

John Rabson Recreation Ground
Northumberland Avenue
Reading
Berkshire

Biodiversity Net Gain Assessment

Report ref.: R2661_BNG_a

<i>Report Quality Control Information</i>	
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1 EXECUTIVE SUMMARY

- 1.1.1** John Wenman Ecological Consultancy LLP was instructed by Reading Borough Council to produce a Biodiversity Net Gain (BNG) assessment for land at John Rabson Recreation Ground in Reading. The BNG assessment was commissioned to accompany a planning application to be submitted to Reading Borough Council seeking consent for the construction of a skate park on the recreation ground. The aim of this BNG report is to demonstrate that a quantifiable net gain in biodiversity can be achieved as part of the proposed development.
- 1.1.2** The Statutory Biodiversity Metric calculation tool demonstrates the feasibility of delivering a minimum 10% net gain for biodiversity. The biodiversity metric tool shows that off-site tree planting (within the land ownership boundary) will deliver a total net change of 245.67% in habitat units.
- 1.1.3** The offsite habitat creation – planting 83 trees - is proposed within the recreation ground ownership boundary and the standard time taken for a planted tree to reach poor condition is 10 years. Therefore, it is considered likely that the management and monitoring of the proposed habitat enhancement can be sufficiently detailed in this document and secured by an appropriately worded planning condition.

2 INTRODUCTION

2.1 Project Background

2.1.1 John Wenman Ecological Consultancy LLP was instructed by Reading Borough Council to produce a Biodiversity Net Gain (BNG) assessment for land at John Rabson Recreation Ground in Reading.

2.1.2 The BNG assessment was commissioned to accompany a planning application to be submitted to Reading Borough Council seeking consent for the construction of a skate park on the recreation ground (see proposed site plan in **Appendix 1**).

2.1.3 This report uses ecological background information from a Preliminary Ecological Appraisal prepared in December 2024 (*'John Rabson Recreation Ground, Reading – Preliminary Ecological Appraisal; R2661_PEA_b'*).

2.2 Site Location and Context

2.2.1 The site covered an area of 0.179 hectares of modified grassland used as amenity space on a recreational ground within a central urban area in Reading, Berkshire (OS Grid Reference: SU 72436 70421). The wider recreation ground was mostly modified grassland with some artificial sports pitches and a leisure centre building.

2.2.2 The recreation ground is bordered by dense urban residential housing to the north and south, sports facilities to the west and the wooded Cowsey Wood nature reserve to the east. The recreation ground and adjoining wooded habitats offer suitable habitats for species adapted to urban environments but is otherwise isolated by urban infrastructure from further suitable habitat in the wider area.

2.3 Objectives

2.3.1 The aim of this BNG assessment is to demonstrate that a quantifiable net gain in biodiversity can be achieved as part of the proposed development. The key objectives are to:

- detail the approach taken for the BNG calculation;
- describe and map the baseline habitats and important ecological features on site;

- describe and map the proposed habitats based on post-development design;
- complete the Statutory Biodiversity Metric calculation; and
- outline the implementation of the design concepts and the long-term management to deliver BNG.

3 RELEVANT PLANNING POLICY AND LEGISLATION

Legislation

- 3.1.1** 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.
- 3.1.2** The biodiversity net gain regulations most relevant to planning are:
- The Environment Act 2021 (Commencement No. 8 and Transitional Provisions) Regulations 2024 which commence biodiversity net gain for most types of new planning applications and provides transitional arrangements for section 73 permissions.
 - The Biodiversity Gain Requirements (Exemptions) Regulations 2024, which prescribe exemptions for categories of development to which biodiversity net gain does not apply.
 - The Biodiversity Gain (Town and Country Planning) (Modifications and Amendments) (England) Regulations 2024 which amend the Town and Country Planning (Development Management Procedure) (England) Order 2015 and the Town and Country Planning (Section 62A Applications) (Procedure and Consequential Amendments) Order 2013 to include provisions in respect of applications for planning permission and the submission and determination of Biodiversity Gain Plans, as well as modifications of Schedule 7A of the Town and Country Planning Act 1990 for phased development.
 - The Biodiversity Gain Requirements (Irreplaceable Habitat) Regulations 2024 which set out the modifications for irreplaceable habitat.

