Jessica Orr BSc (Hons)
Graduate Ecologist
jessicaorr@arbtech.co.uk
Arbtech Consulting Ltd
arbtech.co.uk

Biodiversity Net Gain Assessment

Site Address:

Odstone Hall, Hall Lane, Odstone, Nuneaton, CV13 0QS

Client:

Ed De Lisle

Assessment Date:

28th November 2025

Project:

This report is prepared to inform a planning application with the Hinckley and Bosworth Borough Council**.** The proposal is described as:

The construction of two single-storey buildings and associated hardstanding on site.

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	Jessica Orr BSc (Hons) Graduate Ecologist	28/11/2025
Reviewed	0.2	Beth Ellison-Perrett BSc (Hons) MSc MRSB, Senior Ecologist	11/12/2025
Final	1.0	Jessica Orr BSc (Hons) Graduate Ecologist	11/12/2025

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 SK 39083 07677 and has an area of approximately 0.73ha.

The site comprises of one dwelling (B1) associated outbuildings (B2, B3, B4 & B5), stables (B6), tennis court and a vegetated garden with scattered trees. It is situated within the hamlet of Odstone in Leicestershire. There are scattered trees within the site and extending into the local garden landscape. Aerial imagery shows the local landscape to have an agricultural character. Tributaries of the River Sence run ~0.34km to the north and ~0.3km to the south of the site and the Ashby Canal runs ~1.5km to the southwest.

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

- Statutory BNG Metric – Odstone Hall, CV13 0QS – v1 (Arbtech Consulting Ltd., 2025)
- Proposed Plan (bhb architects, 2025)
- Preliminary Ecological Appraisal (PEA) - Odstone Hall, CV13 0QS – v1 (Arbtech Consulting Ltd., 2025)

Executive Summary

- The current landscaping proposal generates a net loss of area-based habitat units **(-11.07%)** and a net loss of linear-based habitat units **(-11.70%)** 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 2no. urban trees (medium distinctiveness), the areas of vegetated garden (low distinctiveness) and the ~16m of native hedgerow (low 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).
- In order to achieve a +10% biodiversity net gain for area-based habitats, a minimum area-based unit score of 4.97 will need to be achieved. At present, there is a unit deficit of **0.95** units. Of these units, 0.39 units must be of individual trees to satisfy trading rules, and the remaining 0.56 units can be of any distinctiveness.
- Similarly, to achieve a +10% biodiversity net gain for linear-based habitats, a minimum linear-based unit score of 0.60 will need to be achieved. At present, there is a unit deficit of **0.12** units. Of these units, 0.06 units must be of at least low distinctiveness linear-based habitat to satisfy trading rules.

Introduction

BNG Informative		
Habitat Degradation Statement	Date reflected by BNG calculations	5th April 2018
	The baseline biodiversity value of the site is not derived from the site as observed during the PEA field survey (Arbtech Consulting Ltd., 2025) as evidence of habitat degradation had occurred. Therefore, the baseline biodiversity value of the site is derived from assumptions inferred from historic satellite imagery (i.e. GoogleEarth). Two medium scattered trees have been removed from the site since 2020 (circled in red), and two small areas of vegetated garden have become areas of gravel (outlined in red). No previous arb reports for the site were available so both trees are assumed to have been in good condition.  	
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 23rd July 2024.	
BNG Target Uplift	+10%	

