

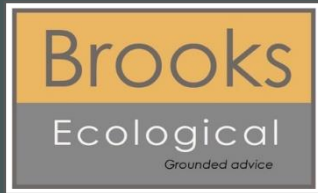
# Goldthorpe Barnsley

## Biodiversity Net Gain Assessment – Part 2

Report Ref. ER-7641-03

23/07/2024

Fortitudo Property



<b>Report reference</b>	<b>ER-7641-03 - Biodiversity Net Gain Assessment (Post-Development)</b>
<b>Author</b>	Jon Roberts MSci (Hons) Assistant Ecologist
<b>Technical Review</b>	Josh Birchall BSc (Hons) MCIEEM Senior Ecologist
<b>QA</b>	Mary Fleming BSc MSc Graduate Ecologist
<b>Authorised</b>	Sam Kitching BSc (Hons) MCIEEM Principal Ecologist
<b>Date</b>	23/07/2024
<b>Report duration</b>	In accordance with CIEEM (2019), unless otherwise stated the findings of this report remain valid for a period of 18 months. After this period advice should be sought on the scope of any updating work required.



Brooks Ecological Ltd has prepared this report for the sole use of Fortitudo Property. The information which we have prepared and provided is in accordance with the CIEEM's Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bona fide opinions. This report does not constitute legal advice. The report is in accordance with the agreement under which our services were performed. No warranty, express or implied, is made as to the advice in this report or any other service provided by us. This report may not be relied upon by any other party except the person, company, agent or any third-party for whom the report is intended without the prior written permission of Brooks Ecological Ltd. This report presents a snapshot of the site at the date it was surveyed; the conditions and the species recorded present, or likely absent, can change rapidly. Resurvey is recommended to any third-party seeking reliance on this report. The content of this report may, in part, be based upon information provided by others and on the assumption that all relevant information has been provided by those parties from whom it has been requested. Information obtained from any third-party has not been independently verified by Brooks unless otherwise stated in the report. This report is the copyright of Brooks Ecological Ltd. Unauthorised reproduction or usage by any person is prohibited.

Unit A, 1 Station Road, Guiseley, Leeds, LS20 8BX  
 Phone: 01943 884451  
 01943 879129  
[www.brooks-ecological.co.uk](http://www.brooks-ecological.co.uk)  
 Registered in England Number 5351418

## Introduction

1. Brooks Ecological Ltd was commissioned by Fortitudo Property to carry out a Biodiversity Net Gain (BNG) Assessment of the proposed development Site at Goldthorpe Barnsley.
2. The assessment applies to the parcel of land shown in Figure 1 opposite. While the Site is divided between red and blue line boundaries, no post-development mapping is provided for the blue line area, and so it is discounted from these calculations.
3. The assessment is informed by a Preliminary Ecological Appraisal Survey of the Site detailed in our report ER-7641-01.
4. At this time Brooks Ecological also carried out an assessment of the baseline value of the Site in relation to BNG and presented this alongside advice on achieving the best BNG position in our report ER-7641-02. This current report supersedes ER-7641-02 and reproduces the relevant information on the Site's baseline.
5. Biodiversity Accounting metrics are used to quantify the value of a site in Biodiversity Units. This helps in assessing the ecological impacts of the proposed development and can help to inform avoidance, or on-Site mitigation levels required; or as a last resort can translate to a direct monetary value where compensation (off-Site) is required.
6. For the purposes of metric calculations, the Site area has been measured using GIS against the provided red line boundary as 0.91ha.
7. Our assessment has made use of the Statutory Biodiversity Metric Calculation Tool, and extracts from this have been used throughout the report. The full spreadsheet has been provided digitally as file BM-7641-01A and should be submitted as part of the application.

**Figure 1** Extent of BNG assessment (red line boundary).



## Pre-development baseline

### Habitats identified

8. Habitats present on-Site are outlined in Table 1, opposite. These are shown in relation to location and extent in Figure 2 overleaf.

### Condition Assessment

9. Habitat condition has been assessed as part of the Preliminary Ecological Appraisal of the Site.
10. Information on condition assessments is provided in the Excel spreadsheet CA-7641-01A provided alongside this report.

### Strategic Significance

11. While the Site lies within the Dearne Valley Green Heart Nature Improvement Area (NIA), it is considered separate enough from the Dearne corridor and links to surrounding habitat to be assessed as "Area/compensation not in local strategy/ no local strategy". Justification for this is presented in Paragraph 18 of the PEA report.

