

WHARTON

Natural
Infrastructure
Consultants

Biodiversity Net Gain Assessment

SITE LOCATION

Woodland south of Hollingworth
Lake, High Ropes

ISSUE DATE

17 November 2023

OUR REFERENCE

221107 1340A BNG V2 FINAL
ISSUE

PREPARED FOR

Rochdale Borough Council

PRINCIPAL AUTHOR

Laura Carter



Biodiversity Net Gain Assessment

VERSION: V1 DATE: November 2023

REF NO: 221107 1340A BNG V2 FINAL ISSUE



Quality Assurance

Issue/revision		Issue
Remarks	Version 1	Version 2
Date	11 November 2022	17 November 2023
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Signature		
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Biodiversity Net Gain Assessment

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Summary	
Site	Woodland south of Hollingworth Lake National Grid reference SD 93762 14689
Purpose and brief	Biodiversity Net Gain (BNG) Assessment Commissioned by Rochdale Borough Council
Development proposals	The Proposed Development is the construction of a high ropes course within the woodland south of Hollingworth Lake using the clearing where possible.
Methods	Biodiversity Net Gain Assessment using the 'The Biodiversity Metric 4.0' (Natural England, 2023).
Pre-development Baseline Biodiversity Value	3.47 habitat units 0 hedgerow units
Post-Development Biodiversity Value	3.56 habitat units (gain of 2.53% in habitat units). 0 hedgerow units
Compensation Strategy	An area of land within the Survey Area has been incorporated and set aside for habitat enhancement with an appropriate Habitat Management Plan (HMP) to ensure any condition assessments of created habitats is achieved long-term.
Recommendations	An appropriate Habitat Management Plan (HMP) to ensure any condition assessments of created habitats is achieved long-term. These can be achieved as part of a planning condition to ensure that the target condition of habitats and time to condition are achieved



1. Introduction/Background

1.1 Author

- 1.1.1 The Principal Author of this report is Laura Carter BSc (*Hons*), (Senior Ecologist). The Principal Author has over five years of professional experience in ecological consultancy and has worked on projects ranging in scale including commercial and residential sites. The Principal Author currently holds a Class 2 survey licence from Natural England for bats (*Chiroptera* spp.) and Class 1 licence for great crested newts (GCN) (*Triturus cristatus*) and is a Qualifying member of the Chartered Institute of Ecology and Environmental Management ('CIEEM'), she is therefore subject to CIEEM's Code of Professional Conduct.
- 1.1.2 The detail provided within this report is a true and accurate reflection of the professional opinion of the Principal Author based on the information provided.

1.2 Purpose and Brief

- 1.2.1 Rochdale Borough Council (the Client) commissioned Wharton Natural Infrastructure Consultants Ltd ('Wharton') to undertake a Biodiversity Net Gain ('BNG') Assessment of land known as land High Ropes south of Hollingworth Lake (see land within the red line boundary on Appendices 1 and 2), known herein as 'the Site'.

1.3 Description of Site and Local Area

- 1.3.1 The Site is located to the south of Hollingworth Lake and west of Rakewood Road in Littleborough. It is centred approximately at National Grid reference SD 93762 14689.
- 1.3.2 The Site comprised a broad-leaved woodland areas of dense canopy cover with an area of other neutral grassland present in the clearings. Public footpaths and Hollingworth lake were present to the east and north of the Site at c35m and c100m respectively. The Site is bordered to the south by woodland and further areas of grassland with access roads and footpaths.
- 1.3.3 Land use in the immediate and wider areas is a mix of residential and commercial land use. The Site is relatively well connected from an ecological perspective due to grassland and woodland throughout the local area.
- 1.3.4 Wildlife corridors are present in the local area, such as the River Roch c.1km northwest of the Site. There is good ecological connectivity to/from the Site. The woodland at the Site contributes to peripheral connectivity around Hollingworth Lake the Site itself does not contribute to the functionality of the wildlife corridors.

1.4 The Proposed Development

- 1.4.1 The Proposed Development is the construction of a high ropes course erected on posts and situated to utilise the existing clearing where possible, the ground substrate will comprise pea gravel.
- 1.4.2 The proposals detailed above will be referred to throughout this report as the 'Proposed Development'.



