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SUCCESS THROUGH SUSTAINABILITY

2 Ladybarn Crescent, Withington

Biodiversity Net Gain Screening

AJ Estates

06/2024

Assessment Summary

This document comprises a Biodiversity Net Gain Screening for 2 Ladybarn Crescent, Withington (centered at grid reference SJ 85666 93242); hereafter referred to as the 'Site') produced on behalf of AJ Estates. It details the results of a high-level Biodiversity Net Gain (BNG) screening of the Site, to provide indicative baseline biodiversity values and an appraisal of likely post-development values based on layout:

- **Drawing number 2220/1**

The outcomes of the screening are summarised in **Table 1** below, which provides the estimated current biodiversity baseline of the site, the target biodiversity value, the estimated post-development with no biodiversity enhancement value, and post-development with biodiversity enhancements value for the Site expressed as habitat units (HU).

Table 1 – Estimated Biodiversity Values

	Biodiversity unit type
	Area based habitats (HU)
Baseline units	0.08
Target units	0.08
Post development	0.06
Post-development with enhancements	0.09
Biodiversity change	0.01
Biodiversity change (%)	14.46

Based on the Biodiversity Net Gain Screening, it is anticipated that a **10% biodiversity net gain target can be achieved** on-site utilizing the current layout.

Please note, as all on site habitats do not carry a condition value, it is considered that a detailed site survey is not applicable as part of any biodiversity net gain assessment to be submitted as part of a planning application.

Baseline Biodiversity Values

Figure 1 shows a map of identified habitats present on the Site. **Table 2** details the area-based habitats identified within the Site, their indicative condition, strategic significance, and calculated biodiversity value.

It should be noted numbers within the Statutory Biodiversity Metric (SBM) are subject to two decimal places, which in some instances may result in minor totalling errors due to rounding.



Figure 1 – Indicative baseline habitats

Table 2 - Baseline Area-Based Habitats

Habitat Identified	Habitat Distinctiveness	Indicative Condition	Strategic Significance	Area (ha)	Biodiversity Value (HU)
Artificial unvegetated, unsealed surface	V.Low	N/A	Area/compensation not in local strategy/ no local strategy	0.06	0.00
Vegetated garden	Low	N/A	Area/compensation not in local strategy/ no local strategy	0.04	0.08
Developed land; sealed surface	V.Low	N/A	Area/compensation not in local strategy/ no local strategy	0.02	0.00
Total					0.08

Data sources

- Current and historic aerial imagery (<https://earth.google.com/web>)
- Streetview images (<https://www.google.com/maps>)
- Defra's Magic map application (<https://magic.defra.gov.uk/magicmap.aspx>)

Post-Development Biodiversity Values

Drawing number 2220/1

Table 3 details the post-development biodiversity value for area-based habitat, estimated from the current site layout: **drawing number 2220/1**. This assumes the creation of standard development habitat types with no additional biodiversity enhancements.

Table 3 - Post-development Area-Based Habitats

Habitat	Intervention Type	Indicative Condition	Strategic Significance	Area (ha)	Estimated Biodiversity Value (HU)
Artificial unvegetated, unsealed surface	Retained	N/A	Area/compensation not in local strategy/ no local strategy	0.05	0.00
Vegetated garden	Retained	N/A	Area/compensation not in local strategy/ no local strategy	0.03	0.06
Developed land; sealed surface	Retained	N/A	Area/compensation not in local strategy/ no local strategy	0.02	0.00
Developed land; sealed surface	Created	N/A	Area/compensation not in local strategy/ no local strategy	0.01	0.00
Total					0.06

Biodiversity Enhancements

Based on the current layout, the following biodiversity enhancements are recommended to achieve further biodiversity net gain:

- Planting of two native species trees on an area of artificial unvegetated, unsealed surface.

An indicative post-development layout is shown in **Figure 2**. **Table 4** details the recommended habitat interventions for achieving biodiversity net gain on-site, based on the current site layout



Figure 2 – Indicative post-development habitats

Table 4 - Recommended Post-Development Biodiversity Enhancements for Area-Based Habitats

Habitat	Intervention Type	Indicative Condition	Strategic Significance	Area (ha)	Estimated Biodiversity Value (HU)
Artificial unvegetated, unsealed surface	Retained	N/A	Area/compensation not in local strategy/ no local strategy	0.05	0.00
Vegetated garden	Retained	N/A	Area/compensation not in local strategy/ no local strategy	0.03	0.06
Developed land; sealed surface	Retained	N/A	Area/compensation not in local strategy/ no local strategy	0.02	0.00
Developed land; sealed surface	Created	N/A	Area/compensation not in local strategy/ no local strategy	0.01	0.00
Individual tree	Created	Moderate	Area/compensation not in local strategy/ no local strategy	0.01	0.03
Total					0.09

Appendix 3 – Assessment Methodology

Baseline Biodiversity

A high-level review of all available data sources has been undertaken in order to classify the habitats currently present within the Site, identify their strategic significance, and assign an indicative habitat condition.

The results of the review have been used to map and classify all habitats within the Site according to UKHab methodology¹. Baseline biodiversity values have then been calculated using the current version of the DEFRA Statutory Biodiversity Metric². Indicative condition values have been assigned according to the condition criteria outlined within the metric, with strategic significance determined by the presence of local and national strategic sites or the function of habitat within the wider landscape (i.e. through facilitating habitat connectivity).

Measuring a Change in Biodiversity

The current development layout: **drawing number 2220/1** was referred to calculate the area, type, and condition of each predicted habitat once the development is implemented. Predicted habitats have been derived from the development plan and classified using UKHab methodology, with habitat conditions predicted by the expected state of each habitat following appropriate management over the defined management period in comparison with their associated condition criteria.

The DEFRA Statutory Biodiversity Metric was used to calculate the predicted net change in the biodiversity value of the Site by comparing the existing baseline biodiversity value against the predicted post-development biodiversity value.

All habitat measurements were made using digital mapping software (QGIS Geographic Information System version 3.36).

Recommendations

Recommendations for achieving biodiversity net gain within the Site have been made based on the following factors:

- Our previous experience working with landscape architects (in terms of typical habitat creation options within development landscaping plans).
- The surrounding environment (i.e. opportunities for the expansion of surrounding habitats and establishment of habitat connectivity across the Site).
- The limitations of the development layout (i.e. the availability and location of open space available for habitat creation and/or enhancement).
- The requirements for satisfying trading rules within the metric (to ensure lost habitats are appropriately mitigated).
- Our ecological judgement (in relation to the feasibility and likelihood of success for any habitat creation/enhancement proposed).

¹ UKHab Ltd (2023). UK Habitat Classification Version 2.0. Available at <https://www.ukhab.org>

² DEFRA (2024) The Statutory Biodiversity Metric: User Guide), February

Bibliography

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QGIS Development Team (2024). QGIS Geographic Information System. Open Source Geospatial Foundation Project. <http://qgis.osgeo.org>

UKHab Ltd (2023). UK Habitat Classification Version 2.0 (at <https://www.ukhab.org>)