



Biodiversity Net Gain Report

Cardens Gardens, Welwyn, Hertfordshire

Report Reference: BG25.292

September 2026



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Revision Details

Revision	Approved	Revision Details
REV1	N/A	Document altered to include written permission for landowner to access document
REV2	Emily Murchison Consultant Ecologist	Document updated to accommodate most recent landscape design. Biodiversity Net Gain metric calculation figures updated accordingly.
REV3	Lucy Talbot Consultant Ecologist	Baseline reverted back to 2022 habitats as per LPA feedback.

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Contents

Document Control	3
Revision Details	3
1 Summary.....	7
2 Introduction.....	8
3 Methodology	10
3.1 Biodiversity Metric.....	10
3.2 Metric Publish Date	11
3.3 Desk Study.....	11
3.4 Field Survey	11
3.5 Mapping and Assessment	12
3.6 Limitations.....	12
4 Results	14
4.1 Baseline Condition Assessment.....	14
4.2 Scheme Design and Biodiversity Net Gain Principles	14
4.3 Biodiversity Metric Calculator Results.....	20
5 Evaluation	21
6 Habitat Prescriptions	22
6.2 Proposed Habitats	23
Appendix 1. Proposed Plans.....	27
Appendix 2. UKHabs Habitat Baseline	28
Appendix 3. Post Development Habitats.....	29
Appendix 4. References.....	30

Tables

Table 1: Summary of condition assessment for habitat baseline for Cardens Gardens, Welwyn.....	16
Table 2: Summary Post Development Habitats for habitats for Cardens Gardens, Welwyn.	17
Table 3: Summary Post Development Habitats for Hedgerows for Cardens Gardens, Welwyn.	18
Table 4: Biodiversity Impact Assessment Score, Scheme with Ecological Enhancements	20
Table 5: Target conditions for Modified Grassland	23
Table 6: Target conditions for Individual Trees.....	24
Table 7: Target conditions for Native Hedgerows	25
Table 8: Target conditions for Native Hedgerows and Native Hedgerow With Trees	26

1 Summary

- 1.1.1 Where a development has an impact on biodiversity, Biodiversity Net Gain encourages developers to secure an increase in appropriate natural habitat and ecological features over and above that being affected. In order to determine whether there is no net loss or a net gain to biodiversity from a development project, a quantitative approach involving the use of a metric is required. In England, biodiversity net gain is required under a statutory framework introduced by Schedule 7A of the Town and Country Planning Act 1990 (inserted by the Environment Act 2021). This statutory framework is referred to as 'Biodiversity Net Gain' in Planning Practice Guidance to distinguish it from other or more general biodiversity gains.
- 1.1.2 This Biodiversity Impact Assessment (BIA) draws upon the baseline results of the Preliminary Ecological Appraisal BG25.292 Cardens Gardens REV3 (March 2026). However, due to habitat degradation the baseline was reverted to 2022 habitats using satellite data following feedback from the Local Planning Authority (LPA). This assessment includes the results of biodiversity value calculations, derived using the Statutory Biodiversity Metric Calculator (DEFRA 2025).
- 1.1.3 Using the Statutory Biodiversity metric, the existing habitats within the application boundary were valued at 10.27 'Habitat Units' with no 'Hedgerow' units. No irreplaceable habitat is present on site. The proposed scheme was calculated to hold 1.59 'Habitat Units', resulting in an overall net-loss to biodiversity of -8.68 'Biodiversity Units' (-84.48%) and 0.61 'Hedgerow Units'. A percentage gain could not be provided due to the site baseline did not possess 'Hedgerow Units'. Trading rules have not been satisfied for habitats under the current assessment. The calculations derived from this assessment meet the statutory 10% net gain requirement as set out within Schedule 7A of the Town and Country Planning Act 1990 (inserted by the Environment Act 2021).
- 1.1.4 As the results derived from the calculation do not meet the mandatory 10% net gain requirement, the client seeks to offset the unit shortfall through purchase of offsite credits from a third-party provider. The unit shortfall can be found in the accompanying metric.
- 1.1.5 The report should be reviewed in conjunction with the Preliminary Ecological Appraisal BG25.292 Cardens Gardens REV3 (March 2026) and the accompanying Metric (BG25.292 Cardens Gardens – BIODIVERSITY METRIC – REV2).

