

Biodiversity Net Gain Assessment

Site Address:

Wythenshawe Park Sports Hub, Wythenshawe Road, Wythenshawe, Manchester M23 0PH

Client:

Joseph Ryan – Etec Contract Services Ltd

Assessment Date:

08/07/2025

Project:

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

The construction of a new leisure facility, with associated outdoor sports areas.

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.

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 main survey site is centred on National Grid Reference SJ 81012 89862 and has an area of approximately 4.7ha. with a further 1.3ha of modified grassland to the south. The main site comprises numerous built structures used to facilitate the sports hub, with areas of grassland and hardstanding used for recreational purposes. The site is situated in an urban setting approximately 8 km south of Manchester City Centre. It is bordered by extensive areas of deciduous woodland, with grassland and dense residential housing to the south. Several ponds are located within the surrounding woodland, alongside a brook that flows along the site's southern boundary. In the wider landscape, the area becomes increasingly urbanised, with dense residential and commercial developments interspersed with small pockets of green space. To the east, larger areas of parkland featuring grassland and woodland provide additional natural habitats.

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

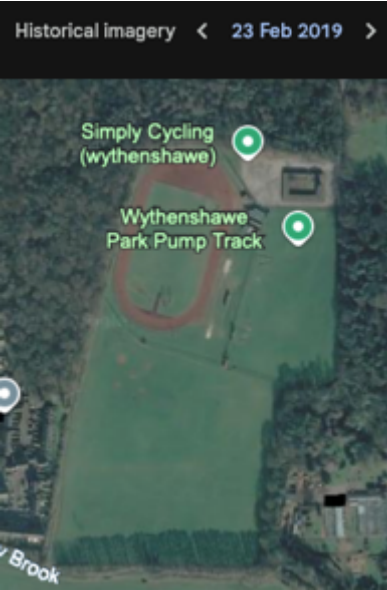
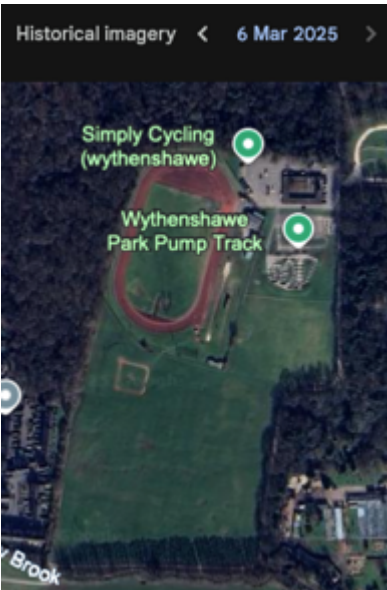
- Statutory BNG Metric – Wythenshawe Park Sports Hub, M23 OPH (Arbtech Consulting Ltd., 2025)
- Proposed Landscape Layout – Barnes Walker (M3851-PA-01-V02 (May 2025)
- Ecological Impact Assessment (EclA) – Wythenshawe Park Sports Hub, M23 OPH (Arbtech Consulting Ltd., 2025)
- BS5837 – Wythenshawe Park Sports Hub – (Arbtech Consulting Ltd., 2025)
- Baseline Habitat Condition Assessment (BHCA) – Wythenshawe Park Sports Hub, M23 OPH (Arbtech Consulting Ltd., 2025)

Executive Summary

The survey site at Wythenshawe Park Sports Hub (4.7ha) comprised primarily modified grassland in poor condition, areas of sealed surfaces and buildings, sparsely vegetated urban land, and scattered trees. The proposed development involves replacing parts of the grassland and built areas with a new leisure facility and associated outdoor sports areas. While this results in additional developed land, the scheme also provides for the creation of other neutral grassland, 88 new native trees across the site, and two lengths of native hedgerow, alongside the enhancement of over 1.25ha of modified grassland to other neutral grassland. Retained habitats include sections of the athletics track and existing modified grassland.

