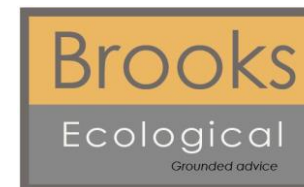


Billingley View, Bolton-on-Dearne



Document Reference ER-4001-02

Date 17.04.2020

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Introduction

This report is produced to inform Barnsley Metropolitan Borough Council of the baseline value, and potential post development value of the Site in relation to targets for Biodiversity Net Gain (BNG).

Methodology

Calculations are based on the Site as mapped during the Phase 1 Survey carried out during July 2019 which followed the principles of Extended Phase 1 Habitat Survey methodology (JNCC, 2010). However, the map produced as part of this initial report has been updated from JNCC Habitats to reflect the corresponding UK Habitat Classification codes, as required to facilitate the use of the DEFRA Biodiversity Metric Calculator 2.0.

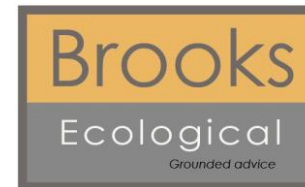
Due to the change in habitat mapping, the large areas of tall ruderal vegetation to the east and west of the Site, and the narrow track of short perennial/ephemeral vegetation passing through the centre, have to be mapped as Ruderal/Ephemeral. For detail on these, and all other habitats on Site the Preliminary Ecological Appraisal Report (R-4001-01) should be read in conjunction.

All measurements are taken from georeferenced GIS mapping and make use of overlaid proposals plans for assessment of developed areas and created habitats. Measurements or estimations of the new habitat are purposefully conservative and where doubt exists about habitat type or area a lower value is assigned.

Unless otherwise stated, this report does not consider faunal constraints such as protected species, but only assesses the likely value of the Site in terms of measured habitats. Value is calculated using the latest version of DEFRA's spreadsheet tool – currently Biodiversity Metric 2.0 Calculation Tool Beta Test - December 2019 Update

Precaution should be applied in translating other values (e.g. financial) from the figures provided in this report. Reliance on figures within this report is at the users own risk.

Biodiversity Net Gain - Calculations Summary
Billingley View, Bolton-on-Dearne



- Site Boundary
- Biodiversity Net Gain Baseline
 - g4 - modified grassland
 - 17 - ruderal / ephemeral
 - 1170 - street tree
 - u1b - developed land, sealed surface

Figure 1

Habitat Baseline Plan

Biodiversity Net Gain - Calculations Summary
Billingley View, Bolton-on-Dearne



Figure 2

Impacts Plan



 Development footprint

Billingley View, Bolton-on-Dearne



Impacts are recorded in the tool and reflect the following changes at this Site.

Within the Development Footprint

- The creation of new built development
- The installation of new landscaped areas, principally being turfed gardens but including ornamental shrubs and hedges and heavy standard trees.

Within the Retained Area

- The undeveloped area to the south of the Site will be protected behind BS5837 fencing. Detail of any landscaping here has not been provided, it is therefore assumed it will remain as is.

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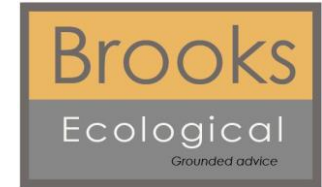


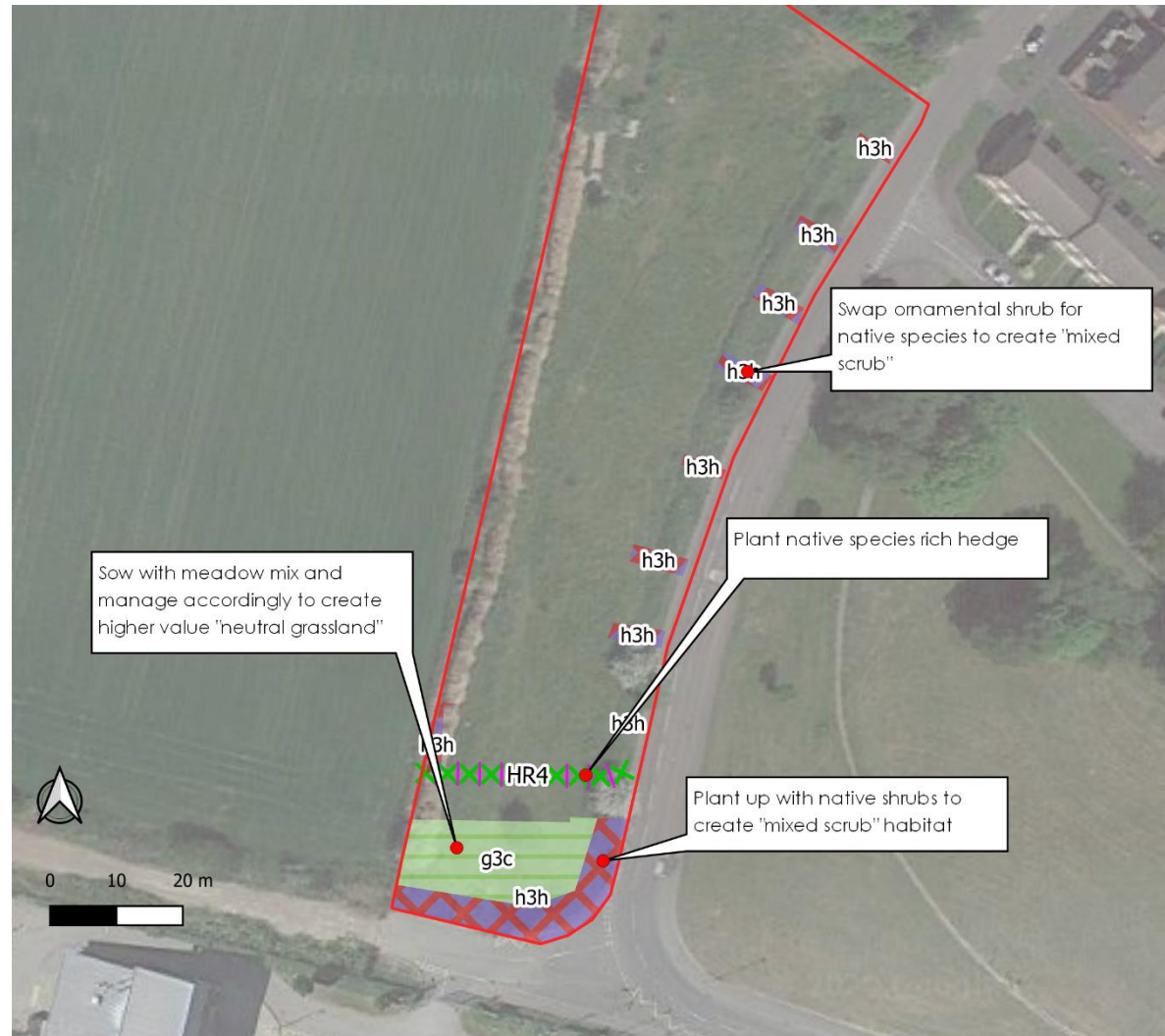
Figure 4 Summary of Biodiversity Impact Assessment based on current layout

