Welfare Park, Goldthorpe

Biodiversity Net Gain Assessment – Part 2

Report Ref. ER-7734-01

30/07/2024

Barnsley Metropolitan Borough Council

Report reference	**ER-7734-01 – Biodiversity Net Gain Assessment**
Author	Ruth Highley Bsc (Hons) MBiol Assistant Ecologist
Technical Review	Christopher Shaw BSc (Hons) MCIEEM Principal Ecologist
QA	Sam Wardle MSci (Hons) Biodiversity Technician
Authorised	Christopher Shaw BSc (Hons) MCIEEM Principal Ecologist
Date	30/07/2024
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.

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

Introduction

1. Brooks Ecological Ltd was commissioned by Barnsley Metropolitan Borough Council to carry out a Biodiversity Net Gain (BNG) Assessment of the proposed development Site at Welfare Park, Goldthorpe.
2. The assessment applies to the parcel of land shown in Figure 1 opposite.
3. The assessment is informed by a walkover survey of the Site conducted by Brooks Ecological in July 2024.
4. 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.
5. 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-7734-01 and should be submitted as part of the application.
6. For the purposes of metric calculations, the Site area has been measured using GIS against the provided red-line as 0.36ha

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

Survey

7. The survey was carried out during July 2024[1] and followed the principles of Extended Phase 1 Habitat Survey methodology (JNCC, 2010).

8. Enough time was afforded the surveyor to carry out the survey. The survey was not constrained by poor weather.

9. Whilst the majority of the Site was accessible, at least 10% of the Site was inaccessible due to very dense vegetation, which could not be closely inspected. This could have concealed invasive species or protected species evidence.

Habitat Appraisal

10. The Site's habitats are described in order on the following pages. In line with the requirement to provide information on Biodiversity Net Gain (BNG), habitats are named in accordance with the UK Habitats classification system. We have used the UK Habitats v2.01 guidance in identifying habitats. Habitat descriptions are divided into the 'distinctiveness' categories used in the calculations presented in the Biodiversity Gain Assessment, with more weight being afforded the more distinctive/important habitats.

11. Generally, the following apply to each tier of distinctiveness, although some authorities might highlight some lower distinctiveness habitats as having a higher importance locally. Where relevant we have highlighted these.

Very Low Distinctiveness Habitats

12. Habitats of little or no habitat value, i.e., lacking any significant native vegetation, but could still provide supporting habitat for protected or notable fauna such as birds or bats. In the context of BNG, their areas are included in calculations, but mitigation or compensation is not required.

Low Distinctiveness Habitats

13. Habitats which are ubiquitous, often which have been created or modified intentionally. They tend to lack diversity of species and structure. They are unlikely to support notable flora but could still provide supporting habitat for protected or notable fauna. In the context of BNG, they are included in calculations, but compensation/mitigation needs only to provide habitat of similar or higher distinctiveness.

Medium Distinctiveness Habitats

14. Habitats which are common but provide a higher level of structural and species diversity. Though unlikely to support more notable assemblages, species of interest could be present here and they are more likely to be important supporting habitat to fauna. In the context of BNG, mitigation needs to provide habitat of the same broad habitat type, or that of higher distinctiveness.

High Distinctiveness Habitats

15. Habitats which are more natural and contain more important assemblages of plants and potentially species which are rare in their own right. They will provide good habitat for fauna. These habitats are likely to be targeted as conservation priorities and will be the subject of additional policy guidance or legislation. In the context of BNG, whilst mitigation or compensation for loss or damage is possible, provision of more of the same type of habitat would be required, which (with a few exceptions) is likely to be difficult.

Very High Distinctiveness Habitats

16. These are the UK's rarest/best habitats. They will be present in very particular locations and a range of rare or important plant and animal species will depend on the particular conditions they provide. These habitats will be the subject of restrictive policy guidance or legislation. Whilst the BNG metric does not preclude mitigation or compensation in respect of these habitats, creation of the same habitat type would be required, and this would range between very difficult/expensive and impossible.