The Biodiversity Net Gain (BNG) assessment demonstrates that baseline habitat units of 10.25 will increase to 12.57 post-development, representing a net gain of +22.64%. Trading rules have been met, and the scheme exceeds the statutory +10% requirement under the Environment Act 2021. To ensure delivery, a Biodiversity Gain Plan (BGP) and a Habitat Management and Monitoring Plan (HMMP) will be required prior to commencement. These should secure the implementation, long-term management, and monitoring of created and enhanced habitats for a minimum of 30 years.

Introduction

BNG Informative		
Habitat Degradation Statement	Date reflected by BNG calculations	17 th March 2025
	The baseline biodiversity value of the site is derived from the site as observed during the EcIA field survey (Arbtech Consulting Ltd., 2025). As evident in the screenshots of satellite imagery obtained from Google Earth dated 23 rd February 2019 and 6 th March 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 30 th January 2020.	
	<div><div>Historical imagery < 23 Feb 2019 ></div></div> <div><div>Historical imagery < 6 Mar 2025 ></div></div>	
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 23 rd July 2024.	

BNG Target Uplift	+10%
National Character Area (NCA)	55 – Manchester Conurbation
Strategic Significance	<p>Manchester City Council (MCC) the responsible authority for drafting the Local Nature Recovery Strategy (LNRS) has yet to adopt a comprehensive LNRS. As advised by the MCC, the following documents from its adopted Local Plan (including Supplementary Planning Documents, SPDs), were used to determine strategic significance:</p> <ul style="list-style-type: none">• Policies Map• Core Strategy 2012-2027
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
u1b Developed land, sealed surface	1.33941ha	As described within the EcIA report for the same site (Arbtech, 2025)	Habitat condition pre- determined as ' N/A ' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	Low Strategic Significance Area/compensation not in local strategy/no local strategy and no evidence to suggest the habitat is of medium strategic significance (not part of a habitat corridor or steppingstone).
u1b5 Building	0.11203ha	As described within the EcIA report for the same site (Arbtech, 2025)	Habitat condition pre- determined as ' N/A ' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	Low Strategic Significance Area/compensation not in local strategy/no local strategy and no evidence to suggest the habitat is of medium strategic significance (not part of a habitat corridor or steppingstone).
u1c Sparsely vegetated urban land	0.04411ha	As described within the EcIA report for the same site (Arbtech, 2025)	Poor Condition Passes 1 of 3 criteria. Assessed using the 'urban' habitat condition sheet.	Low Strategic Significance Area/compensation not in local strategy/no local strategy and no evidence to suggest the habitat is of medium strategic significance (not part of a habitat corridor or steppingstone).
g4 Modified grassland	3.21556ha	As described within the EcIA report for the same site (Arbtech, 2025)	Poor Condition Passes 5 of 7 criteria but fails essential criterion A. Assessed using the 'grassland low' habitat condition sheet.	Low Strategic Significance Area/compensation not in local strategy/no local strategy and no evidence to suggest the habitat is of medium strategic significance (not part of a habitat corridor or steppingstone).

g4 Modified grassland	1.30958ha	As described within the BHCA report for the same site (Arbtech, 2025)	Poor Condition Passes 4 of 7 criteria but fails essential criterion A. Assessed using the 'grassland low' habitat condition sheet.	Low Strategic Significance Area/compensation not in local strategy/no local strategy and no evidence to suggest the habitat is of medium strategic significance (not part of a habitat corridor or steppingstone).
32 Scattered trees	0.0896ha	As described within the EcIA and BS5837 report for the same site (Arbtech, 2025)	Moderate Condition Passes 4 of 6 criteria. Assessed using the 'individual tree' habitat condition sheet.	Low Strategic Significance Area/compensation not in local strategy/no local strategy and no evidence to suggest the habitat is of medium strategic significance (not part of a habitat corridor or steppingstone).