### Irreplaceable habitat

12. Irreplaceable habitats have not been found on-Site.

### Habitat Degradation

13. There is no evidence on Site or in aerial mapping of the Site which suggests that it has been deliberately degraded on or since 30<sup>th</sup> January 2020.

## Biodiversity Metric

14. Habitat types, conditions, and areas have been entered into the Statutory Biodiversity Metric Calculation Tool, alongside information on their strategic significance.
15. The Statutory Biodiversity Metric Calculation Tool is provided alongside this assessment, in Excel spreadsheet BM-7641-01A, and may be useful in investigating design options for the Site.

**Table 1** Habitat Types.

Habitat	Label ref.	Irreplaceable?	Distinctiveness	Condition	See Condition Assessment sheet
Other neutral grassland	G1	No	Medium	Poor	6A
Mixed scrub	S1	No	Medium	Poor	20A
Bramble scrub	S2	No	Medium	N/A	N/A
Ruderal/ephemeral	SV1	No	Low	Moderate	22B
Tall forbs	SV2	No	Low	Poor	22B
Urban tree	T1-T6	No	Medium	Moderate	9A
Native hedgerow with trees	H1	No	Medium	Poor	8A

**Figure 2** The Site's habitats assigned to types used in the Biodiversity Metric. Labelled codes cross-reference to our condition assessment and description in the PEAR, which should be read in conjunction with this report.



**Trading Rules**

- 16. As part of delivering a Net Gain for biodiversity, the BNG process requires that trading rules are complied with, such that loss of habitats is compensated for in a like-for-like or like-for-better fashion. This is based on habitat distinctiveness.
- 17. Once trading rules are complied with, the ‘gain’ component can come from any distinctiveness category.

**Habitat Unit Score**

- 18. The Site has been assessed as having a baseline score of 3.22 Habitat Units. These break down as shown in Table 2, below. Note that this is different from the figure quoted in ER-7641-02, due to the exclusion of habitats within blue line land.

**Table 2** Habitat Units broken down by distinctiveness at this Site.

Distinctiveness	Units	Approach to compensation if lost
Very Low	0	No compensation required.
Low	2.59	Can be replaced with <u>any</u> habitat of the same distinctiveness (low) or any habitat from a higher distinctiveness (Medium, High or Very High)
Medium	0.63	<u>Can not</u> be replaced with habitats from a lower distinctiveness. Compensation needs to be like for like, or like for better. This means it can only be replaced by habitat from the same broad categories in Medium distinctiveness (in this case, grassland, scrub, and individual trees), or any habitat from a higher distinctiveness category (High or Very High).
High	0	Can only be replaced with the same habitat.
Very High	0	Can only be replaced with the same habitat; bespoke compensation required.
Irreplaceable	0	Bespoke compensation required, outside of BNG.

**Hedgerow Unit Score**

- 19. The Site has been assessed as having a baseline score of 0.43 Hedgerow Units. These break down as shown in Table 3, below.

**Table 3** Hedgerow Units broken down by distinctiveness at this Site.

Distinctiveness	Units	Approach to compensation if lost
Very Low	0	Can be replaced with any hedgerow of the same or higher distinctiveness.
Low	0	Can be replaced with any hedgerow of the same or higher distinctiveness.
Medium	0.43	Can be replaced with any hedgerow of the same or higher distinctiveness.
High	0	Can be replaced with the same hedgerow type, or one of Very High distinctiveness.
Very High	0	Can only be replaced with the same hedgerow type.

## Post-development value

- This section calculates the Biodiversity Unit value of the post-development Site and quantifies any gain or shortfall in Units.