Irreplaceable Habitats

17. These are habitats of high biodiversity value, which are so difficult to recreate that it would be impossible to achieve the requirement to increase biodiversity on top of no net loss. These habitats have significant protection in the NPPF; any impacts from development require a strong justification and will flag as unacceptable in the Biodiversity Metric. Bespoke compensation for any loss of these habitats must be agreed with the LPA.

18. Each habitat is mapped and an area for each type is provided in the format of the Statutory Biodiversity Metric Calculation Tool. The areas can be used to quantify the impacts of development in an Ecological Impact Assessment if this is required by the Local Planning Authority.

[1] This Report has been prepared during July 2024 following a visit to the Site in July 2024, and our findings are based on the conditions of the Site that were reasonably visible and accessible at that date. We accept no liability for any areas that were not reasonably visible or accessible, nor for any subsequent alteration, variation, or deviation from the Site conditions which affect the conclusions set out in this report.

Condition Assessment

19. Our condition assessment for each habitat described references where available the criteria set out in DEFRA (2023) Statutory Biodiversity Metric Condition Assessments. A completed version of this spreadsheet is provided digitally with the Biodiversity Gain Report which accompanies this report.

Habitat Degradation

20. There is no evidence on Site or in aerial mapping of the Site which suggests that it has been deliberately degraded.

Biodiversity Metric

21. Habitat types, conditions, and areas have been entered into the Statutory Biodiversity Metric Calculation Tool alongside information on their strategic significance.

22. The Statutory Biodiversity Metric Calculation Tool (published 23/07/2024), is provided alongside this assessment, in Excel spreadsheet BM-7734-01, 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
Developed land; sealed surface	U2	No	V. Low	N/A	N/A
Modified grassland	G1	No	Low	Poor	5A
Vacant or derelict land	U1	No	Medium	Moderate	22A
Bramble Scrub	S1	No	Medium	N/A	N/A
Individual Trees	T1-9	No	Medium	Moderate	9A

Habitats of Very Low/ Low Distinctiveness

Figure 2 Approximate location and extent of these habitats.

Table 2 Summary – Habitats of Low/Very Low Distinctiveness.

UK Habitats	Label Ref	Summary Description
Modified Grassland	g1	Species poor grassland dominated by perennial rye and annual meadow grass. Forbs include creeping buttercup, ribwort plantain, white clover, dandelion and daisy. 2-4 species per m^2.
Vacant or derelict land	u1	Previously sealed surface now overgrown with successional species. Species include Yorkshire fog, false oat grass, creeping bent, willowherb species, red clover, ox-eye daisy, broadleaved and curly leaved dock, teasel, hard and compact rush, herb robert, wall lettuce and coltsfoot. Some woody species including buddleia, willow species and sycamore. Small patches of bramble found underneath the trees in the eastern boundary.
Developed land; sealed surface	u2	Small strip of pavement
Native Hedgerow	H1	Hawthorn hedgerow with elder, bramble, greater bindweed and white bryony. Grass species such as Yorkshire fog and cocksfoot growing underneath with cleavers nettles, spear thistle and willowherb species.

Figure 3 Partially vegetated vacant land

Habitats of Medium Distinctiveness

Figure 4 Approximate location and extent of these habitats.

Table *3* Summary of Medium Distinctiveness habitats.

UK Habitats	Label Ref	Summary Description
Bramble Scrub	s1	Dominated by bramble with rosebay willowherb and nettles.
Large Trees	T8, T9	Cherry sp. and sycamore.
Medium Trees	T1, T2, T4, T7	Sycamore and cherry sp.
Small Trees	T3, T5, T6	Sycamore, willow sp. and cherry sp.

Figure 5 Bramble scrub with rosebay willowherb

Trading Rules

23. 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.

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

Habitat Unit Score

25. The Site has been assessed as having a baseline score of 2.61 Habitat Units. These break down as shown in Table 4, below.

Table 4 Habitat Units broken down by distinctiveness at this Site.

Distinctiveness	Units	Approach to compensation if lost
Very Low	0	No compensation required.
Low	1.39	Can be replaced with any habitat of the same distinctiveness (low) or any habitat from a higher distinctiveness (Medium, High or Very High)
Medium	1.22	Can not 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 Individual trees and bramble scrub), 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

26. The Site has been assessed as having a baseline score of 0.24 Hedgerow Units. These break down as shown in Table 5, below.