Post-Development**Post-Development Biodiversity Value: On-Site**

	Habitat	Area (ha)	Description	Condition Assessment	Strategic Significance
Retained	u1b Developed land, sealed surface	0.708ha	The existing athletics track is to be retained post development.	Habitat condition pre-determined as ' N/A ' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	Low Strategic Significance Area/compensation not in local strategy/no local strategy and no evidence to suggest the habitat is of medium strategic significance (not part of a habitat corridor or steppingstone).
	g4 Modified grassland	1.45231ha	Large sections of the modified grassland will be retained, and although there may be temporary reduction in size or quality these areas are expected to return to their present condition.	To Remain in Poor Condition	Low Strategic Significance Area/compensation not in local strategy/no local strategy and no evidence to suggest the habitat is of medium strategic significance (not part of a habitat corridor or steppingstone).
Created	u1b Developed land, sealed surface	2.24854ha	New areas of developed land will replace areas of buildings and modified grassland post development.	Habitat condition pre-determined as ' N/A ' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	Low Strategic Significance Area/compensation not in local strategy/no local strategy and no evidence to suggest the habitat is of medium strategic significance (not part of a habitat corridor or steppingstone).
	u1b5 Building	0.20796ha	Within the newly created areas of developed land, a new sports hub will be created.	Habitat condition pre-determined as ' N/A ' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	Low Strategic Significance Area/compensation not in local strategy/no local strategy and no evidence to suggest the habitat is of medium strategic significance (not part of a habitat corridor or steppingstone).

	g3c Other neutral grassland	0.08006ha	Patches of other neutral grassland to be created along the edges of the site.	Target Moderate Condition	Low Strategic Significance Area/compensation not in local strategy/no local strategy and no evidence to suggest the habitat is of medium strategic significance (not part of a habitat corridor or steppingstone).
	32 Scattered trees	0.1954ha	A total of 48 native trees are to be planted throughout the site in areas of developed land, modified grassland, and other neutral grassland.	Target Moderate Condition	Low Strategic Significance Area/compensation not in local strategy/no local strategy and no evidence to suggest the habitat is of medium strategic significance (not part of a habitat corridor or steppingstone).
	h2a Native hedgerow	0.084ha	Two lengths of native hedgerow are to be planted along the carpark and sports hub	Target Poor Condition	Low Strategic Significance Area/compensation not in local strategy/no local strategy and no evidence to suggest the habitat is of medium strategic significance (not part of a habitat corridor or steppingstone).
	g 32 Scattered trees	0.1629ha	40 additional native trees will be planted within the area of modified grassland designated for enhancement.	Target Moderate Condition	Low Strategic Significance Area/compensation not in local strategy/no local strategy and no evidence to suggest the habitat is of medium strategic significance (not part of a habitat corridor or steppingstone).
Enhanced	g3c other neutral grassland	1.25658ha	The area of modified grassland, as described within the BHCA will be enhanced to create an area of other neutral grassland.	Target Moderate Condition	Low Strategic Significance Area/compensation not in local strategy/no local strategy and no evidence to suggest the habitat is of medium strategic significance (not part of a habitat corridor or steppingstone).