1.5 Reference Documents

1.5.1 This document has been prepared with reference to the following documents in Table 1:

Table 1. Reference Documents

Document Name	Document Reference	Prepared By	Date
Preliminary Ecological Appraisal	220111 1340a PEA V1 - Preliminary Ecological Appraisal	Wharton (Wharton, 2022)	2022
Proposed Site Plan	Hollingworth Lake Climbing Structure	Redwood Play Ltd (Redwood Play, 2023)	2023

1.5.2 This BNG Assessment has been produced based on the 'Proposed Site Plan' (Redwood Play, 2023) which details the development at the Site, as detailed above.

1.5.3 If the Proposed Site Plan are subject to any future revisions the BNG assessment must be amended to reflect any changes.



2. Relevant Planning Policy

2.1 Relevant Planning Policy

2.1.1 Planning policies which are relevant to the Approved Development are summarised below in Table 2.

Table 2. Planning Policy Relevant to the Approved Development

Planning Policy	Relevance to the Approved Development
National Planning Policy Framework (NPPF) (Department for Communities and Local Government, 2021)	Section 180a and 180c (respectively) of the NPPF state: <i>"if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts) adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused".</i> <i>"Development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons, and a suitable compensation strategy exists."</i> planning permission should be refused".

*Full policy text should be referred to as table text is a summary only.

Local Planning Policy

2.1.2 The Rochdale Adopted Core Strategy (Rochdale Borough Council, 2016) has been reviewed and an excerpt of the relevant ecological policies is provided in Appendix 4.



3. Methodology

3.1 Biodiversity Net Gain Assessment Calculation Tool

- 3.1.1 The BNG calculation tool used for this assessment is 'The Biodiversity Metric 4.0' published in April 2023 by Natural England (Natural England, 2023).
- 3.1.2 This tool is used to objectively calculate biodiversity losses and gains for terrestrial habitats in relation to development.
- 3.1.3 This metric will eventually underpin the Environment Act's provisions for mandatory BNG in England when this comes into effect.

3.2 Habitat Condition Assessment

- 3.2.1 The habitats at the Site were originally categorised using the UK Habitat Classification Version 1.1 (Butcher, Carey, Edmonds, Norton, & Treweek, 2020). The Biodiversity Metric 3.1 requires all habitat data to be categorised according to the UK Habitat Classification.
- 3.2.2 The habitats at the Site have been mapped to reflect this; they are illustrated on the UK Habitat Classification Plan in Appendix 2.
- 3.2.3 The type and condition of habitats on Site were assessed to establish their biodiversity value. The condition assessment of the habitats has been carried out with reference to the Preliminary Ecological Appraisal (PEA) by Wharton (Wharton, 2022).
- 3.2.4 The condition assessments of the habitats at the Site were made using 'a technical supplement of The Biodiversity Metric 4.0.
- 3.2.5 The habitat distinctiveness used is always the default setting with The Biodiversity Metric 4.0, unless stated otherwise.



4. Biodiversity Net Gain Assessment

4.1 Overview

- 4.1.1 The Survey Area is 0.69 hectares (ha) in size.
- 4.1.2 The Impact Zone is 0.154ha.
- 4.1.3 The area considered within the BNG is the Survey Area which contains the Impact Zone.
- 4.1.4 The Proposed Development will involve a high ropes course set within a grassland opening within the woodland area south of Hollingworth Lake below the high ropes course will be a gravel surround.

4.2 Site Habitat Baseline

- 4.2.1 The habitats present within the Site were lowland mixed deciduous woodland and other neutral grassland.
- 4.2.2 A plan of the habitats detailed below is provided at Appendix 2 and Appendix 6 provides the details of the existing baseline condition score.

Other neutral grassland – g3c

- 4.2.3 The grassland comprised a standalone habitat within the clearing at the Site. The open clearings had areas of sparse vegetation resulting from the intense shade cast by the dominant canopy.
- 4.2.4 The area of this habitat was 0.1181 ha.
- 4.2.5 This habitat has *medium* distinctiveness and a condition score of *poor*.
- 4.2.6 The other neutral grassland provides 0.47 habitat units for the Site.
- 4.2.7 The area of 0.1 ha of other neutral grassland will be lost to facilitate the Proposed Development the rest will be retained and enhanced.

Woodland – Lowland mixed deciduous woodland - w1f7

- 4.2.8 The woodland on Site comprised an area of dense canopy cover and other more open areas. There were areas of clearings within the woodland where breaks in the canopy cover were also present and the Proposed Development has been designed to utilise these clearings where possible.
- 4.2.9 The area of this habitat was 0.4548 ha.
- 4.2.10 This habitat has *high* distinctiveness and a condition score of *poor*.
- 4.2.11 The habitat provides 3.00 habitat units for the Site.
- 4.2.12 Only 0.05ha will be lost to facilitate the Proposed Development. The remaining woodland would be retained and enhanced within the wider survey area.