Policy

- 3.1.3** The National Planning Policy Framework (NPPF) (December 2023) makes reference to BNG in the following '*Section 15. Conserving and enhancing the natural environment*' paragraphs:

- *'Paragraph 180. Planning policies and decisions should contribute and enhance the natural and local environment by: [...] d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures[.]'*
- *'Paragraph 185. To protect and enhance biodiversity and geodiversity, plans should: b) promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.'*
- *'Paragraph 186. When determining planning applications, local planning authorities should apply the following principles: d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.'*

3.2 Local Planning Policy

3.2.1 Natural England is working with local authorities across Berkshire (Royal Borough of Windsor and Maidenhead, Bracknell, Reading, Slough, West Berkshire and Wokingham) to identify priorities for nature recovery and develop a Local Nature Recovery Strategy (LNRS) which aims to link up with delivery mechanisms, such as Biodiversity Net Gain for Planning. The LNRS has not yet been completed and therefore reference to the Green Network in Policy EN12 of the Reading Borough Local Plan policies is used in BNG assessments.

3.2.2 Planning policy within the Reading Borough is defined by the policies within the Local Plan (adopted Nov 2019). The policy relevant to biodiversity and natural environment is as follows:

'EN12: BIODIVERSITY AND THE GREEN NETWORK

- a) The identified Green Network, the key elements of which are shown on the Proposals Map, shall be maintained, protected, consolidated, extended and enhanced. Permission will not be granted for*

development that negatively affects the sites with identified interest or fragments the overall network. The Green Network comprises:

- *Sites with identified biodiversity interest - Local Wildlife Sites, Local Nature Reserves, Biodiversity Opportunity Areas, protected and priority species and their habitats, Priority and Biodiversity Action Plan habitats, and the River Thames and all its tributaries (including the River Kennet and the Kennet & Avon Canal); and*
- *Areas with potential for biodiversity value and which stitch the Green Network together – designated Local Green Space and open green spaces, and existing and potential Green Links.*

New development shall demonstrate how the location and type of green space, landscaping and water features provided within a scheme have been arranged such that they maintain or link into the existing Green Network and contribute to its consolidation. Such features should be designed to maximise the opportunities for enhancing this network. All new development should maximise opportunities to create new assets and links into areas where opportunities are as yet unidentified on the Proposals Map.

b) On all sites, development should not result in a net loss of biodiversity and geodiversity, and should provide a net gain for biodiversity wherever possible. Development should:

- *Protect and wherever possible enhance features of biodiversity interest on and adjacent to the application site, incorporating and integrating them into development proposals wherever practicable; and*
- *Provide new tree planting, wildlife friendly landscaping and ecological enhancements (such as wildlife ponds, bird and bat boxes) wherever practicable.*

In exceptional circumstances where the need for development clearly outweighs the need to protect the value of the site, and it is demonstrated that the impacts cannot be: 1) avoided; 2) mitigated or; 3) compensated for on-site; then new development will provide off-

site compensation to ensure that there is “no net loss” of biodiversity. Provision of off-site compensation shall be calculated in accordance with nationally or locally recognised guidance and metrics. It should not replace existing alternative habitats and should be provided prior to development.’

- 3.2.3** Strategic significance of habitats will be assessed in accordance with the identified Green Network across the Reading Borough as detailed in Policy EN12 of the Reading Borough Local Plan (adopted 2019).

4 METHODOLOGY

4.1 Baseline Information

Desk Study

- 4.1.1** A desktop study was conducted by John Wenman Ecological Consultancy LLP as part of the Preliminary Ecological Appraisal prepared in December 2024, in accordance with the CIEEM Guidelines for Preliminary Ecological Appraisal 2nd Edition (CIEEM, 2017). The study utilised the Thames Valley Environmental Records Centre (TVERC), DEFRA Data Services Platform, and the Multi-Agency Geographical Information Centre (MAGIC) to gather information relating to protected/notable species, designated sites and priority habitats (NERC Act 2006 Section 41 habitats of principal importance).

Field Survey

- 4.1.2** Site walkovers were undertaken on 19th March and 20th November 2024 by Conor Watson – an associate member of the Chartered Institute of Ecology and Environmental Management (CIEEM). The site was surveyed using the UK Habitat Classification (UKHab) system (Butcher et al. 2023) in accordance with the CIEEM Guidelines for Preliminary Ecological Appraisal 2nd Edition (CIEEM 2017) and to undertake habitat condition assessments in accordance with the Statutory Biodiversity Metric (DEFRA 2024). Particular attention was given to evidence of protected and priority species (NERC Act 2006 Section 41 species of principal importance) and the site's potential to support such species.
- 4.1.3** There were no significant survey constraints because full access was available to the site. The survey was subject to seasonal constraints because not all plant and animal species are visible throughout the year and therefore the report represents a snapshot of the site at the time of the survey only.

4.2 Biodiversity Net Gain Approach

- 4.2.1** This Biodiversity Net Gain (BNG) assessment uses the Statutory Biodiversity Metric (February 2024) to calculate the losses and gains in biodiversity unit value resulting from the proposed development. The

biodiversity metric tool has been used to guide the proposed site layout and landscaping in order to deliver a minimum 10% net gain for biodiversity.