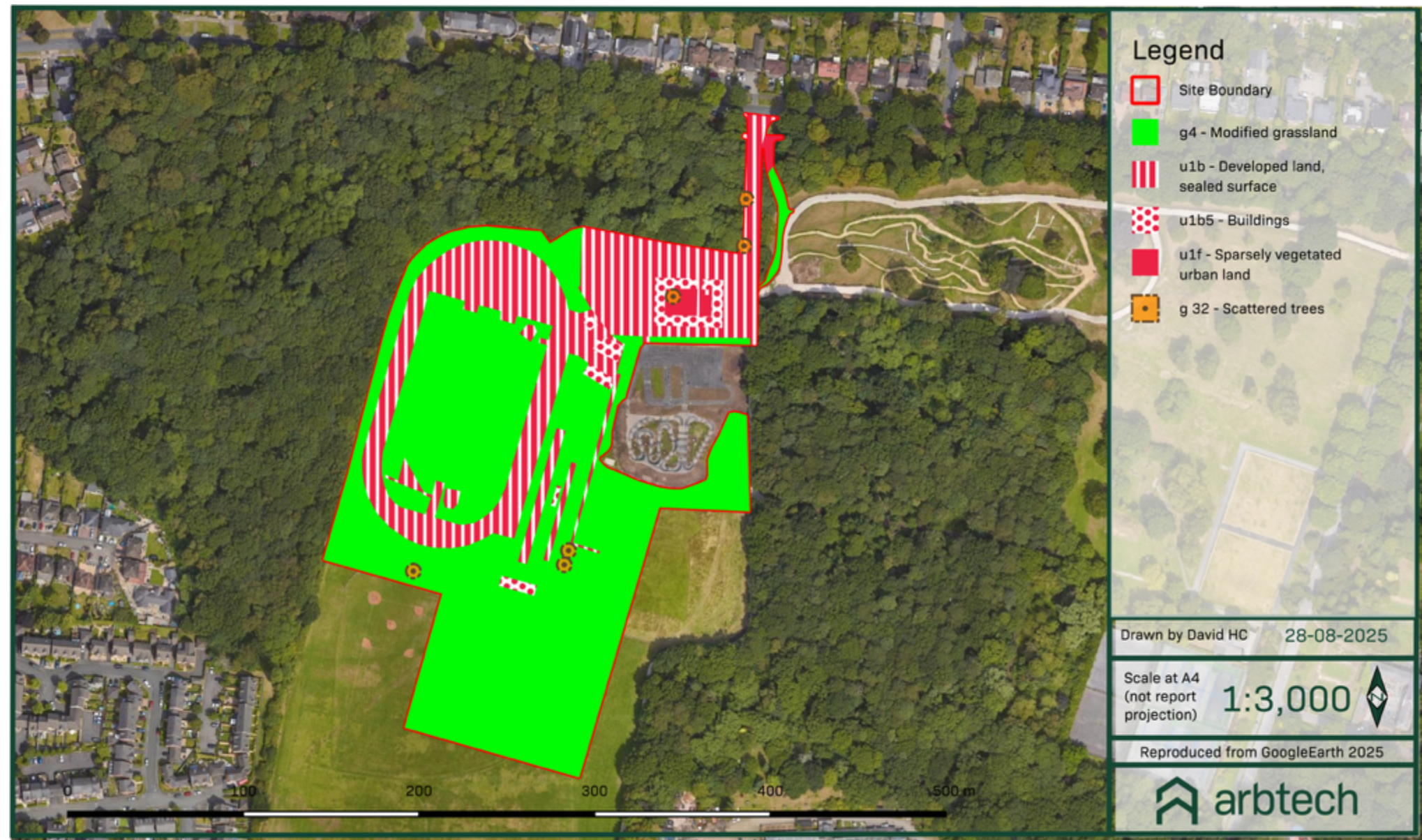
Change of Biodiversity Value

		Biodiversity Units
		Area-Based
On-Site	Baseline	The baseline habitat value for area-based habitats is 10.25 comprising 9.05 units of modified grassland, 1.11 units of scattered trees, 0.14, 0.09 units of sparsely vegetated urban land, and 0.00 units of developed land, sealed surface and buildings.
	Post-Development	<p>The post development habitat value for area-based habitats is 12.57 units comprising:</p> <ul style="list-style-type: none"> Retention of 3.01 units of modified grassland. Creation of 1.21 units of scattered trees, 0.54 units of other neutral grassland, 0.03 units of introduced shrub, and 0.00 units of developed land sealed surface and buildings. Enhancement of 1.25658ha of modified grassland into 7.79 units of other neutral grassland. <p>The post development habitat value for linear-based habitats is 0.18 units comprising:</p> <ul style="list-style-type: none"> Creation of 0.18 units of native hedgerow.
Overall Net Change		<p>+22.64% Area-based habitat units</p> <p>(Linear-based habitats are none applicable as none existed within the baseline calculations)</p> <p>Trading condition have been met for area-based habitat units.</p>