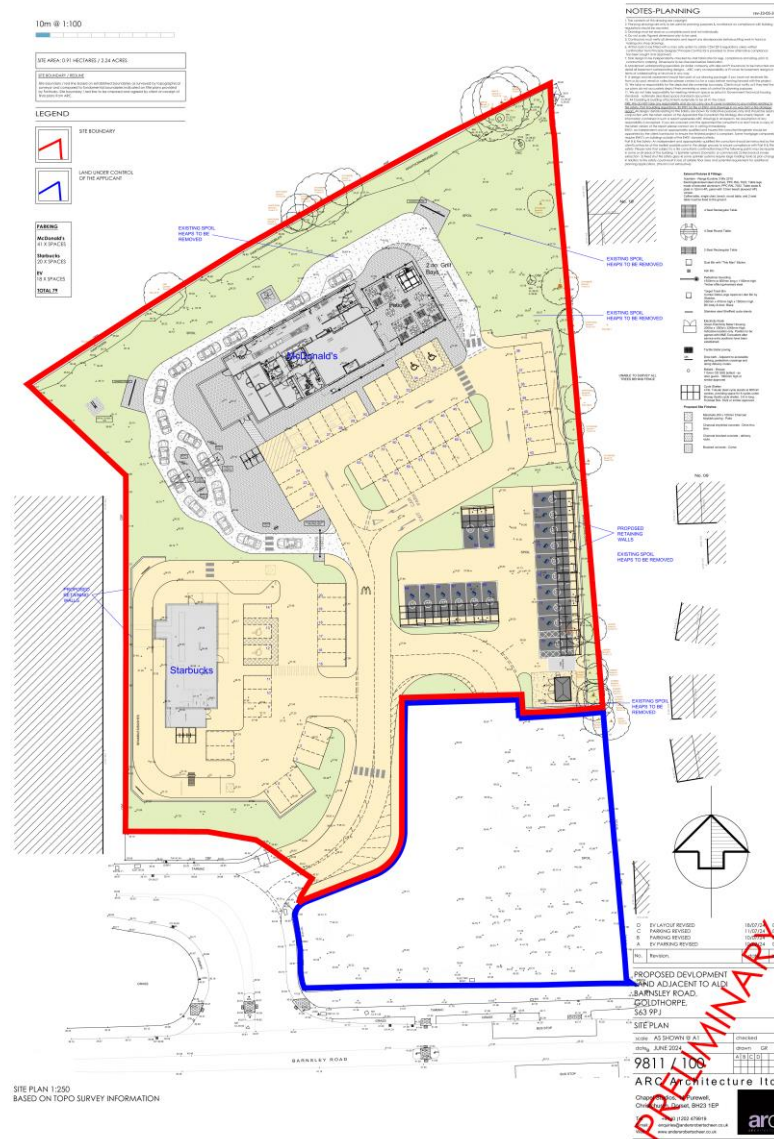
### Proposed habitats

- Habitats present on-Site post-development have been based on the Site Plan (Figure 3, opposite) dwg. 9811 / 100 rev. D (ARC Architecture Ltd, July 2024).
- Habitats assigned are shown in Figure 4 overleaf.

### Condition assessment

- The condition assessment for each proposed habitat is based on what is realistic and achievable for the Site, based on the Site Plan.
- Achieving these conditions scores may be reliant on specific, ecologically driven management recommendations. These can be outlined in a Biodiversity Enhancement and Management Plan (BEMP) or similar.

**Figure 3** Site Plan dwg. 9811 / 100 rev. D (ARC Architecture Ltd., July 2024).



## Post-development habitats

### Habitat Score

25. The Site has been assessed as having a post-development score of 1.03 Habitat Units and 0.43 Hedgerow Units.
26. This score is based on our interpretation of the Site Plan, as shown in Figure 4 opposite.
27. Calculations for the change in Habitat Units have been based on the entire Site being cleared of existing habitats and land reprofiled, except trees T1-T4 which will be retained, which results in the loss of 3.09 Habitat Units present pre-development.
28. The Site Plan does not define any habitats post-development. Therefore, all areas of buildings, parking, and access roads have been mapped as *developed land; sealed surface*, which supplies no Habitat Units; all areas of green space have been mapped as *modified grassland* in Moderate condition, reflecting a flowering lawn-type grassland.
29. The existing hedgerow along the Site's northern boundary (H1) is mapped as retained in its entirety, resulting in no net loss of Hedgerow Units. No new hedgerows are mapped at this stage.
30. The loss of Low-distinctiveness *sparsely vegetated land* habitat types, and of Medium-distinctiveness scrub, grassland, and individual trees, are not compensated for by the creation of new *modified grassland*, hence the Trading Rules cannot be satisfied. Explanation of this and the implications in terms of Units required is set out overleaf.