Table 5 Hedgerow Units broken down by distinctiveness at this Site.

Distinctiveness	Units	Approach to compensation if lost
Very Low	0	Losses must be replaced with hedgerow units of the same or of a higher distinctiveness.
Low	0.24	Losses must be replaced with hedgerow units of the same or of a higher distinctiveness.
Medium	0	Losses must be replaced with hedgerow units of the same or of a higher distinctiveness.
High	0	Losses must be replaced with hedgerow units of the same habitat type or of a higher distinctiveness.
Very High	0	Losses must be replaced with hedgerow units of the same habitat type.

Watercourse Unit Score

27. There are no water courses on Site.

Post-development value

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

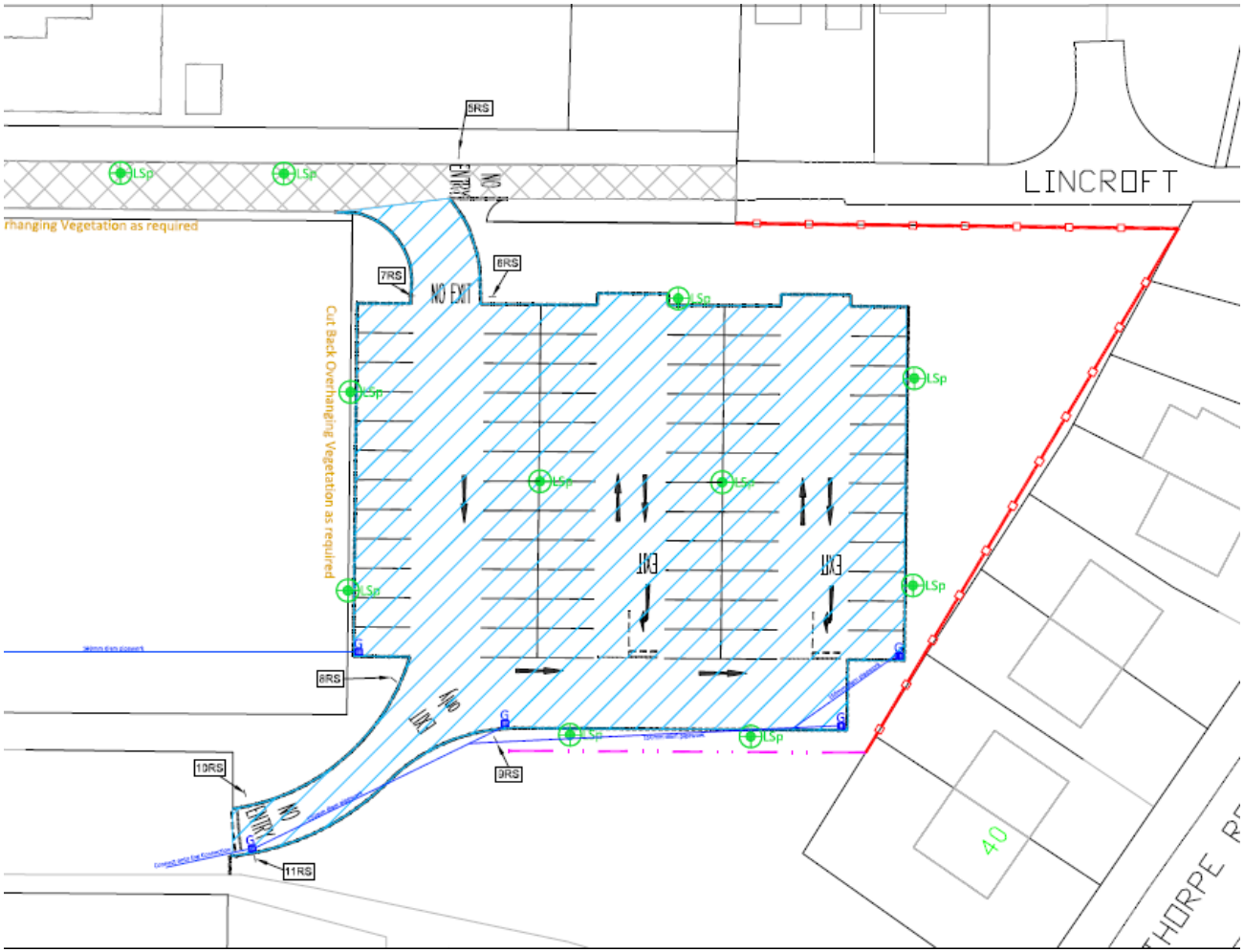
Proposed habitats

29. Habitats present on-Site post-development have been based on the scheme plan (Figure 6, opposite) dwg. TG/002/01.1.
30. Planting types have not been identified in the scheme but as discussed with the client remaining areas will be grassland and the trees and hedgerow are to be retained
31. Habitats assigned are shown in Figure 7 overleaf.

Condition assessment

32. The condition assessment for each proposed habitat is based on what is realistic and achievable for the Site, based on the scheme plan
33. 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 6 Scheme plan dwg. TG/002/01.1