- 4.2.2** The biodiversity metric rules must be followed for a valid biodiversity net gain and are as follows:

***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 at least a 10% net gain applies to each type of unit.*

***Rule 3:** To accurately apply the biodiversity metric formula, you must use the statutory biodiversity metric calculation tool or small sites biodiversity metric tool (SSM) for small sites.*

The tools remove the need for a user to manually calculate the change in biodiversity value.

The tool will summarise the results of the calculation and inform a user whether the biodiversity net gain objective has been met.

***Rule 4:** In exceptional ecological circumstances, deviation from this biodiversity metric methodology may be permitted by the relevant planning authority.'*

- 4.2.3** The biodiversity metric principles inform the use of the biodiversity metric tool and are as follows:

***Principle 1:** The metric assessment should be completed by a competent person.*

***Principle 2:** The use of this biodiversity metric does not override existing biodiversity protections, statutory obligations, policy requirements, ecological mitigation hierarchy or any other requirements. This includes consenting or licensing processes, for example woodlands.*

***Principle 3:** This biodiversity metric should be used in accordance with established good practice guidance and professional codes.*

***Principle 4:** This biodiversity metric is not a complex or comprehensive ecological model and is not a substitute for expert ecological advice.*

Principle 5: *Biodiversity units are a proxy for biodiversity and should be treated as relative values.*

Principle 6: *This biodiversity metric is designed to inform decisions in conjunction with locally relevant evidence, expert input, or guidance.*

Principle 7: *Habitat interventions need to be realistic and deliverable within a relevant project timeframe.*

Principle 8: *Created and enhanced habitats should be, where practical and reasonable, local to any impact and deliver strategically important outcomes for nature conservation.*

Principle 9: *This biodiversity metric does not enforce a minimum habitat size ratio for compensation of losses. Proposals should aim to:*

- *maintain habitat extent - supporting more, bigger, better and more joined up ecological networks*
- *ensure that proposed or retained habitat parcels are of sufficient size for ecological function'*

4.3 Strategic Significance

4.3.1 As defined in the Statutory Biodiversity Metric (February 2024) User Guide, strategic significance is '*the local significance of the habitat based on its location and habitat type*' and assessments of significance should be made based on the Local Nature Recovery Strategy (LNRS). The LNRS for Berkshire has not yet been completed and in the meantime, existing local biodiversity policy and guidance should be used to inform proposals and decisions. A Green Network has been mapped by Reading Borough Council in the Local Plan (adopted 2019) with the aim to reverse nature loss by identifying the best areas to restore, enhance and reconnect priority habitat. This network will be considered when assigning strategic significance to habitats on site.

5 BASELINE INFORMATION

5.1 Important Ecological Features

Designated Sites and Habitats

- 5.1.1** The application site is 125m to the west of The Cowsey Local Wildlife Site (LWS) which has deciduous woodland priority habitat (NERC Act 2006 Section 41 habitat of principle importance). The proposed skate park is considered highly unlikely to have an adverse effect on the LWS.

Protected Species

- 5.1.2** The proposals are considered to have no adverse impact on any protected or notable species.

5.2 Baseline Habitats

- 5.2.1** The application site is 0.179 hectares of modified grassland, part of a much larger recreation ground in Reading. The site falls within a Local Green Space as defined in the Reading Borough Green Network and although has low ecological value, the area and associated habitats have been formally identified in the local strategy and therefore have high strategic significance.

- 5.2.2** The UK Habitat Classification (UKHab) habitats classified during the site walkover, with their condition and strategic significance, are listed in **Table 1** below and described in detail within the separate PEA report and habitat condition assessment sheets (*John Rabson Recreation Ground, Reading – Habitat Condition Assessments; R2661_HCA_b*). A plan of the on-site baseline habitats for the Statutory Biodiversity Metric calculation is illustrated in **Figure 1** below.

Table 1. Baseline habitats for the biodiversity metric tool.

Habitat Type (UKHab code)	Habitat Distinctiveness	Habitat Condition	Strategic Significance	Area (ha)	Habitat Units
Modified grassland (g4)	Low	Low	High	0.1698	0.39
Developed land – sealed surface (u1b)	Very low	N/A	Low	0.0101	0.00
Total				0.1799	0.39



Figure 1. Baseline Habitats Plan.

Modified grassland (g4)

- 5.2.3** The modified grassland at the recreation ground was identified to be in poor condition and resembles a low distinctiveness grassland habitat. Despite the low ecological value of the habitat, the off-site area is situated within the Green Network and the strategic significance is therefore high.

Developed land – sealed surface (u1b)

- 5.2.4** A small section of concrete and asphalt path leading onto the grassland was an urban habitat of very low distinctiveness which cannot be assigned condition. It has low strategic significance.