National Character Area (NCA)	72 - Mease/Sence Lowlands		
Strategic Significance	Leicestershire, Leicester and Rutland Local Nature Recovery Strategy - Leicestershire, Leicester and Rutland Local Nature Recovery Strategy | Leicestershire County Council		
	Habitat	**Baseline / Post-Development**	**Justification**
	Vegetated Garden	Both	Low – No connectivity
	Urban Trees	Both	Low – No connectivity
	Native Hedgerow	Both	Low – No connectivity
	Ornamental Hedgerow	Both	Low – No connectivity
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**
Vegetated Garden	0.474	The majority of the site is vegetated garden, which comprises of a modified grass lawn, fruit tree saplings and introduced shrubs. The grass lawn has a short homogenous sward (~3cm), which is subject to frequent management.	Habitat condition pre-determined as '***N/A***' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	**Low** Strategic Significance
Developed land, sealed surface	0.137	There is an area of hardstanding surrounding the main dwelling (B1) and the swimming pool. There is also a tennis court with a concrete path leading up to the tennis court.	Habitat condition pre-determined as '***N/A***' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	**Low** Strategic Significance
Artificial, unsealed,	0.106	There is a gravel driveway from the entrance gate in the east to the front of B1 to provide access and parking and another small, gravelled area to the south of the swimming pool.	Habitat condition pre-determined as '***N/A***' as detailed within the	**Low** Strategic Significance

unvegetated surface			Statutory Biodiversity Condition Assessment Supplement.	
Buildings	0.052	There are six buildings on site; the main dwelling (B1), associated outbuildings (B2, B3, B4, B5) and the stables to the west of the site (B6).	Habitat condition pre-determined as '***N/A***' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	**Low** Strategic Significance
Urban Tree	0.2972	There are 17 scattered trees within the baseline, of which 16 are medium and 1 is a large tree (small trees <30cm DBH were excluded from the calculations). This includes two medium trees that had been removed by the time of the survey (since January 2020), which are assumed to be in good condition.	**Good**: passes 5 of 6 criteria 16 no. of medium 1 no. of large	**Low** Strategic Significance

Baseline Biodiversity Value: On-Site				
Linear-Based Habitats (B-1)				
Habitat	**Length (km)**	**Description**	**Condition Assessment**	**Strategic Significance**
Native hedgerow	0.09	Native hedgerows along the western and southern site boundaries.	**Moderate**: Passing 5 of 8 criteria. Assessed using the 'Hedgerows' habitat type condition sheet.	**Low** Strategic Significance
Non-native and ornamental hedgerow	0.187	Sections of non-native hedgerow run along the northern and southern site boundaries. Species composition was dominated by Lawson cypress.	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)	Urban trees	0.2646	The retained trees after the proposed development.	**Good**: passes 5 of 6 criteria 14 no. of medium 1 no. of large	**Low** Strategic Significance
Created (A-2)	Vegetated garden	0.435	The retained and created areas of vegetated garden after the proposed development.	Habitat condition pre-determined as '***N/A***' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	**Low** Strategic Significance
	Developed land, sealed surface	0.153	The existing areas of hardstanding and the created areas of hardstanding surrounding the new building.	Habitat condition pre-determined as '***N/A***' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	**Low** Strategic Significance
	Artificial, unvegetated, unsealed surface	0.116	The retained and created areas of gravel (including the gravelled areas present during the survey, which have been created since January 2020).	Habitat condition pre-determined as '***N/A***' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	**Low** Strategic Significance
	Buildings	0.065	The two created buildings and the 5 retained buildings on site.	Habitat condition pre-determined as '***N/A***' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	**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	0.074	The retained length of the native hedgerows on site. The hedgerow on the southern site boundary is retained in full and ~16m of the hedgerow on the western site boundary will be lost after the development.	**Moderate**: Passing 5 of 8 criteria. Assessed using the 'Hedgerows' habitat type condition sheet.	**Low** Strategic Significance
	Non-native and ornamental hedgerow	0.187	The retained non-native and ornamental hedgerows on site.	Habitat condition pre-determined as '**Poor**' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	**Low** Strategic Significance

Change of Biodiversity Value

		Biodiversity Units		
		Area-Based	**Linear-Based**	**Watercourse-Based**
On-Site	Baseline	4.51 ❖ Vegetated garden (0.95) ❖ Urban trees of good condition (3.57)	0.55 ❖ Native hedgerow of moderate condition (0.36) ❖ Non-native and ornamental hedgerow (0.19)	N/A
	Post-Development	4.01 ❖ Vegetated garden (0.84) ❖ Urban trees of good condition (3.18)	0.48 ❖ Native hedgerow of moderate condition (0.30) ❖ Non-native and ornamental hedgerow (0.19)	N/A
Overall Net Change		**-0.50 (-11.07%)**	**-0.06 (-11.70%)**	**N/A**

