperus communis</i> , sea buckthorn <i>Hippophae rhamnoides</i> or box <i>Buxus sempervirens</i> , which can be up to 100% cover).	Y	Proposed species closely matches the characteristics of the specific scrub type (mixed scrub), with at least 80% native scrubs, three native woody species, and no dominant species.
B	Seedlings, saplings, young shrubs and mature (or ancient or veteran) shrubs are all present.	N	Newly planted.
C	There is an absence of invasive non-native plant species (as listed on Schedule 9 of WCA) and species indicative of sub-optimal condition make up less than 5% of ground cover.	Y	Management anticipated to remove non-native invasive species.
D	The scrub has a well-developed edge with scattered scrub and tall grassland and or forbs present between the scrub and adjacent habitat.	Y	Management anticipated to maintain a well-developed edge. Adjacent habitat proposed to be modified grasslands of good condition.
E	There are clearings, glades or rides present within the scrub, providing sheltered edges.	N	Due to the position of the scrub, it is unlikely to be planted with open spaces.
Number of criteria passed			3
Condition Assessment Result (out of 5 criteria)		Condition Assessment Score	Score Achieved ✓
Passes 5 criteria		Good (3)	
Passes 3 or 4 criteria		Moderate (2)	✓
Passes 2 or fewer criteria		Poor (1)	

Hedgerow assessed using 'Hedgerow' habitat type condition sheet:

Hedgerow favourable condition attributes				
Attributes and functional groupings (A, B, C, D & E)	Criteria (the minimum requirements for 'favourable condition')	Description	Criterion passed (Yes or No)	Notes/Justification
A1. Height	>1.5 m average along length	The average height of woody growth estimated from base of stem to the top of shoots, excluding any bank beneath the hedgerow, any gaps or isolated trees. Newly laid or coppiced hedgerows are indicative of good management and pass this criterion for up to a maximum of four years (if undertaken according to good practice). A newly planted hedgerow does not pass this criterion (unless it is > 1.5 m height).	Y	Hedgerow averages >1.5m in 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 (e.g. blackthorn suckers) are only included in the width estimate when they >0.5 m in height. Laid, coppiced, cut and newly planted hedgerows are indicative of good management and pass this criterion for up to a maximum of four years (if undertaken according to good practice).	N	Hedgerow averages <1.5m in width.
B1. Gap – hedge base	Gap between ground and base of canopy <0.5 m for >90% of length	This is the vertical 'gappiness' of the woody component of the hedgerow, and its distance from the ground to the lowest leafy growth. Certain exceptions to this criterion are acceptable (see page 65 of the Hedgerow Survey Handbook).	Y	Gap between ground and base of canopy is <0.5m for more than 10% of length.

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).	N	Gaps make up >10% of total length; with canopy gaps >5m.
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 hedge (at least)	This is the level of disturbance (excluding wildlife disturbance) at the base of the hedge. Undisturbed ground should be 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 hedge. This criterion recognises the value of the hedge base as a boundary habitat with the capacity to support a wide range of species. Cultivation, heavily trodden footpaths, poached ground etc. can limit available habitat niches.	Y	<1m width of undisturbed ground with perennial herbaceous vegetation for >90% of length.
C2.	Undesirable 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, should not exceed the 20% cover threshold.	Y	Plant species indicative of nutrient enrichment of soils dominate <20% cover.
D1.	Invasive and neophyte species	>90% of the hedgerow and undisturbed ground is free of invasive non-native and recently introduced species	Recently introduced species refer to plant that have naturalised in the UK since AD 1500 (neophytes). Archaeophytes count as natives.	Y	No invasives observed.
D2.	Current damage	>90% of the hedgerow or undisturbed ground is free of damage caused by human activities	This criterion addresses damaging activities that may have led to or lead to deterioration in other attributes. This could include evidence of pollution, piles of manure or rubble, or inappropriate management practices (e.g. excessive hedge cutting).	N	<90% of hedgerow and understorey is free of damage caused by human activities.
Condition categories for hedgerows with trees					

Category	Maximum number of attributes that can fail to meet 'favourable condition' criteria in Table TS1-2	Weighting (score)	
Good	No more than 2 failures in total AND No more than 1 failure in any functional group	3	
Moderate	No more than 5 failures in total AND <u>Does not fail both attributes</u> in more than one functional group (e.g., fails attributes A1, A2, B1, C2, and E1 = moderate condition)	2	
Poor	Fails a total of more than 5 attributes OR <u>Fails both attributes</u> in more than one functional group (e.g. fails attributes A1, A2, B1 and B2 = poor condition)	1	
Score achieved:	Moderate		