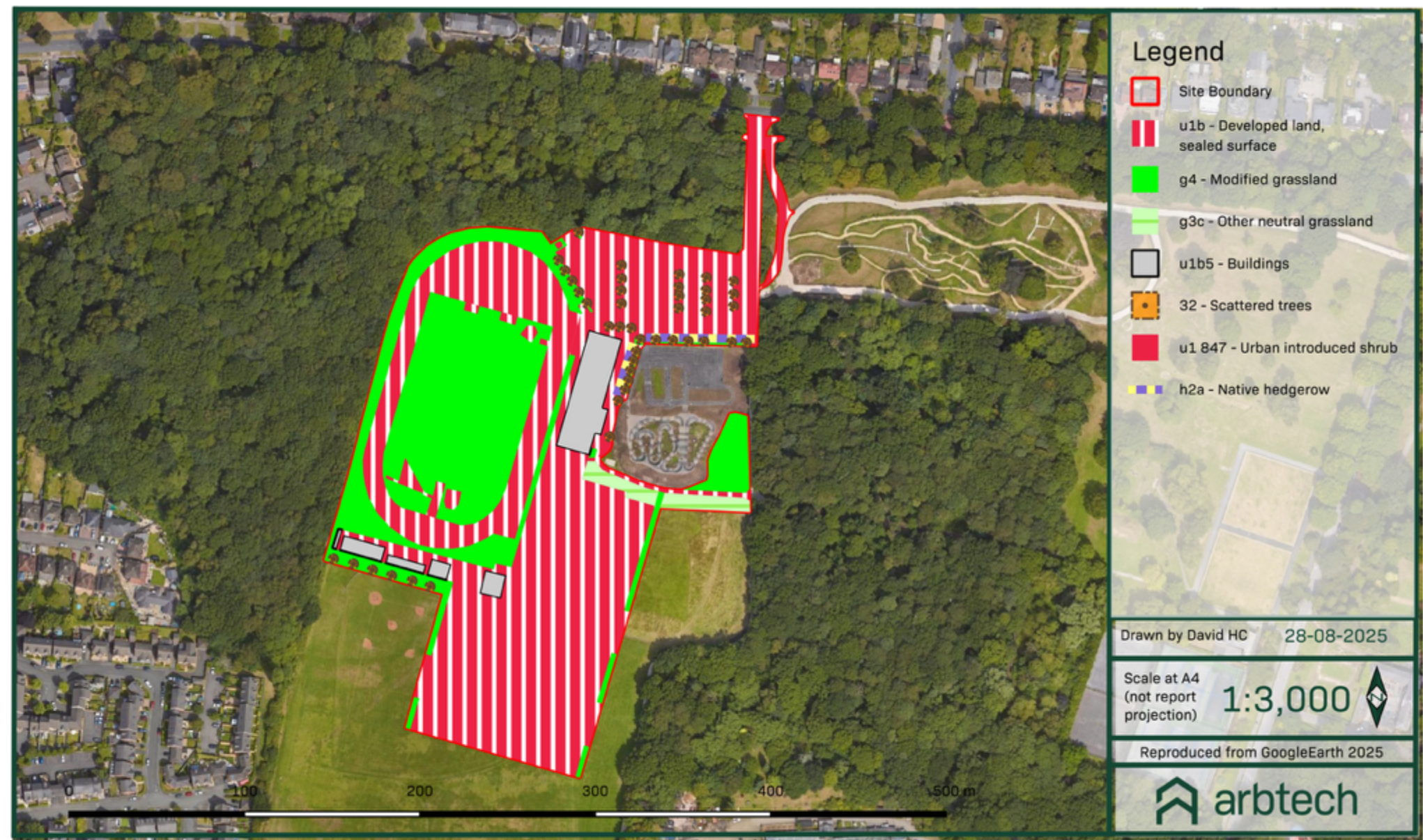
Results, Discussion, and Next Steps

BNG Informative	
Results	<p>The current landscaping proposal generates a net gain for area-based habitat units (+22.64%). As such, the proposed development is compliant with current legislation (Environment Act 2021) and planning policies (National Planning Policy Framework, 2024) is a minimum biodiversity net gain of +10% was achieved for both area-based habitat units.</p> <p>Trading conditions for area-based habitats have been achieved.</p>
Pre-Commencement	<p>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.</p>