2 Introduction

- 2.1.1 Brindle and Green Ltd were commissioned by Macdonald Begeman Limited to undertake a Biodiversity Impact Assessment (BIA) at the site known as Cardens Gardens, Danesbury Park Road, Hertfordshire. This report provides an appraisal of the biodiversity value associated with the existing habitats established during the baseline survey and assesses the impacts in terms of biodiversity loss against the proposed layout (Appendix 1) using the Statutory Metric (DEFRA, 2025) which is considered the most up to date method for assessing impact to biodiversity.
- 2.1.2 The purpose of this report is to assess the current biodiversity habitat and value of the site, so as to reduce net-loss as a result of the development and guide requirements to meet the mandatory 10% net gain requirement.
- 2.1.3 The application site is approximately 0.74ha in extent and is situated north of the village of Welwyn. The site area at the time of initial survey (June 2025) was comprised of gravelled hardstanding, cleared sparsely vegetated land that had been recolonised by vegetation and a parcel of modified grassland formed as a result of colonisation of previously cleared land. Following revision by the Local Planning Authority (LPA), baseline habitats were altered to reflect satellite imagery from 2022 to feature other neutral grassland, with areas of mixed scrub and scattered trees present. The surroundings of the site consist of a combination of suburban residential development and arable/pastoral fields, with the A1 motorway located adjacent to the eastern boundary of the site. A strip of woodland forming the motorway verge runs alongside the eastern edge of the site.
- 2.1.4 The site is the subject of a full planning application for a caravan park with space for 27 caravans and the associated access roads for vehicles. Design proposals for the site are presented in Appendix 1 of this report.
- 2.1.5 All habitat areas are planned to be lost as part of the scheme. No habitats are planned to be retained or enhanced.
- 2.1.6 Results and recommendations contained within this report have been prepared by an experienced ecologist and are therefore the view of Brindle & Green Limited. The results of the Biodiversity Impact Assessment are based on information provided by our client and the

previous ecological report (BG25.292, August 2025). This report pertains to this information only.

- 2.1.7 This report has been complied in accordance with local policies (Hertfordshire County Council, 2025, and national policies to guide the scheme on how to achieve the targets set out within Schedule 7A of the Town and Country Planning Act 1990 (inserted by the Environment Act 2021).

3 Methodology

3.1 Biodiversity Metric

3.1.1 The biodiversity accounting system is underpinned by a metric that calculates the ecological value of both development impact and habitat restoration/creation. The statutory Biodiversity Metric was built upon a series of previous versions developed in collaboration with Natural England, the Environment Agency and the Forestry Commission, including authors and contributors cited in previous versions. The Biodiversity Metric calculations must be undertaken following the below rules. If they are not followed, then a biodiversity net gain cannot be claimed.

- **Rule 1:** The trading rules of this biodiversity metric must be followed.
- **Rule 2:** Biodiversity Unit Outputs, for each type of unit, must not be summed traded, or converted between types. The requirement to deliver a 10% net gain applies to each type of unit.
- **Rule 3:** The calculations must be undertaken using the statutory metric calculation tool or small sites metric tool (for small sites).
- **Rule 4:** in exceptional ecological circumstances, deviation from this biodiversity metric methodology may be permitted by the relevant planning authority (refer to The Statutory Metric User Guide on applications of Rule 4).

3.1.2 The metric is based on an assessment of habitat type and condition. Habitat types are classified into five bands of 'distinctiveness' which are:

- **Very High:** Priority habitats that are rare and threatened and require conservation action
- **High:** Priority habitats
- **Medium:** Semi-natural habitats that are not priority habitats
- **Low:** Habitat of low biodiversity value
- **Very low:** Habitats with little or no biodiversity value

3.1.3 Compensation arrangements must be like-for-like or better, i.e. the loss of semi-natural habitats can only be compensated for through the creation of priority or other semi-natural habitats, not through creation of lesser quality habitat. 'Trading up' options allow for the loss of poor-quality habitat, such as farmland, to be compensated for with the creation of high-quality habitat.

- 3.1.4 The ecological value of the habitat lost to development is a function of its distinctiveness, its condition and the area lost – scores are assigned to all three variables and multiplied together to arrive at the number of units lost. To compensate for a loss; habitat creation in the scheme must be delivered to produce sufficient units to meet the mandatory 10% net gain. Where a 10% net gain cannot be achieved within the application site, habitat creation/enhancement will be used within wider ownership to meet the statutory requirement. Where this cannot be achieved then purchase of biodiversity credits through a third part provider is considered.
- 3.1.5 The number of credits delivered by the compensation receptor sites are also a function of the type, condition and area of the habitat being created or restored. But additionally, there are a further range of ‘multipliers’ applied to the creation of habitat because there are a number of risks to take account of – spatial, temporal and delivery.
- 3.1.6 Where proposed creation/enhancement of habitat is of medium distinctiveness or above then a Habitat Management and Monitoring Plan (HMMP) must be produced to detail how these areas are to be maintained to achieve their target criteria and secure their longevity.

3.2 Metric Publish Date

- 3.2.1 The version of Statutory Metric used for this assessment was published on 05/08/2026.

3.3 Desk Study

- 3.3.1 A desk study utilising Local Nature Recover Strategies or publications within the local plan (Hertfordshire County Council 2025) as well as open-source special data available from Multi Agency Geographic Information for the countryside (MAGIC) was searched to determine the strategic significance of the site.

3.4 Field Survey

Habitat Baseline Condition Assessment

- 3.4.1 A preliminary ecological appraisal was undertaken by Brindle and Green Ltd which included a habitat baseline condition assessment using the Statutory Condition Assessment Sheets.
- 3.4.2 The baseline condition assessment was undertaken at 11:30am on the 18th of June 2025 by Sarah Jennison BSc (Hons), Consultant Ecologist, Josh Bowler BSc (Hons), Qualifying Member of CIEEM,

Graduate Ecologist and Harry Ridgeway BSc (Hons), MSc, Qualifying Member of CIEEM, Seasonal Ecologist.