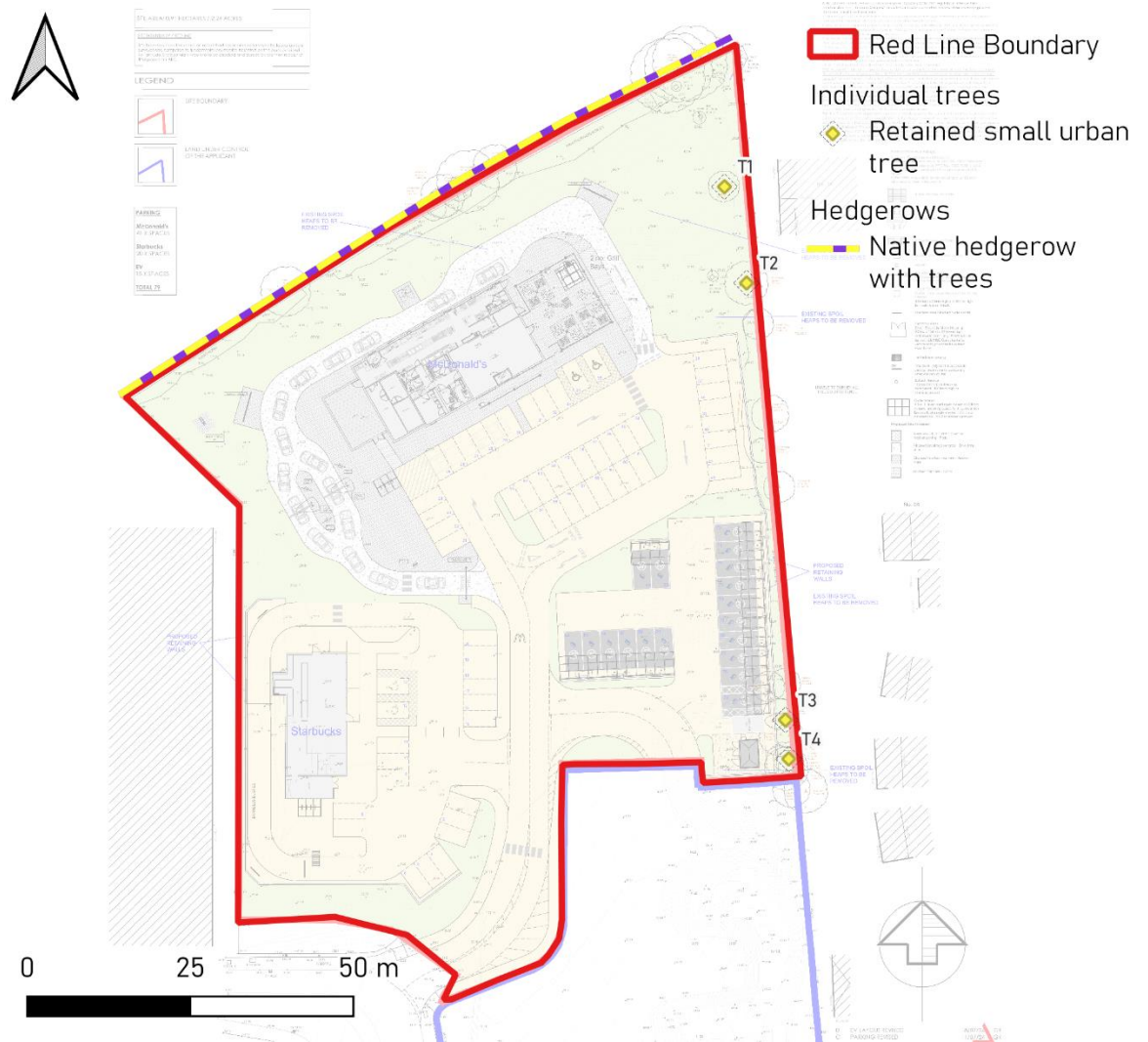
**Figure 4** Post-development habitats.



## Habitat Retention

31. The current Site Plan shows no definitive areas where habitat will be retained post-development. Defining areas where no impacts of development will be felt, and where habitats can be retained, should be a priority and should contribute significantly to the provision of Habitat Units post-development.
32. At present, the Metric calculations assume the loss of all baseline habitats from the Site, excepting the aforementioned trees T1-T4 and hedgerow H1. In reality, these features will have a standoff within which the surrounding habitat will be retained.

**Figure 5** Habitat retention.



## Final Results

- 33. The Statutory Metric has been used to calculate the net unit change for the Site, which has been predicted an overall net loss of 2.20 Habitat Units (-68.16%), and no net change in Hedgerow Units.
- 34. A copy of the Statutory Biodiversity Metric Calculation Tool Excel spreadsheet (ref. BM-7641-01A) and Condition Assessment sheets (CA-7641-01A) have been provided with this report and should be submitted digitally as part of the application.
- 35. There is a mandatory requirement for all developments to demonstrate at least a 10% net gain in each unit measurement, as well as to satisfy Trading Rules. Notwithstanding Trading Rules, the scheme will need to offset the current deficit of 2.20 Habitat Units, and supply an additional 0.32 Habitat Units (2.52 Habitat Units total) and 0.04 Hedgerow Units.