Post-development habitats

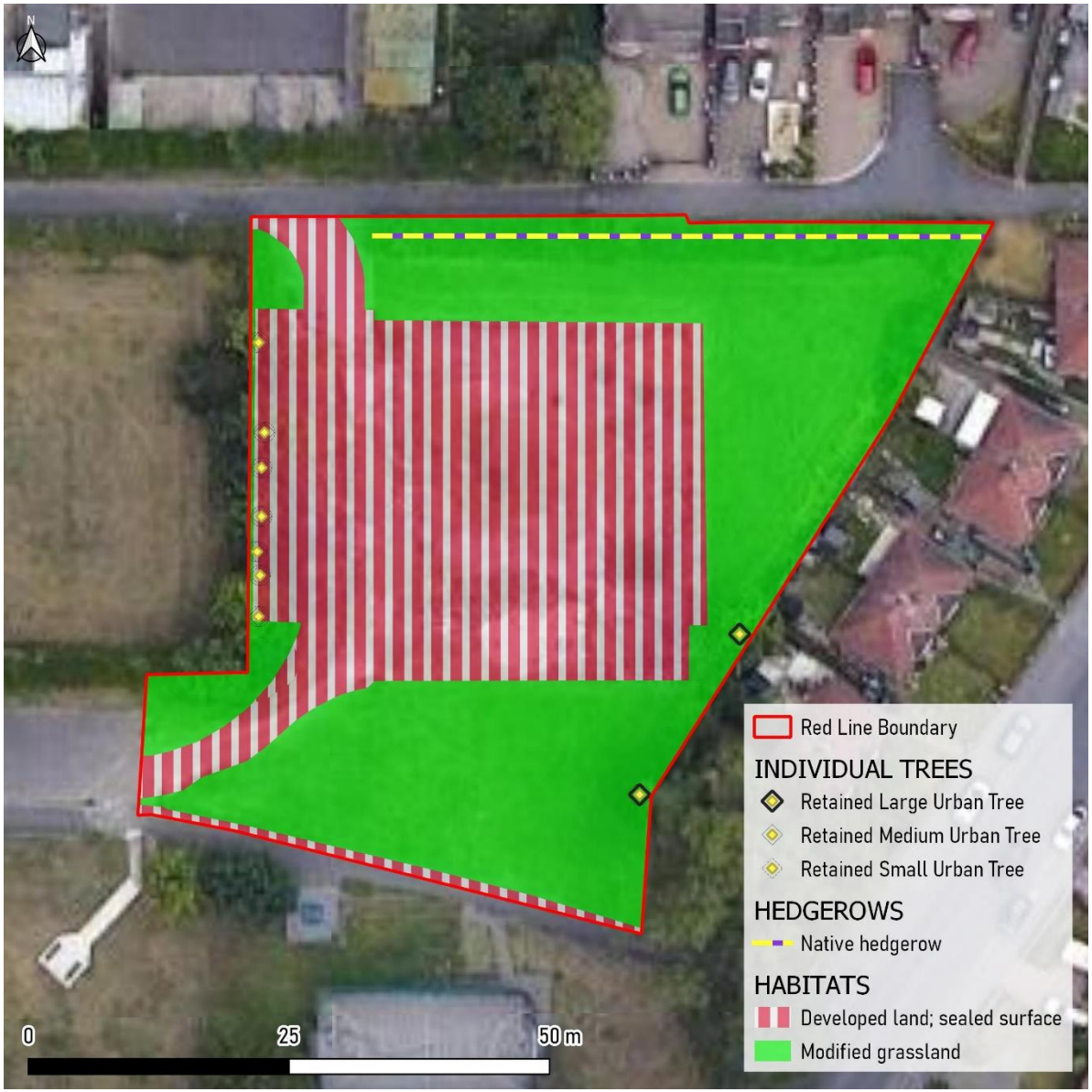
Habitat Score

34. The Site has been assessed as having a post-development score of 1.57 Habitat Units.

35. Much of the central area of the Site is to be tarmacked creating a sealed surface and then the remaining portion of the Site is to be modified grassland.

36. This score is based on our interpretation of the scheme plan, as shown in Figure 7 opposite. It has been assumed that the site will be cleared and habitats created with the exception of the trees and the hedgerows.

Figure 7 Post-development habitats.



Final Results

37. The Statutory Metric has been used to calculate the net unit change for the Site, which has been predicted an overall net loss of 1.04 Habitat Units (39.90%) and no gain in Hedgerow Units.

38. A copy of the Statutory Biodiversity Metric Calculation Tool Excel spreadsheet (ref. BM-7734-01) and Condition Assessment sheets (CA-7734-01) have been provided with this report and should be submitted digitally as part of the application.

39. 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 secure an additional 0.26 Habitat Units, on top of the current deficit of 1.04 Habitat Unit, and an additional 0.02 Hedgerow Units, to demonstrate a 10% net gain (1.30 Habitat Units total).

Trading Rules

40. Habitat types are separated out into distinctiveness categories (Very low to Very High) which dictate what mitigation/ compensation is required for their loss. This is assessment is separate to the 'net unit change' score quoted above.