3.4.3 Following recommendation from the North Hertfordshire Council, the baseline habitats were amended following initial report submission to reflect satellite imagery from 2022 due to degradation of the habitats recorded on site during the 2025 survey. This was done according to UK government guidance on BNG:

- 'Where unauthorised degradation of the onsite habitat has taken place on the land between 30 January 2020 and the date of relevant date, the biodiversity pre-development value of the onsite habitat should be calculated as the biodiversity value of the habitat on the date immediately before the carrying out of these degradation activities.'

3.4.4 Habitat classifications were assumed based on photograph appearance and the species present during the site visit. Habitat conditions were assumed to be 'Good' to establish a best-case scenario with regard to baseline habitat units.

3.5 Mapping and Assessment

3.5.1 Habitats were mapped within QGIS software to allow area calculations. Geometry was extracted from the polygons and lines drawn on the baseline plan and entered into the metric with their respected condition assessment.

3.5.2 The proposed scheme was georeferenced over the baseline map to determine extent of development and assess habitat retention/loss/potential enhancement areas. Where available; CAD drawings may be directly imported to QGIS to allow for calculations.

3.5.3 A series of points, polygons and lines were drawn over the proposed plans and classified by their target habitat type and condition with their geometries extracted and entered into the habitat creation or habitat enhancement tabs of the metric.

3.6 Limitations

3.6.1 It should be noted that whilst every effort has been made to provide a comprehensive description of the site, no investigation could ensure the complete characterisation and prediction of the natural environment.

- 3.6.2 Classifying habitats based on historical satellite imagery does not provide accuracy with regard to species composition and condition which require closer in-person assessment to properly quantify. As a result, habitat types and conditions have been assumed to be as high value as is reasonably expected given the site location, context and species present during site visit.
- 3.6.3 Georeferencing does not provide an exact measurement of the elements of the proposed scheme. However, the metric rounds the area calculations to 2 decimals to be as accurate as possible.

4 Results

4.1 Baseline Condition Assessment

- 4.1.1 The application site comprises an area of other neutral grassland, with areas of mixed scrub and seven scattered trees. The distinctiveness recorded on site was considered 'Medium' for habitats. The site was not situated within the local nature recovery strategy for Hertfordshire and so the strategic significance for the site has been assessed as 'Area/compensation not in local strategy/ no local strategy'. A summary of the baseline condition assessment can be found in Table 1 below with a map of the baseline habitats in Appendix 2. Full details of the baseline assessment can be found within the accompanying metric (BG25.292, BNG Metric – REV2). No habitats within the application site met the criteria for irreplaceable habitat. No hedgerow or watercourse units were present in the baseline of this site.

4.2 Scheme Design and Biodiversity Net Gain Principles

- 4.2.1 The progression of the layout has been informed by the baseline calculations and habitat creation/enhancement has been guided to maximise biodiversity potential on site.

Retained/Enhanced Habitat

- 4.2.2 No habitat is planned to be retained or enhanced as part of the scheme. Habitats identified using the 2022 satellite imagery have already been lost, therefore retention is no longer possible.

Habitat Loss

- 4.2.3 The proposals have seen the loss of 0.238ha of 'Other neutral grassland', 0.504ha of 'Mixed scrub' and of seven total scattered trees.

Habitat Creation

- 4.2.4 The scheme will seek the creation of a caravan park containing pitches for 27 caravans as well as associated access roads, parking and spaces for storage sheds and refuse containers.
- 4.2.5 All proposed caravan spaces, access and parking have been classified as 'Developed Land; Sealed Surface' with no biodiversity value.
- 4.2.6 Areas of open space have been provided in the proposals which is to be used for the benefit of biodiversity. The grassland surrounding and running between caravan spaces and roads will be

seeded with an appropriate mix such as Emorsgate EM2 seed mix or other similar suitable product to target the habitat type 'Modified Grassland' at 'Moderate condition'. Grassland should consist of at least six native species per square meter with at least two being forbs and no invasive species present.

- 4.2.7 Part of the area of open space is planned to be utilised for the planting of trees and hedgerows for landscaping. A total of 28 individual trees will be planted and should be of native species and are expected to achieve 'Moderate' condition. Four native hedgerows and one native hedgerow with trees are also included within landscaping proposals. Due to expected management regime of surrounding grassland, hedgerows are not expected to achieve a condition score higher than 'Poor'.
- 4.2.8 The 'Modified Grassland' and 'Individual Trees' habitat proposed within this Biodiversity Impact Assessment and Metric Calculations are relatively low value, however the net gain requirement is dependent on them achieving 'Moderate' condition. As such, this site will require management under a Habitat Management and Monitoring Plan (HMMP) in order to achieve their target conditions outlined within the metric calculations.

Table 1: Summary of condition assessment for habitat baseline for Cardens Gardens, Welwyn.