On-site baseline	<i>Habitat units</i>	1.12
	<i>Hedgerow units</i>	0.00
	<i>River units</i>	0.00
On-site post-intervention (Including habitat retention, creation, enhancement & succession)	<i>Habitat units</i>	0.66
	<i>Hedgerow units</i>	0.00
	<i>River units</i>	0.00
Off-site baseline	<i>Habitat units</i>	0.00
	<i>Hedgerow units</i>	0.00
	<i>River units</i>	0.00
Off-site post-intervention (Including habitat retention, creation, enhancement & succession)	<i>Habitat units</i>	0.00
	<i>Hedgerow units</i>	0.00
	<i>River units</i>	0.00
Total net unit change (including all on-site & off-site habitat retention/creation)	<i>Habitat units</i>	-0.46
	<i>Hedgerow units</i>	0.00
	<i>River units</i>	0.00
Total net % change (including all on-site & off-site habitat creation + retained habitats)	<i>Habitat units</i>	-40.84%
	<i>Hedgerow units</i>	0.00%
	<i>River units</i>	0.00%

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Figure 5

Based on the shortfall set out above, simple improvement options have been identified which can be applied to the site. These are identified in figure 4.



Billingley View, Bolton-on-Dearne

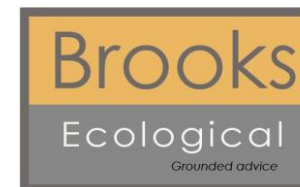


Figure 6 Summary of Biodiversity Impact Assessment – based on improvements shown above

On-site baseline	<i>Habitat units</i>	1.12
	<i>Hedgerow units</i>	0.00
	<i>River units</i>	0.00
On-site post-intervention (Including habitat retention, creation, enhancement & succession)	<i>Habitat units</i>	0.94
	<i>Hedgerow units</i>	0.09
	<i>River units</i>	0.00
Off-site baseline	<i>Habitat units</i>	0.00
	<i>Hedgerow units</i>	0.00
	<i>River units</i>	0.00
Off-site post-intervention (Including habitat retention, creation, enhancement & succession)	<i>Habitat units</i>	0.00
	<i>Hedgerow units</i>	0.00
	<i>River units</i>	0.00
Total net unit change (including all on-site & off-site habitat retention/creation)	<i>Habitat units</i>	-0.18
	<i>Hedgerow units</i>	0.09
	<i>River units</i>	0.00
Total net % change (including all on-site & off-site habitat creation + retained habitats)	<i>Habitat units</i>	-15.72%
	<i>Hedgerow units</i>	4277.50%
	<i>River units</i>	0.00%

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As set out above the proposed creation and enhancement works will still result in a shortfall of 15.72 % of the Site's baseline in terms of habitat units, but there will be gains in the separately assessed measurements of hedgerows. Combining these the shortfall equates to 0.09 units, or approximately 7.5% loss in biodiversity value.

Relevant guidance suggests that the calculator will never provide the full picture in terms of the true benefits or impacts derived from a scheme. In this case the provision of faunal boxes built into the fabric of new properties will provide further enhancement.

Despite this, the Local Planning Authority may ask for a financial contribution to make up the shortfall in on Site biodiversity value, or to provide a net gain. This would need to be agreed with the LPA as part of the planning process. Alternatively, further improvements could be made on Site to deliver a net gain.

References

DEFRA (2012). *Biodiversity Offsetting Pilots Technical Paper: the metric for the biodiversity offsetting pilot in England*

DEFRA (2018). *Defra Biodiversity Metric - Introduction to the Proposed Updated Metric (BD2020-10)*

JNCC (2010). *Handbook for Phase 1 Habitat Survey: A technique for environmental audit.*