41. To satisfy Trading Rules for this development, compensatory units will need to be generated from the following broad Habitat Types, as outline in the Table 6, opposite.

42. A total of 0.02 Habitat Units will need to be generated through offsetting.

Requirements for Planning

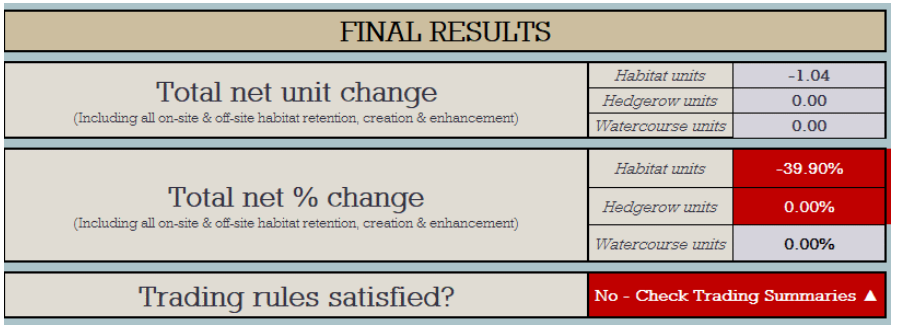
43. A standard planning condition will be imposed that will require the development to demonstrate (i) a minimum 10% net gain and (ii) that Trading rules have been satisfied. To achieve this:

    - 1.30 habitat units need to be secured
    - 0.02 of these need to be heathland and scrub
    - 0.02 hedgerow units need to be secured

44. 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 (ref. BM-7734-01) before submission to the LPA.

45. 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 *8* Biodiversity Metric Summary.



FINAL RESULTS		
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	-1.04
	Hedgerow units	0.00
	Watercourse units	0.00
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	-39.90%
	Hedgerow units	0.00%
	Watercourse units	0.00%
Trading rules satisfied?	No - Check Trading Summaries ▲	

Table *6* Trading rule summary

Distinctiveness	Broad Habitat Type	Habitat Units requried
Medium*	Heathland and scrub	0.02
	Total Units	**0.02 Units**

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

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

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-7734-01 – Statutory Biodiversity Metric Calculation Tool
- CA-7734-01 – Statutory Biodiversity Metric Condition Assessments