On-Site Baseline

- 4.2.13 The existing biodiversity units of the Site based on the information provided above is **3.47 habitat units** and **0 hedgerow units**.

4.3 On-Site Habitat Creation

- 4.3.1 The habitats to be created within the Site are artificial unvegetated, unsealed surface paving,
- 4.3.2 The Proposed Site Plan (Redwood Play, 2023) on which this BNG Assessment is based, is provided at Appendix 5.



Artificial unvegetated, unsealed surface - u1c

- 4.3.3 The Site Boundary will be dominated by a high rope climbing course with a gravel surround. The total area of artificial unvegetated, unsealed surface within the Site will be 0.1ha.
- 4.3.4 This habitat has *very low* distinctiveness and a condition score of *N/A- other* (a condition score cannot be assigned to this habitat as it provides negligible ecological benefits).
- 4.3.5 This habitat provides no habitat units for the Site.

4.4 Habitat Trading Requirements

- 4.4.1 The Proposed Development will achieve a **2.53% gain in habitat units** within the Site.
- 4.4.2 The Site satisfied the trading standards of the DEFRA metric (Natural England, 2023). The Biodiversity Metric based on the Proposed Site Plan by Redwood Play (Redwood Play, 2023) seen Appendix 5 results in an **overall biodiversity gain of 0.09 units**. See Biodiversity Impact Calculation in Appendix 3.

4.5 Results

- 4.5.1 Based on the Proposed Site Plan (Redwood Play, 2023) see Appendix 5, the other neutral grassland and a small area of lowland mixed deciduous woodland at the Site will be lost to facilitate the Proposed Development.
- 4.5.2 Based on the Proposed Site Plan (Redwood Play, 2023) there will be an **overall biodiversity gain of 0.09 habitat units (2.53%) and no change in hedgerow units** as a result of the Proposed Development.
- 4.5.3 See BNG Calculation 'Headline Results' in Appendix 3.

4.6 Assessment of Results

- 4.6.1 The Proposed Development will be able to achieve a 2.53% net gain in biodiversity within the Site boundary under the current proposal.
- 4.6.2 This fails the requirement of the 10% gain in biodiversity as outlined local policy. However, achieves a net gain on Site.
- 4.6.3 To achieve a 10% gain on Site a total of 0.12ha of other neutral grassland around the Site could be enhanced from poor condition to moderate condition achieving 10.72%



5. Conclusion

- 5.1.1 The Site is currently an open grassland clearing surrounded by lowland mixed deciduous woodland to the south of Hollingworth Lake.
- 5.1.2 The Proposed Development is for construction of a high ropes course with gravel surround.
- 5.1.3 The existing biodiversity value of the Site is **3.47 habitat units** and **0 hedgerow units**.
- 5.1.4 The Proposed Development, based on the Proposed Site Plan (Redwood Play, 2023), will result in an **overall biodiversity gain of 0.09 habitat units (2.53%) and no change in hedgerow units.**
- 5.1.5 The post development biodiversity value of the Site is **3.56 habitat units** and **0 hedgerow units**.
- 5.1.6 The Proposed Development will achieve a net gain in biodiversity. This fails the requirement of the 10% gain in biodiversity as outlined in local policy.
- 5.1.7 To achieve a 10% gain on Site a total of 0.12ha of other neutral grassland around the Site could be enhanced from poor condition to moderate condition achieving 10.72%
- 5.1.8 The Proposed Development in its current form satisfies the trading standards of the DEFRA metric (Natural England, 2023) for the loss of the lowland mixed deciduous woodland on the Site through the Proposed Development.
- 5.1.9 A Habitat Management Plan (HMP) should accompany the Biodiversity Assessment to ensure establishment of enhancements.



References

Butcher, B., Carey, P., Edmonds, R., Norton, L., & Treweek, J. (2020). Retrieved from The UK Habitat Classification Version 1.1: <http://www.ukhab.org/>

Department for Communities and Local Government. (2021). *National Planning Policy Framework*. London: Department for Communities and Local Government.

Google Earth Pro. (2022). Google.

Natural England. (2023). *The Biodiversity Metric 4.0*. Natural England.