Habitat and Area/Length	Habitat Parcel Ref	Distinctiveness	Condition	Reason
Other Neutral Grassland (0.238ha)	g3c	Medium	Good	Due to habitat degradation occurring onsite prior to site visit, the pre-development biodiversity value has taken based on satellite imagery from 2022. Based off this, it is assumed that the pre-development habitats onsite was Other neutral grassland. It has been assumed to have been in the best possible condition to account for its loss.
Mixed scrub (0.504ha)	h3h	Medium	Good	Due to habitat degradation occurring onsite prior to site visit, the pre-development biodiversity value has taken based on satellite imagery from 2022. Based off this, it is assumed that the pre-development habitats onsite was Mixed scrub. It has been assumed to have been in the best possible condition to account for its loss.
Individual trees (0.114ha)	T1-T7	Medium	Good	Due to habitat degradation occurring onsite prior to site visit, the pre-development biodiversity value has taken based on satellite imagery from 2022. Based off this, it is assumed that there were seven pre-development trees expected to be Medium sized. It has been assumed to have been in the best possible condition to account for its loss.

Table 2: Summary Post Development Habitats for habitats for Cardens Gardens, Welwyn.

Habitat and Area	Habitat Parcel Ref	Distinctiveness	Condition	Reason
Modified Grassland (0.368ha)	1	Low	Moderate	Areas of modified grassland planted in open spaces around handstanding. Number of native species present should be at least 6 species per meter square. Additionally, there should be absence of invasive species, bracken and bramble or other scrub. Bare ground should be between 1-10%. Condition assessment criteria A, C, E, F, G are expected to be passed. Sward height is unlikely to be varied in this amenity grassland, and so criterion B is not expected to be met. Potential presence of frequent vehicle access and families with children means that criterion D requirements for <5% of habitat to feature physical damage cannot be guaranteed. Essential criterion A in addition to 5 total criteria passed will qualify this habitat for 'Moderate' condition.
Developed Land – Sealed Surface (0.385ha)	2	Very low	N/A	Condition assessment not applicable for this habitat type.
Individual Trees	T1 – T28	Medium	Moderate	Scattered individual small trees to be planted across the site. Trees should be of native species, lack evidence of human-caused damage and have >20% of the canopy cover oversailing vegetation. As such, trees are expected to pass criteria A, B, D and F, returning a condition score of 'Moderate'. Trees will not be mature, not feature natural ecological niches at time of planting, therefore are not expected to pass criteria C or E.

Table 3: Summary Post Development Habitats for Hedgerows for Cardens Gardens, Welwyn.

Habitat and Length	Habitat Parcel Ref	Distinctiveness	Condition	Reason
Native Hedgerow	H1	Low	Poor	Hedgerow is expected to pass criteria A1, B1, B2, D1 and D2. However, criteria A2, C1 and C2 are expected to be failed. Both 'C' category criteria are expected to be failed as they require an area of undisturbed ground around the hedgerow. The proposed plans do not indicate that this is a possibility within the bounds of the scheme. As two criteria from a single lettered category are failed, the hedgerow cannot achieve a condition score above 'Poor'.
Native Hedgerow	H2	Low	Poor	Hedgerow is expected to pass criteria A1, B1, B2, D1 and D2. However, criteria A2, C1 and C2 are expected to be failed. Both 'C' category criteria are expected to be failed as they require an area of undisturbed ground around the hedgerow. The proposed plans do not indicate that this is a possibility within the bounds of the scheme. As two criteria from a single lettered category are failed, the hedgerow cannot achieve a condition score above 'Poor'.
Native Hedgerow with Trees	H3	Medium	Poor	Hedgerow with trees is expected to pass criteria A1, B1, B2, D1, D2 and E2. However, criteria A2, C1, C2 and E1 are expected to be failed. Both 'C' category criteria are expected to be failed as they require an area of undisturbed ground around the hedgerow. The proposed plans do not indicate that this is a possibility within the bounds of the scheme. As two criteria from a single lettered category are failed, the hedgerow cannot achieve a condition score above 'Poor'.
Native Hedgerow	H4	Low	Poor	Hedgerow is expected to pass criteria A1, B1, B2, D1 and D2. However, criteria A2, C1 and C2 are expected to be failed. Both 'C' category criteria are expected to be failed as they require an area of undisturbed ground around the hedgerow. The proposed plans do not indicate that this is a possibility within the bounds of the scheme. As two criteria from a single lettered category are failed, the hedgerow cannot achieve a condition score above 'Poor'.
Native Hedgerow	H5	Low	Poor	Hedgerow is expected to pass criteria A1, B1, B2, D1 and D2. However, criteria A2, C1 and C2 are expected to be failed. Both 'C' category criteria are expected to be failed as they require an area of undisturbed ground around the hedgerow. The proposed plans do not indicate that this is a

Habitat and Length	Habitat Parcel Ref	Distinctiveness	Condition	Reason
				possibility within the bounds of the scheme. As two criteria from a single lettered category are failed, the hedgerow cannot achieve a condition score above 'Poor'.