Appendix 1: Baseline Habitat Plan

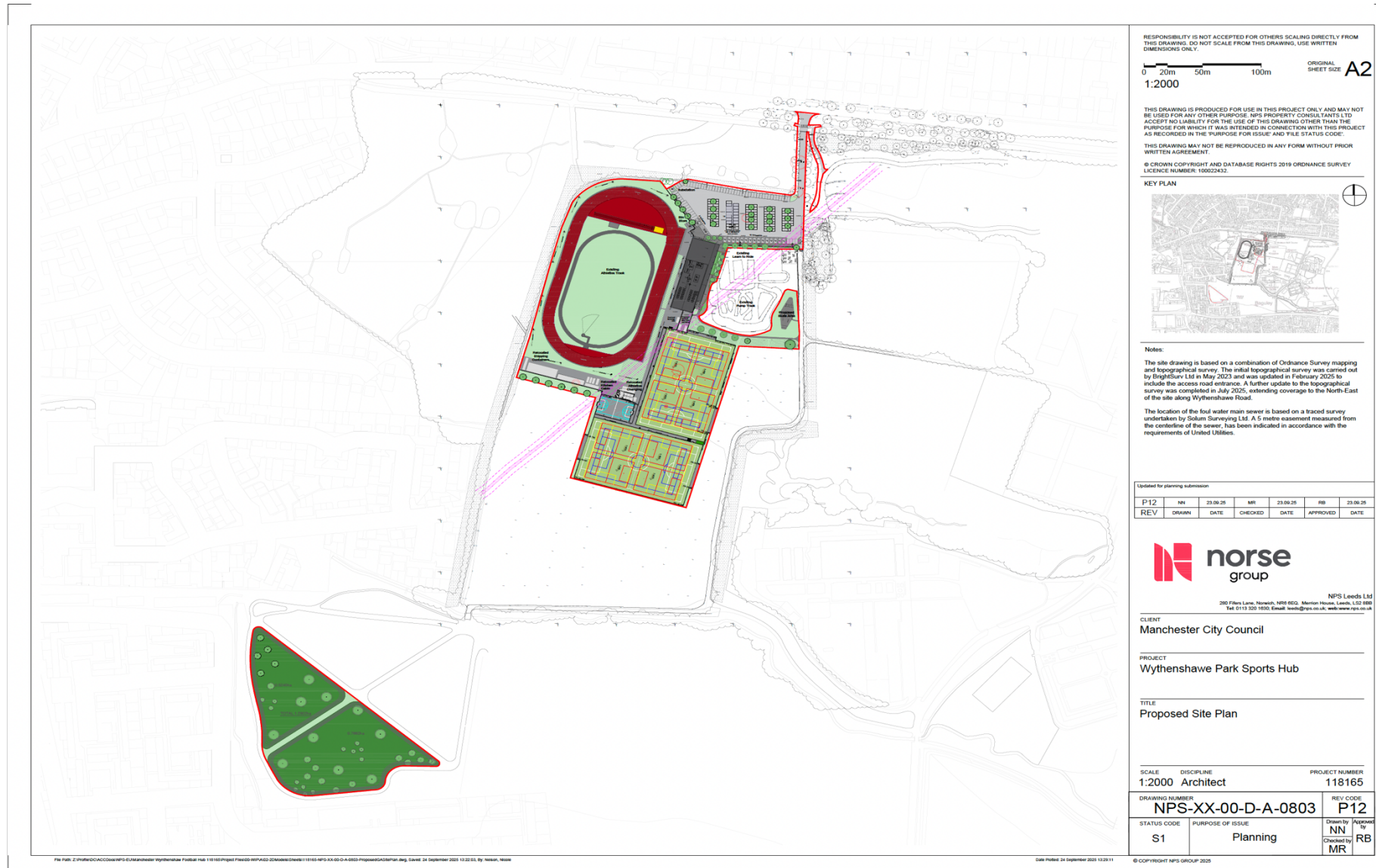