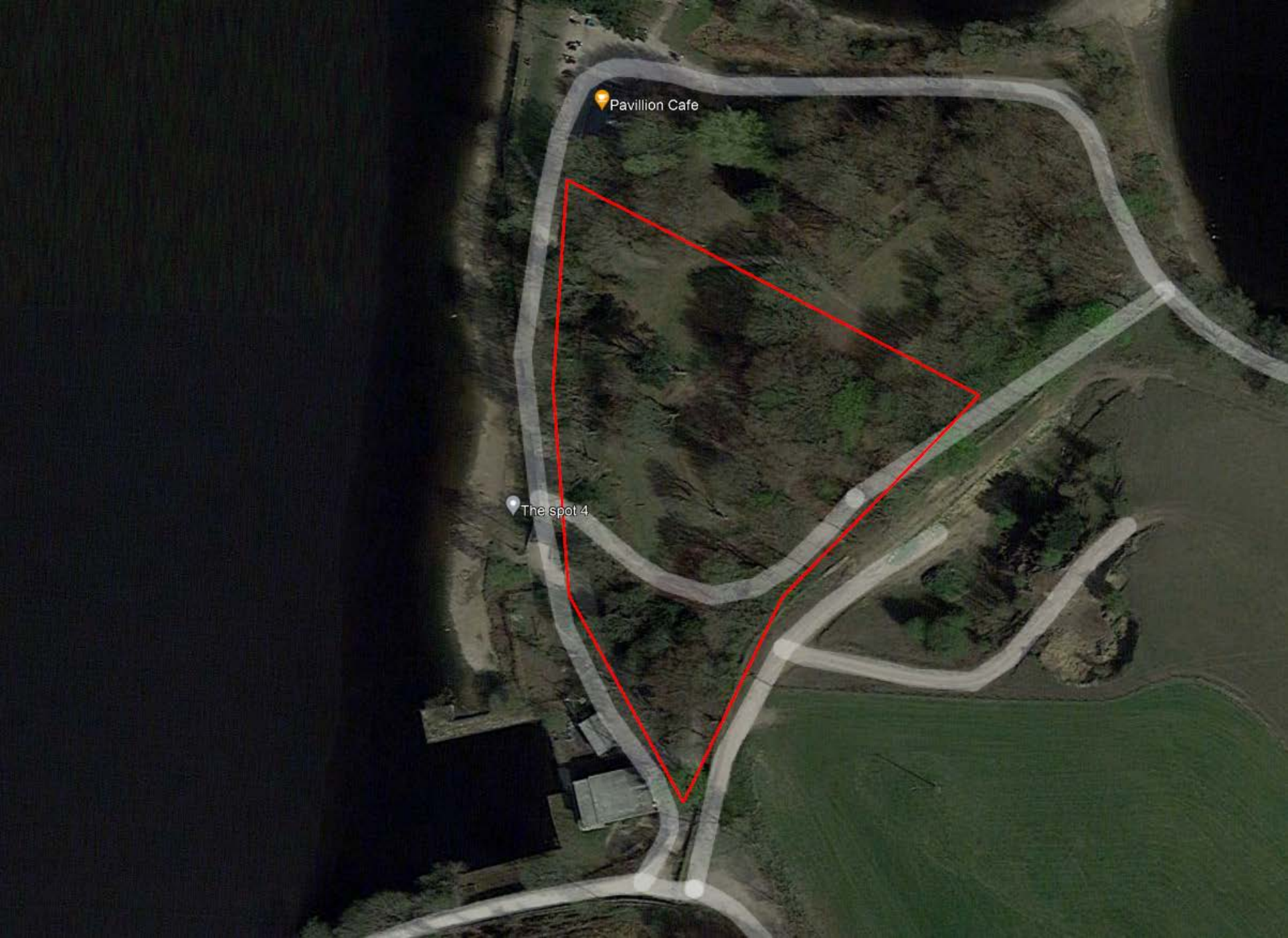
Redwood Play. (2023). *Hollingworth Lake Climbing Structure*.

Rochdale Borough Council. (2016). *The Rochdale Adopted Core Strategy*.

Wharton. (2022). *220111 1340a PEA V1 - Preliminary Ecological Appraisal-Hollingworth Lake*.