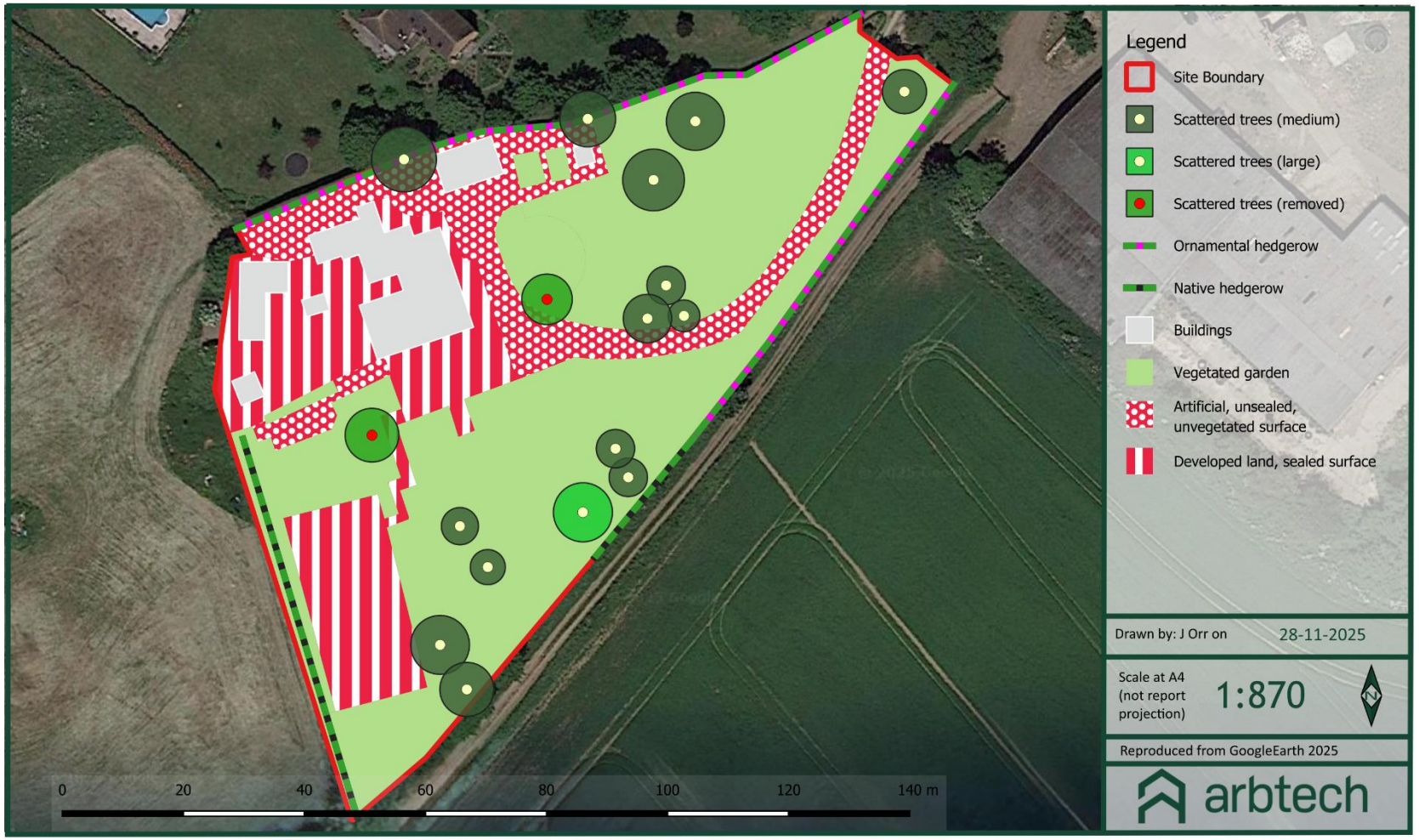
Results, Discussion, and Next Steps

BNG Informative	
Results	The current landscaping proposal generates a net loss of area-based habitat units **(-11.07%)** and a net loss of linear-based habitat units **(-11.70%)** 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 2no. urban trees (medium distinctiveness), the areas of vegetated garden (low distinctiveness) and the ~16m of native hedgerow (low 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). In order to achieve a +10% biodiversity net gain for area-based habitats, a minimum area-based unit score of 4.97 will need to be achieved. At present, there is a unit deficit of **0.95** units. Of these units, 0.39 units must be of individual trees to satisfy trading rules, and the remaining 0.56 units can be of any distinctiveness. Similarly, to achieve a +10% biodiversity net gain for linear-based habitats, a minimum linear-based unit score of 0.60 will need to be achieved. At present, there is a unit deficit of **0.12** units. Of these units, 0.06 units must be of at least low distinctiveness linear-based habitat to satisfy trading rules.
Recommendations and Next Steps	In order to achieve the required net gain in biodiversity as a result of the proposed development, the provision of additional or alternative landscaping should be explored and the proposed plans amended accordingly to achieve a net gain on site. The provisioning of additional landscaping should first be considered within the site boundary. There is good scope on site to achieve the required net gain. Should these alterations be incorporated this BNG Assessment will need to be updated to accurately reflect the change in biodiversity value of the site pre- and post-development. Preliminary calculations indicate the required net gain can be achieved within the site's boundaries or within the site ownership boundaries: ❖ Planting 32 small trees of moderate condition will create 0.40 area-based units and will satisfy trading rules for the 2 medium trees lost. The below recommendations will achieve a condition score of 'moderate': ○ Any trees planted on site will be located **outside** of vegetated gardens, as instructed by the BNG user guide (Natural England, 2024). It should be noted that any trees planted within mixed scrub habitat should not exceed 5m in height.