## Trading Rules

- 36. Habitat types are separated out into distinctiveness categories (Very Low to Very High) which dictate what mitigation/compensation is required for their loss. This assessment is separate to the 'net unit change' score quoted above.
- 37. To satisfy Trading Rules for this development, compensatory Units will need to be generated from the broad Habitat Types outlined in the Table 4, opposite. Trading Rules for hedgerows are already satisfied.
- 38. A total of 2.20 Habitat Units will need to be generated through offsetting in order to satisfy Trading Rules. This is lower than the figure quoted above required to secure 10% Net Gain; therefore, Units produced to satisfy Trading Rules may also count towards achieving 10% Net Gain.

## Requirements for Planning

- 39. A standard planning condition will be imposed that will require the development to demonstrate (i) a minimum 10% net gain and (ii) that Trading rules have been satisfied. To achieve this, **2.52 Habitat Units** will need to be generated, to include the broad habitats shown in Table 4.
- 40. These Units will need to be secured through offsetting, with offsite land Registered with Natural England. Once this offsetting has been secured, the Biodiversity Metric will need to be finalised before submission to the LPA.
- 41. A Net Gain Plan and Habitat Monitoring and Management Plan will also be required in order to discharge the planning condition that will be imposed.

**Figure 6** Biodiversity Metric Summary.

FINAL RESULTS		
<b>Total net unit change</b> <small>(Including all on-site &amp; off-site habitat retention, creation &amp; enhancement)</small>	Habitat units	-2.20
	Hedgerow units	0.00
	Watercourse units	0.00
<b>Total net % change</b> <small>(Including all on-site &amp; off-site habitat retention, creation &amp; enhancement)</small>	Habitat units	-68.16%
	Hedgerow units	0.00%
	Watercourse units	0.00%
<b>Trading rules satisfied?</b>		<b>No - Check Trading Summaries ▲</b>

**Table 4** Trading rule summary - Habitat Units.

Distinctiveness	Broad Habitat Type	Habitat Units required
Medium*	Grassland	0.34
Medium*	Heathland and shrub	0.09
Medium*	Individual trees	0.06
Low	Any	1.70
<b>Total Units</b>		<b>2.20 Units**</b>

\* Compensation for habitats of medium distinctiveness must be in the same broad habitat type, or any habitat type in a higher distinctiveness category.

\*\* Units may appear to not 'add up' correctly; this is due to rounding within the Metric.

## References

Chartered Institute of Ecology and Environmental Management (CIEEM). 2019. *Advice note: on the lifespan of ecological reports and surveys*. Winchester: Chartered Institute of Ecology and Environmental Management. [Online]. Available from: <https://cieem.net/resource/advice-note-on-the-lifespan-of-ecological-reports-and-surveys/>

Department for Levelling Up, Housing and Communities. 2023. *National Planning and Policy Framework*. London: Her Majesty's Government. [Online]. Available from: [https://assets.publishing.service.gov.uk/media/65819679fc07f3000d8d4495/NPPF\\_December\\_2023.pdf](https://assets.publishing.service.gov.uk/media/65819679fc07f3000d8d4495/NPPF_December_2023.pdf)

*The Statutory Biodiversity Metric User Guide (draft)*. 2023. London: Department for Environment, Food and Rural Affairs (DEFRA). [Online]. Available from: <https://www.gov.uk/government/publications/statutory-biodiversity-metric-tools-and-guides>

*The Statutory Biodiversity Metric Calculation Tool (macro-enabled)*. 2023. London: Department for Environment, Food and Rural Affairs (DEFRA). [Online]. Available from: <https://www.gov.uk/government/publications/statutory-biodiversity-metric-tools-and-guides>

*The Statutory Biodiversity Metric Condition Assessments*. 2023. London: Department for Environment, Food and Rural Affairs (DEFRA). [Online]. Available from: <https://www.gov.uk/government/publications/statutory-biodiversity-metric-tools-and-guides>

## Appendices

The following reports/digital documents have been provided alongside this report and should be read in conjunction with it:

- BM-7641-01A – Statutory Biodiversity Metric Calculation Tool
- CA-7641-01A – Statutory Biodiversity Metric Condition Assessments
- ER-7641-01 – Preliminary Ecological Appraisal