Appendix 1 – Site Location Plan (Google Earth Pro, 2022)



Pavillion Cafe

The spot 4



Appendix 2 – UK Habitat Classification Map



Scale: 1:500

- Red Line Boundary
- Lowland mixed deciduous woodland
- Other neutral grassland



The spot 4
Temporarily closed

Date: 11/11/2023	
Client: Rochdale	
Project: Hollingworth - High Ropes	
Title: Baseline	
Map file reference	Plan No.
231117 1340 ECO V2	E001

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Appendix 3 – Biodiversity Net Gain Assessment Calculation for the Site (Natural England, 2023)

Headline Results

Return to
results menu

Scroll down for final results ▲

On-site baseline

Habitat units	3.47
Hedgerow units	0.00
Watercourse	0.00

On-site post-intervention

(Including habitat retention, creation & enhancement)

Habitat units	3.56
Hedgerow units	0.00
Watercourse	0.00

On-site net change

(units & percentage)

Habitat units	0.09
Hedgerow units	0.00
Watercourse	0.00

2.53%

0.00%

0.00%

On-site net gain is less than target net ▲

Off-site baseline

Habitat units	0.00
Hedgerow units	0.00
Watercourse	0.00

Off-site post-intervention

(Including habitat retention, creation & enhancement)

Habitat units	0.00
Hedgerow units	0.00
Watercourse	0.00

Off-site net change

(units & percentage)

Habitat units	0.00
Hedgerow units	0.00
Watercourse	0.00

0.00%

0.00%

0.00%

Combined net unit change

(Including all on-site & off-site habitat retention, creation & enhancement)

Habitat units	0.09
Hedgerow units	0.00
Watercourse	0.00

Spatial risk multiplier (SRM) deductions

Habitat units	0.00
Hedgerow units	0.00
Watercourse	0.00

FINAL RESULTS

Total net unit change

(Including all on-site & off-site habitat retention, creation & enhancement)

Habitat units	0.09
Hedgerow units	0.00
Watercourse	0.00

Total net % change

(Including all on-site & off-site habitat retention, creation & enhancement)

Habitat units	2.53%
Hedgerow units	0.00%
Watercourse units	0.00%

Total net gain achieved is less than target net ▲

Trading rules satisfied?

Yes ✓



Appendix 4 - Local Planning Policy Excerpts

G7 - Increasing the value of biodiversity and geodiversity

We will ensure that sites and features of biodiversity and geodiversity importance are given full and appropriate recognition and protection. Opportunities for enhancing biodiversity and geodiversity, creating new sites and features of interest and improving opportunities for public enjoyment will be supported. No development should result in a net loss of biodiversity or geodiversity interest in the borough and overall development in the borough should result in a net gain.

Particular priorities for biodiversity and geodiversity are:

1. **The South Pennine Moors** - our focus is to maintain and enhance the peatland habitats of the moorland and to support development, land and water management activities which provide an opportunity to conserve and enhance the value of moorland for upland breeding birds of conservation significance and the habitats on which they depend and which do not harm biodiversity value. Our focus is the designated Special Protection Area and Special Area of Conservation but also the wider moorland where such interest is present or could be supported through appropriate development or land management. We will also protect and support enhancement measures for areas of geodiversity value.
2. **The Rochdale Canal** - our focus is to ensure that the Rochdale Canal Special Area of Conservation and the wider biodiversity interest of the canal is given full and appropriate protection and ensure that development which delivers the economic and recreational value of the Rochdale Canal and its wider corridor supports and does not harm its biodiversity value.
3. **Upland farmland** - our focus is to ensure that the biodiversity interest of upland farmland including its value for birds, woodland and grassland is protected and opportunities for enhancement and the creation of new interest maximised through land management improvements and appropriate development activities.
4. **Countryside around towns** - our focus is to protect and enhance the biodiversity interest of river valleys, woodland, water and farmland including the reclamation of derelict and neglected land and flood risk management measures. We will also support actions which enhance public access and enjoyment of countryside close to urban areas including Local Nature Reserves and the wider countryside.
5. **Urban Areas** - our priority is to protect and enhance existing urban biodiversity and to support opportunities for new urban biodiversity corridors, sites and features including sustainable urban drainage schemes, new public realm provision, street trees and urban woodlands, ponds and lodges, green roofs and natural play areas.
6. **Designated sites of ecological importance** - will be given appropriate protection according to their European, national or local status and in accordance with policies in other development plan documents, supporting Supplementary Planning Documents and Biodiversity Action Plans.
7. **Protected Species:** Development proposals which would affect a species protected by law or its habitat will not be permitted unless it can be demonstrated that:
 - a. there is no adverse impact on the species concerned;
 - b. damage to habitats is minimal and alternative habitat provision is effective in maintaining those species.

