Dorothy Hyman Sports Centre, Cudworth, Barnsley

Biodiversity Net Gain Assessment (Baseline)

Report Ref. ER-7498-02

18/04/2024

McArdle Sports Tec Ltd

Report reference	**ER-7498-02 – Biodiversity Net Gain Assessment (Baseline)**
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Report duration	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.

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Introduction

1. Brooks Ecological Ltd was commissioned by McArdle Sports Tec Ltd to carry out a Biodiversity Net Gain (BNG) Assessment of the proposed development Site at Dorothy Hyman Sports Centre, Cudworth, Barnsley.
2. The assessment applies to the parcel of land shown in Figure 1 opposite.
3. The assessment is informed by a Preliminary Ecological Appraisal Survey of the Site detailed in our report ER-7498-01.
4. Biodiversity Accounting metrics are used to quantify the value of a site in Biodiversity Units, which helps in assessing the ecological impacts of the proposed development on the Site.
5. Biodiversity Units 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 0.67ha.

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

Pre-development baseline

Habitats identified

7. 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

8. Habitat condition has been assessed as part of the Preliminary Ecological Appraisal of the Site.
9. Information on condition assessments is provided in the Excel spreadsheet CA-7498-01 provided alongside this report.

Strategic Significance

10. Part of the Site overlaps with the Nature Improvement Area (NIA) and so is mapped as 'formally identified in local strategy'.

Irreplaceable habitat

11. Irreplaceable habitats have not been found on-Site

Biodiversity Metric

12. Habitat types, conditions, and areas have been entered into the Statutory Biodiversity Metric Calculation Tool, alongside information on their strategic significance.
13. The Statutory Biodiversity Metric Calculation Tool is provided alongside this assessment, in Excel spreadsheet BM-7498-01, and may be useful in investigating design options for the Site.

Table 1 Habitat Types.

Habitat	Irreplaceable?	Distinctiveness	Condition	See Condition Assessment sheet
Modified grassland	No	Low	Poor	5A
Developed Land; Sealed Surface	No	V. Low	N/A – not assessed	N/A

Figure 2 The Site's habitats assigned to types used in the Biodiversity Metric.

Figure 3 Extract from the Statutory Biodiversity Metric Calculation Tool showing entered information and resultant Biodiversity Units[1].

	Existing area habitats				Distinctiveness	Condition	Strategic significance	Required Action to Meet Trading Rules	Ecological baseline
Ref	Broad Habitat	Habitat Type	Irreplaceable habitat	Area (hectares)	Distinctiveness	Condition	Strategic significance		Total habitat units
1	Urban	Developed land; sealed surface	No	0.0064	V.Low	N/A - Other	Formally identified in local strategy	Compensation Not Required	0.00
2	Grassland	Modified grassland	No	0.663	Low	Poor	Formally identified in local strategy	Same distinctiveness or better habitat required ≥	1.52
3									
4									
5									
6									
7									
		Total habitat area		0.67					1.52
		Site Area (Excluding area of individual trees, green walls, intertidal hard structures)		0.67					

[1] Our report provides an estimate of the Site's value in Biodiversity Units. This is based on thorough assessment at the time of survey and using the information available at this time. In this assessment we have used the Statutory Biodiversity Metric Calculation Tool, the UK Habitats Classification, and relevant guidance. This assessment requires subjective judgments to be made in terms of habitat type and condition and could be open to other interpretations. Reliance on the Unit Score, or conversion of this into a monetary value, would be at the developer's own risk. Where conversion to monetary value is required, it is always advisable to get calculations checked independently.

Trading Rules

14. 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.

15. Once trading rules are complied with, the 'gain' component can come from any distinctiveness category.

Habitat Unit Score

16. The Site has been assessed as having a baseline score of 1.52 Habitat Units. These break down as shown in Table 2, below.

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	1.52	Losses must be replaced with area habitat units of the same or higher distinctiveness.
Medium	0	Losses must be replaced by area habitat units of either medium distinctiveness habitats within the same broad habitat type, or any habitat from a higher distinctiveness from any broad habitat type.
High	0	Losses must be replaced with area habitat units of the same habitat type.
Very High	0	Priority should be given to replacing losses with area habitat units of the same habitat type.
Irreplaceable	0	Cannot be compensated for.

Planning your development

Mitigation Hierarchy

17. To engage with the Biodiversity Gain process, a project must be able to demonstrate that it has complied with the Mitigation Hierarchy of Avoid – Mitigate – Compensate. Its relevance to this Site is set out in Table 3 below.

Table 3 Mitigation hierarchy summary.

Level of Hierarchy	Requirement at this Site
First **Avoid**	The PEA has established that the habitats on Site are all of Low Distinctiveness habitats. These habitats cannot be retained during the development.
then **Mitigate**	Habitats cannot be retained.
then **Compensate**	Any residual loss would need to be compensated off-Site. It will not be possible to deliver a Net Gain on-Site alongside development here.

Summary & Recommendations

Baseline value

18. The Site's baseline value is measured as 1.52 Habitat Units.

Trading Rules

19. As shown in Table 2, the Site's baseline value is accounted for by low distinctiveness habitat types. Satisfying Trading Rules is therefore not likely to be constraint.

Recommendations

20. Recommendations are set out in Table 4, opposite.

Biodiversity Offsetting

21. Development of the Site is very likely to result in the requirement to offset losses elsewhere. Potential means of achieving this would be:
    - Creating a bespoke offset on land available to the developer, as locally as possible.
    - Making use (through contribution) of any Local Authority habitat banking scheme, if this is available.
    - Purchasing the necessary Units from a broker or habitat banking scheme, again as locally as possible (and ideally within the same Local Authority or Natural Character area/s as the development).
    - Purchasing Statutory Credits from the UK government scheme. This is the last resort and is deliberately priced to be uncompetitive and is not available yet at the time of writing. Twice as many Credits will be required as there are Units to offset.

Table 4 Summary of Planning Considerations.

Recommendation	Rationale
Required during the design stage process	
R1 Produce a layout which minimises loss of biodiversity	Engage with the recommendations set out above, involve your ecologist in designs at an early stage, as required. The proposals will need to consider the NPPF hierarchy of Avoid – Mitigate – Compensate in minimising any loss of biodiversity.
R2 Produce a Habitat Retention Plan	Make sure your design team follows ecological advice to and make sure there are no design conflicts. The Habitat Retention Plan should identify areas which can be excluded from any impacts of clearance and construction. In producing the Plan you should consider the need to provide (amongst other things) Site compounds, to store and move materials, to install drainage, flood storage, access and services - all with suitable easements.
R2 Biodiversity Gain Strategy (BGS)	Engage an ecologist to work with the design team to maximise available Biodiversity Units on-Site, taking into account Trading rules. Identify opportunities to address any losses off-Site.
R3 Landscape Design	Make sure your landscape architect follows ecological advice or the BGS to maximise Biodiversity Units on-Site and make sure there are no design conflicts.
To be completed once a fixed Site Layout is agreed	
R4 Calculate the final Biodiversity Impact Score	Once the Site Layout is fixed and a Habitat Retention Plan is produced, the DEFRA Metric will be used to quantify change in biodiversity unit value at the Site. This report will then be updated to include the Post development scores.

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/

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-guide

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Appendices

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

- BM-7498-01 – Statutory Biodiversity Metric Calculation Tool
- CA-7498-01 – Statutory Biodiversity Metric Condition Assessments
- ER-7498-01 – Preliminary Ecological Appraisal