4.3 Biodiversity Metric Calculator Results

4.3.1 Table 4 below provides a headline summary of the calculations derived from the statutory metric.

4.3.2 Under the current proposals trading rules have not been satisfied with a net loss of 8.68 Habitat units and a gain of 0.61 Hedgerow units detailed in the habitat trading summary tab (BG25.292 Cardens Gardens BNG Metric – REV2).

Table 4: Biodiversity Impact Assessment Score, Scheme with Ecological Enhancements

BG25.292 Cardens Gardens		Return to results menu	
Headline Results		Scroll down for final results ▲	
On-site baseline	Area habitat units	10.27	
	Hedgerow units	0.00	
	Watercourse units	0.00	
On-site post-intervention (including habitat retention, creation & enhancement)	Area habitat units	1.59	
	Hedgerow units	0.61	
	Watercourse units	0.00	
On-site net change (units & percentage)	Area habitat units	-8.68	-84.48%
	Hedgerow units	0.61	N/A
	Watercourse units	0.00	0.00%
		On-site net gain is less than target set ▲ Zero baseline units - % cannot be calculated	
Off-site baseline	Area habitat units	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Off-site post-intervention (including habitat retention, creation & enhancement)	Area habitat units	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Off-site net change (units & percentage)	Area habitat units	0.00	0.00%
	Hedgerow units	0.00	0.00%
	Watercourse units	0.00	0.00%
Combined net unit change (including all on-site & off-site habitat retention, creation & enhancement)	Area habitat units	-8.68	
	Hedgerow units	0.61	
	Watercourse units	0.00	
Spatial risk multiplier (SRM) deductions	Area habitat units	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	

FINAL RESULTS		
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	Area habitat units	-8.68
	Hedgerow units	0.61
	Watercourse units	0.00
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	Area habitat units	-84.48%
	Hedgerow units	N/A
	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%	10.27	11.30	9.71
Hedgerow units	10.00%	0.00	0.00	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 ▲

5 Evaluation

- 5.1.1 The site is the subject of a full planning application for site clearance to facilitate the development of a caravan park with capacity for 27 caravan pitches, as well as associated access, parking, storage sheds and refuse collection. Current design proposals for the site are presented in Appendix 1 of this report.
- 5.1.2 Using the Statutory Biodiversity metric the proposed scheme results in an overall net-loss to biodiversity of -8.68 'Biodiversity Units' (-84.48%) and a net-gain of +0.61 'Hedgerow Units'.
- 5.1.3 The proposed scheme has not demonstrated to meet the statutory 10% net gain requirement as set out within Schedule 7A of the Town and Country Planning Act 1990 (inserted by the Environment Act 2021).
- 5.1.4 Under the current assessment trading rules have not been satisfied. Given the scope of the scheme and the habitats present within the site baseline, it is not expected that the design plans could be altered in a manner that would generate a net-gain. As such, the client seeks to offset the unit shortfall through purchase of offsite credits from a third-party provider.
- 5.1.5 This report has considered all available area of open space with maximised potential for retention/enhancement on site in line with good practice principles. Habitat creation has been informed by the distinctiveness of habitat derived from the baseline calculations to reduce impacts on habitat value where possible.
- 5.1.6 In order to secure the habitat creation and target conditions a Habitat Management and Monitoring Plan (HMMP) will be required to safeguard the habitats for 30 years post construction.

6 Habitat Prescriptions

- 6.1.1 The tables outlined within this section set out each of the proposed habitats and target conditions and how they will achieve the targets. The specific seed types, establishment, management and monitoring requirements will be secured within a Habitat Management and Monitoring Plan. A map detailing the areas of creation have been included within Appendix 3.
- 6.1.2 Spaces for caravans, roads, parking, sheds and refuse collection areas cannot be secured as such have been classified as Developed Land – Sealed Surface with condition assessment N/A.

6.2 Proposed Habitats

Table 5: Target conditions for Modified Grassland

Habitat	Distinctiveness	Condition	Parcel Reference
Modified Grassland	Low	Moderate	g4
Description			
The areas of open space located around the caravan park will be seeded with a flowering lawn mixture (such as Emorsgate EM2 or similar approved). The seed mix provides a higher biodiversity value sward than a typical amenity seed mix. The EM2 mix contains enough species to target essential criterion A; required to achieve 'Moderate' condition. These areas will be managed to prevent establishment of scrub and bracken cover, free of invasive species. Any bare ground areas will be reseeded.			
Target Condition Criteria			
A	There are 6-8 vascular plant species per m ² present, including at least 2 forbs (these may include those listed in Footnote 1). Note - this criterion is essential for achieving Moderate or Good condition. 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.		
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.		
D	Physical damage is evident in less than 5% of total grassland area. Examples of physical damage include excessive poaching, damage from machinery use or storage, erosion caused by high levels of access, or any other damaging management activities.		
E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens) ² .		
F	Cover of bracken <i>Pteridium aquilinum</i> is less than 20%.		
G	There is an absence of invasive non-native plant species ³ (as listed on Schedule 9 of WCA ⁴).		
Footnotes			
Footnote 1 – Creeping thistle <i>Cirsium arvense</i> , spear thistle <i>Cirsium vulgare</i> , curled dock <i>Rumex crispus</i> , broad-leaved dock <i>Rumex obtusifolius</i> , common nettle <i>Urtica dioica</i> , creeping buttercup <i>Ranunculus repens</i> , greater plantain <i>Plantago major</i> , white clover <i>Trifolium repens</i> and cow parsley <i>Anthriscus sylvestris</i> . Footnote 2 – For example, this could include small, scattered areas of bare ground allowing establishment of new species, or localised patches where not exceeding 10% cover. Footnote 3 – Assess this for each distinct habitat parcel. If the distribution of invasive non-native species varies across the habitat, split into parcels accordingly, applying a buffer zone around the invasive non-native species with a size relative to its risk of spread into adjacent habitat, using professional judgement. Footnote 4 – Wildlife and Countryside Act 1981 (as amended).			