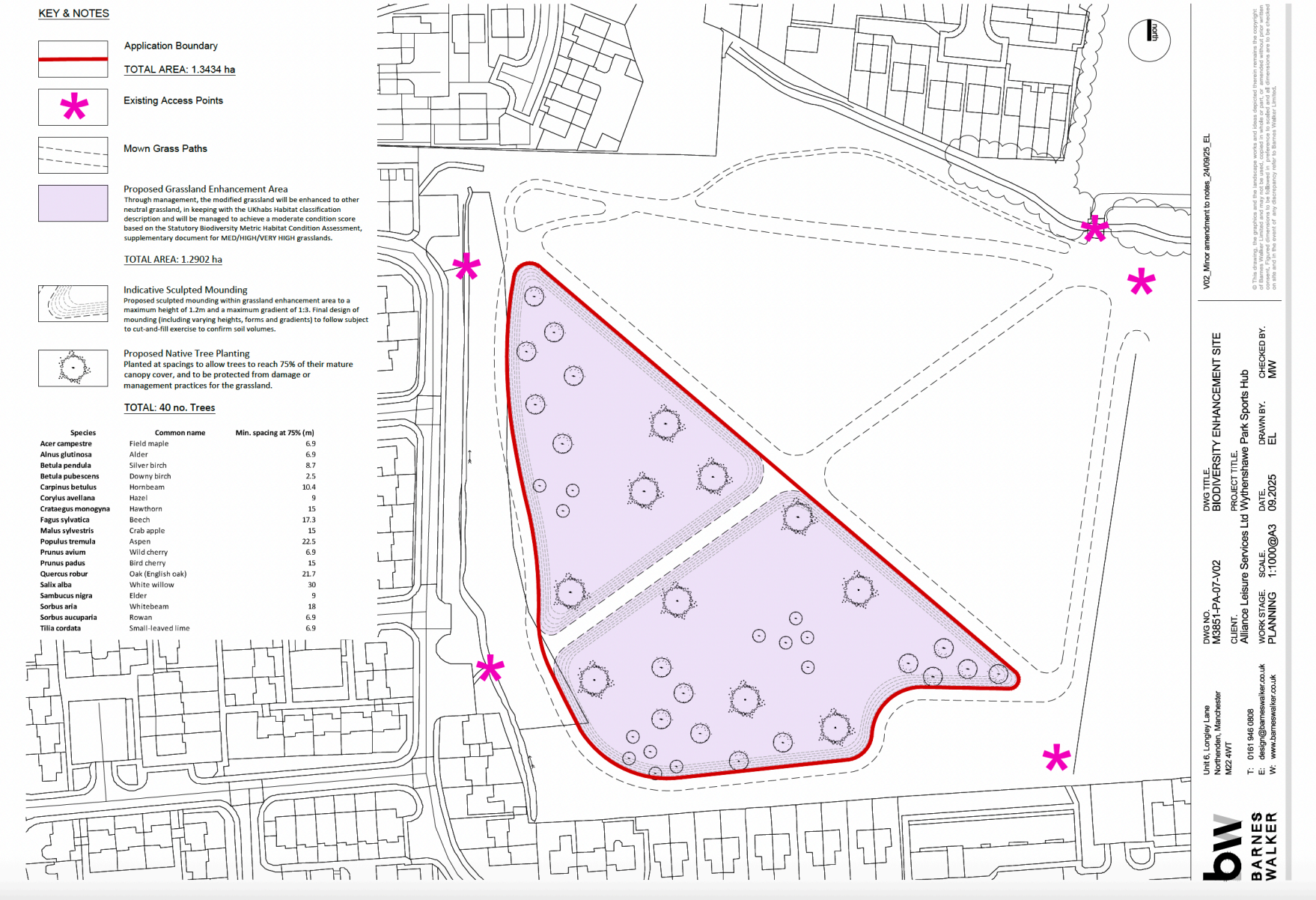
Appendix 2: Post-Development Habitat Plan