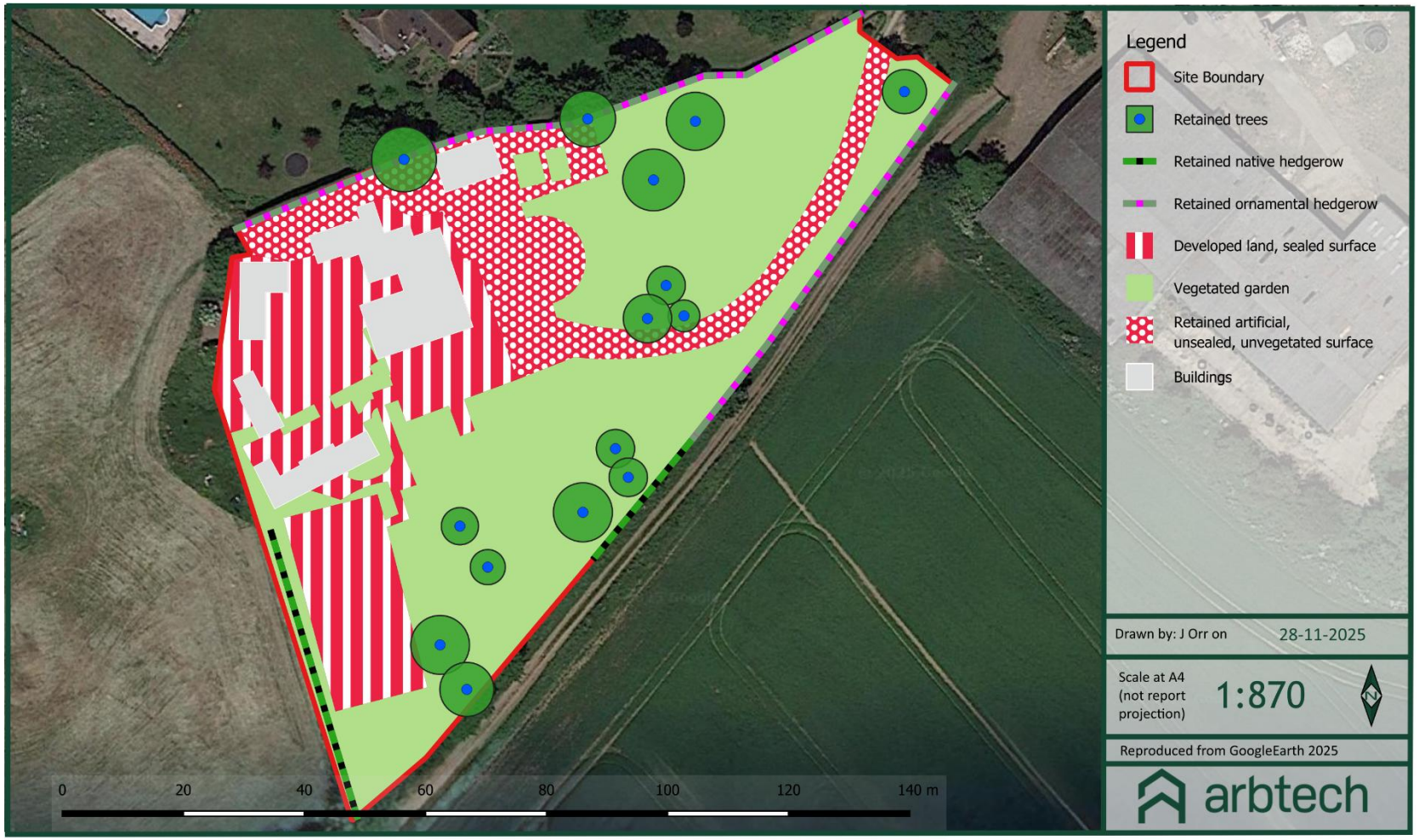
	○ Tree species planted will be of **native** origin, or at the very least, appropriate with the local landscape. Any non-native species planted must comprise <30% off all trees planted on site. ○ Trees planted on site will require protection from damage caused by human activity, including poor management and vandalism. ○ Trees should be planted in areas with enough space for the canopy growth to reach a **minimum** of 75% of its expected area, relative to the age, height and species of the tree, allowing the canopy to oversail **at least** 20% of the ground vegetation beneath. Additionally, these trees will **not** be subject to regular pruning. ○ Species considered suitable for planting include English oak, hawthorn, blackthorn, birch, willow, wild cherry, ash. ❖ Planting an area of 0.085 hectares of mixed scrub in moderate condition will create 0.57 area-based units. The below recommendations will achieve a score of 'moderate': ○ Management of this habitat parcel will be required to ensure the target condition is achieved. As such, access to the habitat parcel must be achieved from the road or similar, without encroaching on any private gardens, for external management to take place. ○ Mixed scrub should **not** exceed 5m in height and should have a dense composition, comprising a continuous cover of 75% or more, and must contain a range of age-classes, including seedlings, saplings, young shrubs and mature shrubs. Any trees located within this habitat parcel must **not** exceed 5m in height. ○ Mixed scrub should contain a mixture of at least three species and should **not** be dominated by a single species, providing well-developed sheltered edges, with clearings, glades or rides. Any non-native shrub species must make up **less** than 20% of the scrub ○ Shrub species to consider include blackthorn, hazel, sea-buckthorn, bramble, hawthorn, willow, alder and birch. ❖ Planting 40m of native hedgerow will create 0.13 linear-based habitat units and will satisfy trading rules for the ~16m of native hedgerow lost as a result of the development. ○ Species composition often contains a mix of shrub and tree species. Recommended species include hawthorn, hazel, blackthorn, field maple, elm, ash, English oak, dog rose, wild cherry, spindle. ○ Native hedgerow must have an average width of **at least 1.5m** along its length, a base of the leafy canopy that commences **0.5m or less** from the ground, and horizontal gaps must make up **less than 10%** of the length of the hedgerow. **At least 90%** of the hedgerow must be free from damage caused by human activities.