Table 6: Target conditions for Individual Trees

Habitat	Distinctiveness	Condition	Parcel Reference
Individual Trees	Low	Moderate	T1 – T28
Description			
Total of 28 scattered trees planted throughout the site. Trees are expected to achieve ‘Moderate’ condition if species are native and trees are protected from human-induced damage.			
Target Condition Criteria			
A	The tree is a native species (or at least 70% within the block are native species).		
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).		
C	The tree is mature (or more than 50% within the block are mature) ¹ .		
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.		
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.		
F	More than 20% of the tree canopy area is oversailing vegetation beneath.		
Footnotes			
Footnote 1 - See gov.uk standing advice on ancient and veteran trees. Available from: Keepers of time: ancient and native woodland and trees policy in England (publishing.service.gov.uk) and: Ancient woodland, ancient trees and veteran trees: advice for making planning decisions - GOV.UK (www.gov.uk) Footnote 2 - Enhancement of this habitat type is only possible by improving the habitat so that it meets all Criteria B, D and F. It is not possible or appropriate to enhance individual tree/s through meeting just one or two of those Criteria, nor by meeting Criteria A, C or E.			

Green highlighted rows indicate target criteria

Table 7: Target conditions for Native Hedgerows

Habitat		Distinctiveness	Condition	Parcel Reference
Native Hedgerow		Low	Poor	H1, H2, H4, H5
Description				
Four lengths of native hedgerow have been proposed as part of the landscaping scheme, both internally and along site boundaries. Hedgerows are all expected to fail criteria C1 and C2 due to a lack of area of undisturbed vegetation around hedgerow. This condition is not expected to be achievable within the bounds of the proposed scheme.				
Target Condition Criteria				
A1.	>1.5 m average along length			
A2.	>1.5 m average along length			
B1.	Gap between ground and base of canopy <0.5 m for >90% of length			
B2.	Gaps make up <10% of total length; and No canopy gaps >5 m			
C1.	>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).			
C2.	Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground.			
D1.	>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.			
D2.	>90% of the hedgerow or undisturbed ground is free of damage caused by human activities.			
Footnotes				
Footnote 1 – DEFRA (2007) <i>Hedgerow Survey Handbook. A standard procedure for local surveys in the UK.</i> [online] Available on: layout (hedgelink.org.uk)				
Footnote 2 – STALEY, J.T. ET AL. (2020) <i>Definition of Favourable Conservation Status for Hedgerows.</i> [online] Available on: Definition of Favourable Conservation Status for Hedgerows - RP2943 (naturalengland.org.uk)				
Footnote 3 – Wildlife and Countryside Act 1981 (as amended).				
Footnote 4 – CHEFFINGS, C. M. et al. (2005) <i>The Vascular Plant Red Data List for Great Britain.</i> Species Status 7: 1-116. [online] Available on: The Vascular Plant Red Data List for Great Britain (Species Status No. 7) JNCC Resource Hub				
Footnote 5 – BOTANICAL SOCIETY OF BRITAIN AND IRELAND (BSBI). <i>Definitions: wild, native or alien?</i> [online] Available on: Definitions: wild, native or alien? – Botanical Society of Britain & Ireland (bsbi.org)				
Footnote 6 – BSBI and Biological Records Centre (BRC) (2022) <i>Online Atlas of the British and Irish Flora.</i> [online] Available on: Acknowledgements Online Atlas of the British and Irish Flora (brc.ac.uk)				
Footnote 7 – GB NON-NATIVE SPECIES SECRETARIAT (GBNNS) (2022) Available on: Home » NNSS (nonnativespecies.org)				
Footnote 8 – See gov.uk standing advice on ancient and veteran trees. Available from: Keepers of time: ancient and native woodland and trees policy in England (publishing.service.gov.uk) and: Ancient woodland, ancient trees and veteran trees: advice for making planning decisions - GOV.UK (www.gov.uk)				