Appendix 3: Proposed Development Plan





Appendix 4: Headline BNG Results

FINAL RESULTS		
Total net unit change <small>(Including all on-site & off-site habitat retention, creation & enhancement)</small>	Habitat units	2.32
	Hedgerow units	0.18
	Watercourse units	0.00
Total net % change <small>(Including all on-site & off-site habitat retention, creation & enhancement)</small>	Habitat units	22.64%
	Hedgerow units	N/A
	Watercourse units	0.00%
Trading rules satisfied?	Yes ✓	

Unit Type	Target	Baseline Units	Units Required	Unit Deficit
Habitat units	10.00%	10.25	11.27	0.00
Hedgerow units	10.00%	0.00	0.00	0.00
Watercourse units	10.00%	0.00	0.00	0.00

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

0 baseline units - % cannot be calculated

Appendix 5: Baseline Habitat Condition Assessment Sheets

Sparsely vegetated urban land: assessed using 'urban' habitat type condition sheet:

Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
Core Criteria – must be assessed for all urban habitat types :			
A	Vegetation structure is varied, providing opportunities for vertebrates and invertebrates to live, eat and breed. A single structural habitat component or vegetation type does not account for more than 80% of the total habitat area.	N	Relatively uniform and lack complexity.
B	The habitat parcel contains different plant species that are beneficial for wildlife, for example flowering species providing nectar sources for a range of invertebrates at different times of year.	N	The habitat parcel is not considered capable of supporting a range of invertebrates.
C	Invasive non-native plant species (listed on Schedule 9 of WCA ¹) and others which are to the detriment of native wildlife (using professional judgement) ² cover less than 5% of the total vegetated area ³ . Note - to achieve Good condition, this criterion must be satisfied by a complete absence of invasive non-native species (rather than <5% cover).	Y	None present.
Essential criteria relevant for habitat type achieved (Yes or No)			Y
Number of criteria passed			1
Condition Assessment Result	Condition Assessment Score	Score Achieved x/√	
Results for habitats requiring assessment of 3 core criteria only (all listed urban habitats except Open mosaic habitat on previously developed land, Bioswale, SuDS and Green roofs):			
<ul style="list-style-type: none"> Passes all 3 core criteria; AND <ul style="list-style-type: none"> Meets the requirements for Good condition within criterion C. 	Good (3)		
<ul style="list-style-type: none"> Passes 2 of 3 core criteria; OR <ul style="list-style-type: none"> Passes 3 of 3 core criteria but does not meet the requirements for Good condition within criterion C. 	Moderate (2)		
<ul style="list-style-type: none"> 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 Achieved (Y/N)	Notes/Justification
A	There must be 6-8 vascular plant species per m ² , including at least 2 forbs. NB - 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	Regularly mown, uniform sward height present.
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.	Y	Physical damage present in less 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 1 achieved (Y/N)			N
Number of criteria passed			5
Condition Assessment Result		Condition Assessment Score	Score Achieved x/✓
Passes 6 or 7 of 7 criteria including passing essential criterion 1		Good (3)	
Passes 4 or 5 of 7 criteria including passing essential criterion 1		Moderate (2)	
Passes 0, 1, 2 or 3 of 7 criteria; OR 4, 5 or 6 of criteria but failing criterion 1		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	All trees present on site are 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 present on site either stand as individuals or form part of an continuous canopy with no gaps.
C	The tree is mature (or more than 50% within the block are mature).	Y (T5 and T6) N	The two trees along the access road are classed as mature. The remaining 4 trees on site are young.
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 (T5 and T6) N	The two trees along the access road have deadwood and dense Ivy. None observed on the young trees.
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	Y	More than 20% of the tree's canopy area has vegetation underneath.
Number of criteria passed			4 (T1-T4) 6(T5 and T6)
Condition Assessment Result		Condition Assessment Score	Score Achieved x/✓
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)	

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Version Control			
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Draft	0.1	David Hill-Chambers MSc BSc (Hons) – Graduate Ecologist	08/07/2025
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Updated	4.0	David Hill-Chambers MSc BSc (Hons) – Graduate Ecologist	13/10/2025