	○ A strip of undisturbed ground containing perennial herbaceous vegetation, measuring **>1m** in width, must be present for **at least 90%** of the length of the hedgerow, on at least one side. Plant species indicative of nutrient enrichment must comprise **<20%** of the ground vegetation beneath, and the hedgerow and ground flora **must** present an absence of non-native invasive species, as listed on Schedule 9 of the Wildlife and Countryside Act (1981). If such additional landscape provisions are considered unfeasible, off-site offsetting will be required. Specifically, 0.95 area-based units (0.39 of individual trees and 0.11 of at least low distinctiveness area-based habitats) and 0.12 linear-based units (0.06 of at least low distinctiveness) will need to be purchased from a suitable habitat bank.
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	The entirety of the ornamental hedgerow was retained after the development, in addition to 82% of the native hedgerow on site. Of the 17 trees present prior to the development, 15 trees were retained.
Minimisation	
Mitigation	The loss of the two medium trees and the native hedgerow on site is foreseen to be mitigated through the planting of urban trees within the site ownership boundary and the planting of a new hedgerow.
Offset	Net gain is achievable within the red line boundary; no off-site offsetting foreseen.

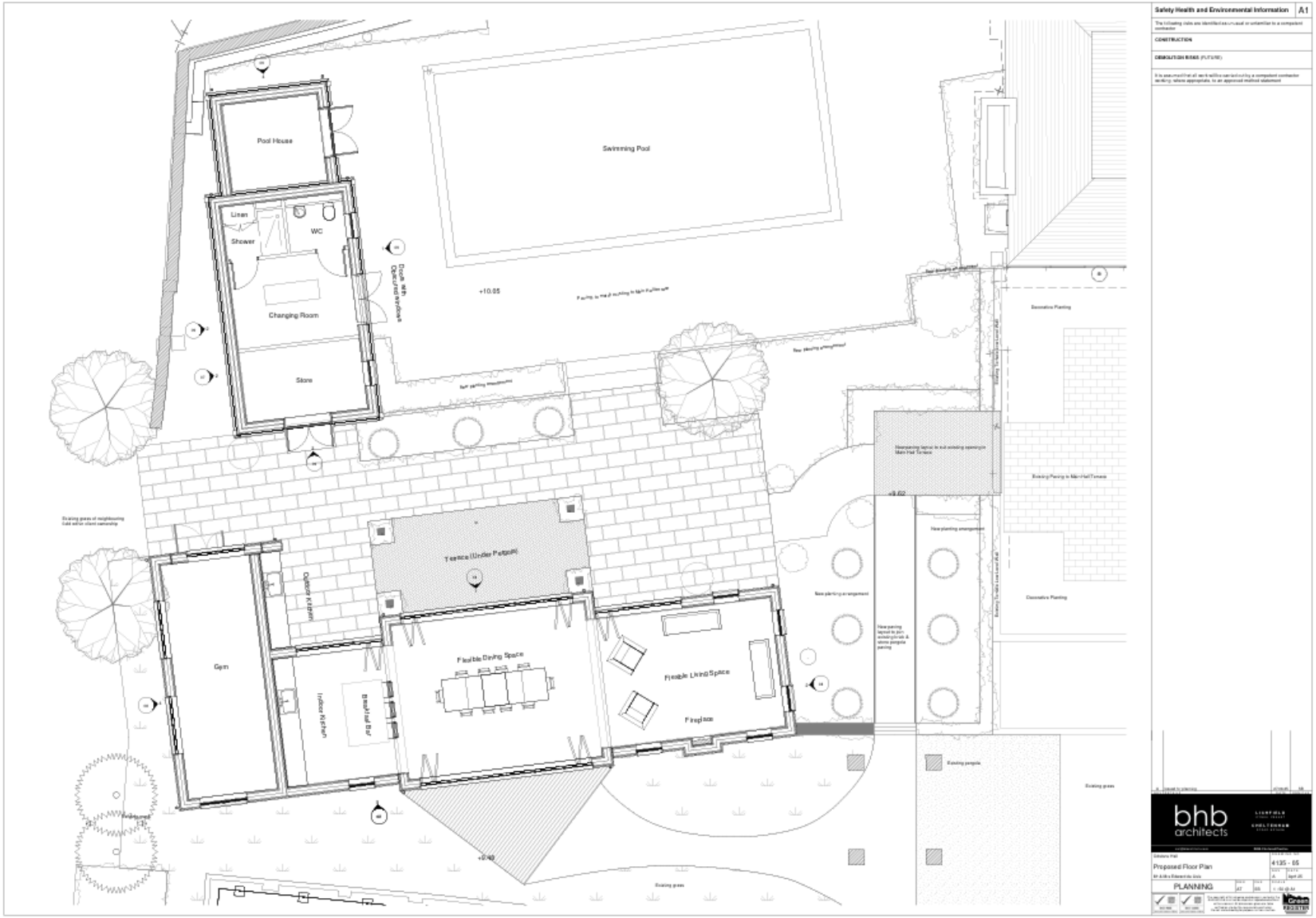
Appendix 1: Baseline Habitat Plan



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)	*Area habitat units*	-0.50	
	Hedgerow units	-0.06	
	Watercourse units	0.00	
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	*Area habitat units*	-11.07%	Total net gain achieved is less than target set ▲
	Hedgerow units	-11.70%	Total net gain achieved is less than target set ▲
	Watercourse units	0.00%	
Trading rules satisfied?	No - Check Trading Summaries ▲		

Unit Type	Target	Baseline Units	Units Required	Unit Deficit	
Area habitat units	10.00%	4.51	4.97	0.95	
Hedgerow units	10.00%	0.55	0.60	0.12	
Watercourse units	10.00%	0.00	0.00	0.00	No additional watercourse units required to meet target ✓

Appendix 5a: Baseline Habitat Condition Assessment Sheets