6 POST-DEVELOPMENT DESIGN

6.1 Proposed Site Layout

- 6.1.1** The proposed habitats are listed in **Table 2** and a plan of these proposed habitats for the Statutory Biodiversity Metric calculation is illustrated in **Figure 2** below.

Table 2. Proposed habitats for the biodiversity metric tool.

Habitat Type (UKHab code)	Habitat Distinctiveness	Habitat Condition	Strategic Significance	Area (ha)	Habitat Units (net change)
On-site					
Modified grassland (g4)	Low	Low	High	0.1137	0.26 (-0.13)
Developed land – sealed surface (u1b)	Very low	N/A	Low	0.0519	0.00
Built linear features (u1e)	Very low	N/A	Low	0.0143	0.00
Total				0.0752	0.26 (-0.13)
Off-site					
83 individual trees	Low	Poor	High	0.3379	1.09 (+1.09)
Total				0.3379	1.09 (+1.09)
Combined Net Habitat Unit Change					0.96

Modified grassland (g4)

- 6.1.2** The intensive management required on the skate park and in the wider recreation ground means that it would not be possible to enhance the condition of the grassland on- and off-site.

Individual trees

- 6.1.3** Tree planting at the recreation ground will comprise 3 oak (*Quercus robur*), 40 Norway maple 'Crimson King' and 40 Norway maple (*Acer platanoides*) (see proposed tree planting in **Appendix 2**). The trees will be of local provenance. The trees have been assigned poor condition as standard, but if managed appropriately will improve in condition as they mature.



Figure 2. Proposed Habitats Plan (excluding off-site).

7 STATUTORY BIODIVERSITY METRIC CALCULATION

7.1 Headline Result

- 7.1.1** The Statutory Biodiversity Metric calculation tool demonstrates the feasibility of delivering a minimum 10% net gain for biodiversity. The biodiversity metric tool shows that off-site tree planting (within the land ownership boundary) will deliver a total net change of 245.67% in habitat units – see the final results section in **Figure 3** below.

FINAL RESULTS		
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	0.96
	Hedgerow units	0.00
	Watercourse units	0.00
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	245.67%
	Hedgerow units	0.00%
	Watercourse units	0.00%
Trading rules satisfied?	Yes ✓	

Unit Type	Target	Baseline Units	Units Required	Unit Deficit
Habitat units	10.00%	0.39	0.43	0.00
Hedgerow units	10.00%	0.00	0.00	0.00
Watercourse units	10.00%	0.00	0.00	0.00

No additional area habitat units required to meet target ✓
No additional hedgerow units required to meet target ✓
No additional watercourse units required to meet target ✓

Figure 3. The Statutory Biodiversity Metric Final Results.

- 7.1.2** The 'John Rabson Recreation Ground, Reading – The Statutory Biodiversity Metric Calculation Tool (R12661_BNG_b)' document should be referred to for the full calculation details.

7.2 Project Implementation and Management

- 7.2.1** It is Government guidance that all offsite BNG provision must be legally secured for a minimum of a minimum 30-year period, and subject to a Habitat Management and Monitoring Plan (HMMP). However, due to the nature and the scale of the scheme this approach is considered disproportionate.
- 7.2.2** The offsite habitat creation – planting 83 trees - is proposed within the recreation ground ownership boundary and the standard time taken for a planted tree to reach poor condition is 10 years. Therefore, it is considered likely that the management and monitoring of the proposed habitat creation can be sufficiently detailed in this document and secured by an appropriately worded planning condition.

7.3 Proposed Tree Planting Specification

- 7.3.1** The newly planted trees will require minimal management and maintenance beyond the initial planting and care. Each tree will be mulched to suppress competition from weeds using locally sourced wood chips (the use of compost or plastic mulch should be avoided). The trees will be given an initial soak with water and should only be watered again in a period of drought if necessary.
- 7.3.2** Stakes and ties will be used to support the newly planted trees and will be inspected monthly and adjusted/replaced as necessary; the use of plastic spirals and tree guards will be avoided. The trees will be firmed in after strong winds or heavy frosts as necessary. Tree health will be assessed monthly in the first year and replacement trees planted if any fail.
- 7.3.3** The monitoring will be undertaken by Reading Borough Council rangers as part of regular monitoring within their existing management work schedules.

8 REFERENCES

CIEEM (2021). *Biodiversity Net Gain Report and Audit Templates*.
Chartered Institute of Ecology and Environmental Management, Winchester,
UK.

DEFRA (2023). *The Statutory Biodiversity Metric – User Guide*. DEFRA

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

APPENDIX 1 – PROPOSED SITE PLAN



APPENDIX 2 – PROPOSED TREE PLANTING PLAN