Opportunities to protect, enhance and create features of biodiversity or geodiversity interest should be informed by the detail of any formal designation of a site or area and supporting plans and guidance such as Local Biodiversity Action Plans, Green Infrastructure Strategies and Action Plans and the Council's Biodiversity and Development SPD.

We will expect development proposals and improvements to:

- a. Protect and include existing biodiversity (including established biodiversity interest on brownfield land) within new developments, public realm and open spaces and meet the requirements of the Biodiversity and Development SPD, Greater Manchester and Local Biodiversity Action Plans;
- b. Protect and enhance existing features such as peatland, ponds, wetlands, reservoirs, mill lodges, trees, hedges, wooded areas, meadows, flora and fauna;
- c. Take opportunities to promote biodiversity and create new habitats through new development using landscaping and building and construction features wherever possible (e.g. ponds, species of vegetation, green roofs and walls, bat boxes, roof space, appropriate nest boxes and landscaping);
- d. Enhance strategic wildlife corridors and the most natural areas and ensure that habitats and corridors are not fragmented by development;
- e. Improve access where appropriate to new or existing biodiversity interest for public enjoyment; and
- f. Protect important geology and take opportunities to increase interest and accessibility.



Appendix 5 – Proposed Development (Redwood Play, 2023)



Figured dimensions to be used. Do not scale from drawing

Rev.	Revision detail	By	Chk.	Date
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Client	
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Project	HOLLINGWORTH LAKE ADVENTURE COURSE
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Title	EXISTING SITE LAYOUT
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Drawn by GB	Date 11/10/23	Purpose of issue Planning	Scale 1:200 @ A
Checked by	Date	Project No.	
Approved by	Date	Drawing No. P02	Rev.



Appendix 6 – Baseline Condition Assessment

Lowland Mixed Deciduous Woodland

Condition Assessment Criteria			
Indicator			Score per indicator
1	Age distribution of trees	Two age classes present	2
2	Wild, domestic and feral herbivore damage	Evidence of significant browsing pressure is present 40% or less	2
3	Invasive plant species	Invasive species present in the woodland – Rhododendron sp. present	1
4	Number of native tree species	Three to four native tree or shrub species found across woodland parcel	2
5	Cover of native tree and shrub species	50- 80% of canopy trees and 50-80% of understory shrubs are native	2
6	Open space within woodland	More than 40% of woodland has areas of temporary open space	1
7	Woodland regeneration	No classes or coppice regrowth present in the woodland	1
8	Tree health	Tree mortality less than 10% and no crown dieback or pest or disease is present	3
9	Vegetation and ground flora	No recognisable NVC community	1
10	Woodland vertical structure	One or less storeys across all survey plots	1
11	Veteran trees	No veteran trees present in woodland	1
12	Amount of deadwood	Less than 25% of all survey plots within the woodland parcel have standing deadwood, large dead branches/stems and stumps	1
13	Woodland disturbance	More than 1ha in total of nutrient enrichment across woodland area and/or more than 20% of woodland area has damaged ground	1
Total score (out of a possible 39)		19	
Condition Assessment Result		Condition Assessment Score	
Total score >32 (33 to 39)		Good (3)	
Total score 26 to 32		Moderate (2)	
Total score <26 (13 to 25)		Poor (1)	
Final Condition (Based on scoring 19 out of 39)		Poor	

Biodiversity Net Gain Assessment

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Other neutral grassland

Condition Assessment Criteria		Pass/Fail
1	The appearance and composition of the vegetation closely matches characteristics of the specific grassland habitat type (see UKHab definition). Wildflowers, sedges and indicator species for the specific grassland habitat type are very clearly and easily visible throughout the sward. NB- This criterion is essential for achieving moderate condition (non-acid grassland types)	FAIL
2	Sward height is varied (at least 20% of the sward is less than 7cm and at least 20% is more than 7cm) creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.	FAIL
3	Cover of bare ground between 1% and 5%, including localised areas, for example, rabbit warrens.	FAIL
4	Cover of bracken less than 20% and cover of scrub (including bramble) less than 5%.	PASS
5	There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981). Combined cover of undesirable species and physical damage (such as excessive poaching, damage from machinery use or storage, damaging levels of access, or any other damaging management activities) accounts for less than 5% of the total area.	PASS
6	There are greater than 9 species/m ² . NB- This criterion is essential for achieving good condition (non-acid grassland types).	FAIL
Final condition assessment (based on passing 2 of 6 criteria)		Poor

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