Urban trees assessed using the 'Individual trees' habitat type condition sheet:

Condition Assessment Criteria		Criterion passed (Yes or No)
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	5

Condition Assessment Result (out of 6 criteria)	Condition Assessment Score	Score Achieved ×/✓
Passes 5 or 6 criteria	Good (3)	✓
Passes 3 or 4 criteria	Moderate (2)	
Passes 2 or fewer criteria	Poor (1)	

Native hedgerow assessed using the 'Hedgerow' habitat type condition sheet:

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 *Prunus spinosa* 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	>1 m width of undisturbed ground with perennial herbaceous vegetation for >90% of length: · Measured from outer edge of hedgerow; and · Is present on one side of the hedgerow (at least).	This is the level of disturbance (excluding wildlife disturbance) at the base of the hedgerow. Undisturbed ground is present for at least 90% of the hedgerow length, greater than 1 m in width and must be present along at least one side of the hedgerow. This criterion recognises the value of the hedgerow base as a boundary habitat with the capacity to support a wide range of species. Cultivation, heavily trodden footpaths, poached ground etc. can limit available habitat niches.	No
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 *Urtica* spp., cleavers *Galium aparine* and docks *Rumex* spp. Their presence, either singly or together, does not exceed the 20% cover threshold.	No
D1.	Invasive and neophyte species	>90% of the hedgerow and undisturbed ground is free of invasive non-native plant species (including those listed on Schedule 9 of WCA[3]) and recently introduced species.	Recently introduced species refer to plants that have naturalised in the UK since AD 1500 (neophytes). Archaeophytes count as natives. For information on archaeophytes and neophytes see the JNCC website[4], as well as the BSBI website[5] where the 'Online Atlas of the British and Irish Flora'[6] contains an up-to-date list of the status of species. For information on invasive non-native species see the GB Non-Native Secretariat website[7].	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).	No