Green highlighted rows indicate target criteria

Table 8: Target conditions for Native Hedgerows and Native Hedgerow With Trees

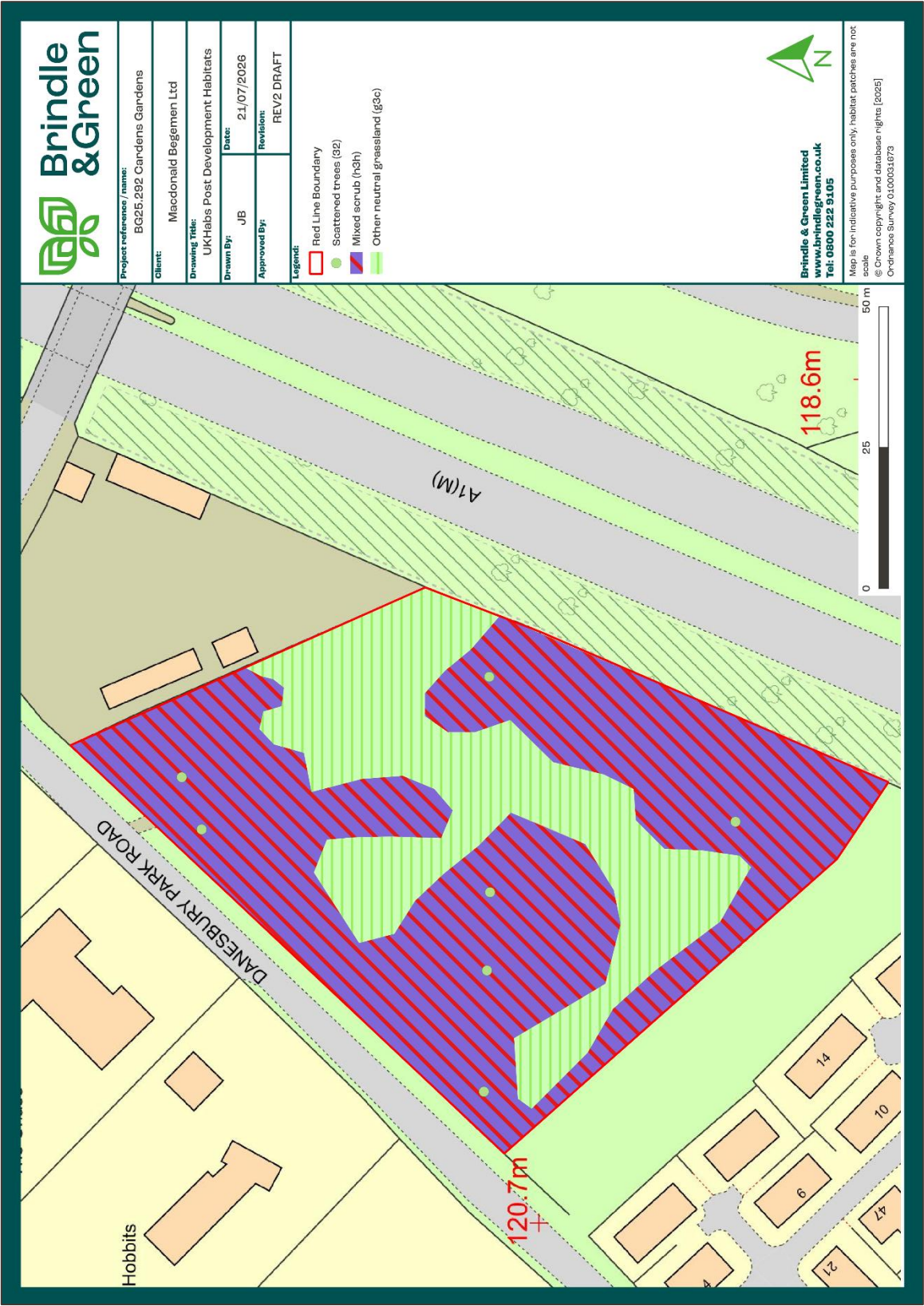
Habitat		Distinctiveness	Condition	Parcel Reference
Native Hedgerow With Trees		Medium	Poor	H3
Description				
Length of native hedgerow with trees proposed as part of the landscaping scheme centrally within the interior of the site. Hedgerow is expected to fail criteria C1 and C2 due to a lack of area of undisturbed vegetation around hedgerow. This condition is not expected to be achievable within the bounds of the proposed scheme.				
Target Condition Criteria				
A1.	>1.5 m average along length			
A2.	>1.5 m average along length			
B1.	Gap between ground and base of canopy <0.5 m for >90% of length			
B2.	Gaps make up <10% of total length; and No canopy gaps >5 m			
C1.	>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).			
C2.	Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground.			
D1.	>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.			
D2.	>90% of the hedgerow or undisturbed ground is free of damage caused by human activities.			
E1.	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.			
E2.	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.			
Footnotes				
Footnote 1 – DEFRA (2007) <i>Hedgerow Survey Handbook. A standard procedure for local surveys in the UK.</i> [online] Available on: layout (hedgelink.org.uk)				
Footnote 2 – STALEY, J.T. ET AL. (2020) <i>Definition of Favourable Conservation Status for Hedgerows.</i> [online] Available on: Definition of Favourable Conservation Status for Hedgerows - RP2943 (naturalengland.org.uk)				
Footnote 3 – Wildlife and Countryside Act 1981 (as amended).				
Footnote 4 – CHEFFINGS, C. M. et al. (2005) <i>The Vascular Plant Red Data List for Great Britain.</i> Species Status 7: 1-116. [online] Available at: The Vascular Plant Red Data List for Great Britain (Species Status No. 7) JNCC Resource Hub				
Footnote 5 – BOTANICAL SOCIETY OF BRITAIN AND IRELAND (BSBI). <i>Definitions: wild, native or alien?</i> [online] Available on Definitions: wild, native or alien? – Botanical Society of Britain & Ireland (bsbi.org)				
Footnote 6 – BSBI and Biological Records Centre (BRC) (2022) <i>Online Atlas of the British and Irish Flora.</i> [online] Available on: Acknowledgements Online Atlas of the British and Irish Flora (brc.ac.uk)				
Footnote 7 – GB NON-NATIVE SPECIES SECRETARIAT (GBNNSS) (2022) Available on: Home » NNSS (nonnativespecies.org)				
Footnote 8 – See gov.uk standing advice on ancient and veteran trees. Available from: Keepers of time: ancient and native woodland and trees policy in England (publishing.service.gov.uk)				

Appendix 1. Proposed Plans

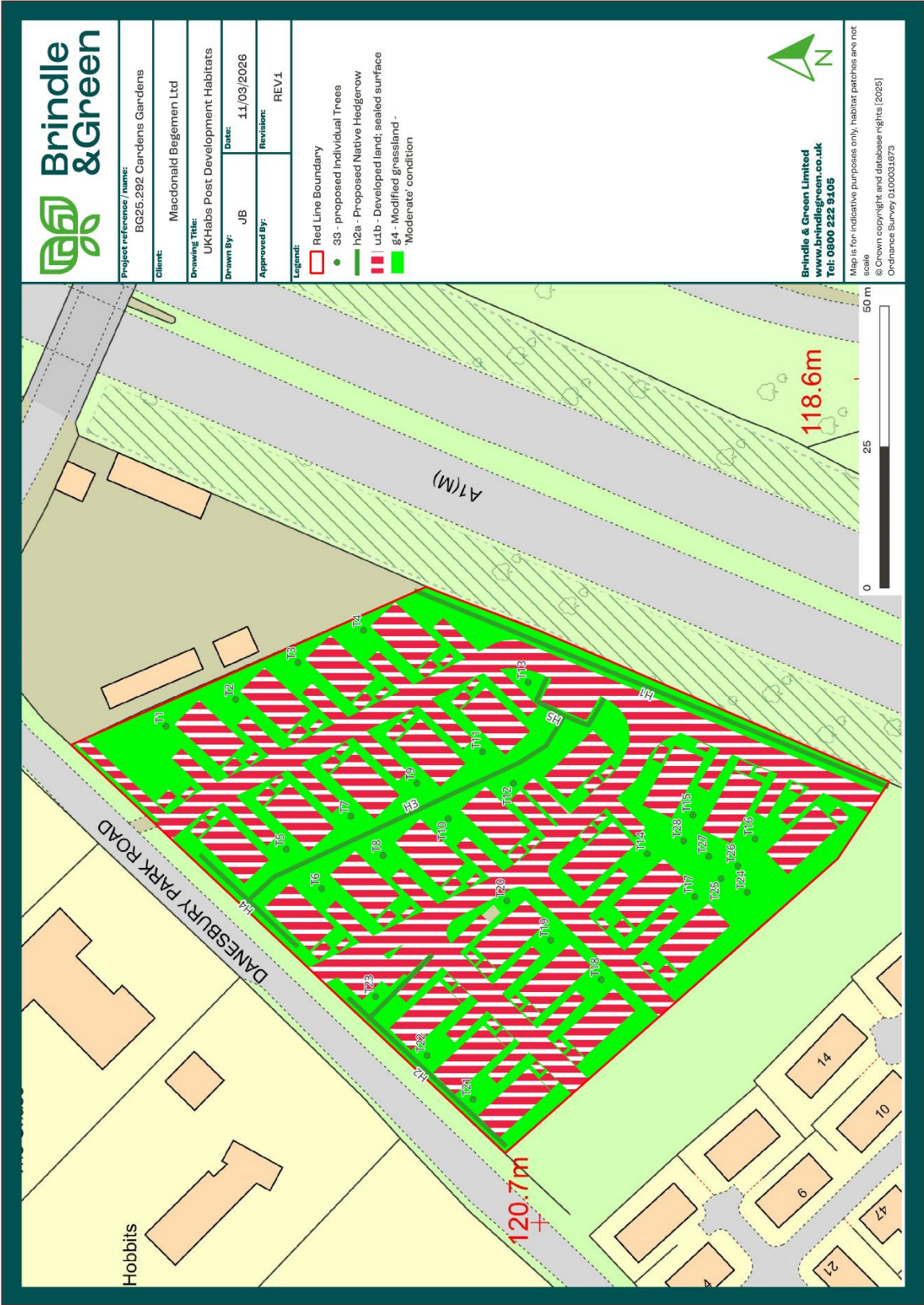
Proposed layout from Park Designs, 2026



Appendix 2. UKHabs Habitat Baseline



Appendix 3. Post Development Habitats



Appendix 4. References

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