

**MAPLE PLACE
(FORMER CROCKERY AND SAMSON'S GYM),
DERBY ROAD, EASTLEIGH, HAMPSHIRE**

BIODIVERSITY NET GAIN ASSESSMENT

Final Document (Revision 1)

August 2023

Preliminary Ecological Appraisals • Protected Species Surveys and Licensing • NVC • EclA • HRA • Management Plans
Habitats • Badger • Bats • Hazel Dormouse • Birds • Reptiles • Amphibians • Invertebrates • Riparian and Aquatic Species

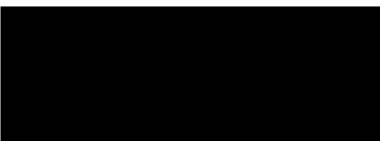
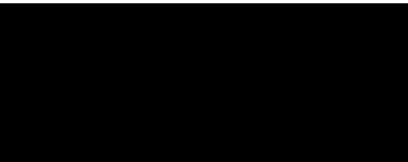
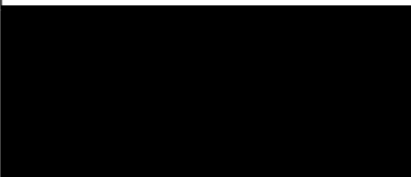
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ECOSA Quality Assurance Record

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BIODIVERSITY NET GAIN ASSESSMENT

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1.0 INTRODUCTION

1.1 Background

Ecological Survey & Assessment Limited (ECOSA) have been appointed by Aspect (Eastleigh) Ltd to prepare a Biodiversity Net Gain Assessment to support a planning application for Maple Place; the redevelopment of the Former Crockery and Samson's Gym site, Derby Road, Eastleigh, Hampshire SO50 5HX (hereafter referred to as 'the site'). This report presents the findings of the Biodiversity Net Gain Assessment, based on calculations using the DEFRA Metric 3.1 (Natural England, 2023).

Following receipt of comments on the planning application from Eastleigh Borough Council's ecologist Lisa Malter on 31st July 2023 that highlighted that the biodiversity value of the site prior to the demolition works had not been considered, this revised version of the report has been updated.

1.2 The Site

The site is located in Eastleigh, Hampshire centred on National Grid Reference (NGR) SU 4512 1843 (**Map 1**). The site covers approximately 0.1 hectares and comprises a vacant plot situated on the corner of Derby Road and Chamberlayne Road. Two vacant commercial buildings previously located on this land have recently been demolished.

In the wider area, the landscape is dominated by residential and industrial development associated with Eastleigh. Grantham Green (a recreational park) lies approximately 50 metres north-west. Beyond the town, the landscape is characterised by agricultural fields interspersed with woodland blocks.

1.3 Aims and Scope of Report

The aim of this document is to establish whether the proposals will be able to deliver measurable net gain in biodiversity through using a recognised biodiversity metric to calculate the value of the site before and after development. This document is a stand-alone assessment of the pre- and post-development value of the site in terms of the biodiversity units. This does not supersede the Ecological Impact Assessment (ECOSA, 2023) but should be read in-conjunction with that document.

1.4 Site Proposals

The proposals entail the construction of 12 new residential units comprising three houses facing Derby Road, nine apartments on the corner of Derby and Chamberlayne Roads, and associated external parking spaces with electric vehicle charging points. Bin and cycle storage, communal areas and gardens have also been included. Access will remain the same from Derby Road and Chamberlayne Road.

The Biodiversity Net Gain Assessment is based on the proposals plan 'Aspect (Eastleigh) Ltd Redevelopment of Samson's Gym – Proposed Site Plan' produced by FDG (Fairhursts Design Group), dated 17th May 2023 (Drawing No. 7694-08-600, Rev. P02) (**Appendix 1**).

2.0 METHODOLOGY

2.1 Introduction

This section provides the methodology followed as part of the Biodiversity Net Gain Assessment.

2.2 Biodiversity Net Gain Assessment Methods

The Biodiversity Net Gain Assessment was undertaken using DEFRA's Biodiversity Metric 3.1 Calculation Tool (Beta) (Natural England, 2022).

The calculator provides a score which represents the biodiversity value of each area of habitat by applying multipliers, which can have a positive or negative effect on the overall score, based on a number of components of biodiversity quality. These components are set out in the paragraphs below.

Once these calculations are completed a pre- and post-development biodiversity value of the site is provided, which allows an assessment to be made of the net biodiversity losses or gains at the site.

As stated within the Environment Act where operations that have taken place which would decrease the unit value of the site after 30th January 2020, which are not otherwise part of a lawful operation, the condition of the site needs to be similar to those before the 30th January 2020.

As per the Ecological Impact Assessment report (ECOSA, 2023), prior notification of the demolition proposals was submitted to Eastleigh Borough Council in November 2020 (Application no. PN/20/89301). Permission to demolish the two buildings was granted in January 2022. Despite the the two buildings being demolished under lawful operation as part of the consented planning permission, they have been included as part of the baseline habitats in response to comments received from the Eastleigh Borough Council ecologist.

2.2.1 Components of Biodiversity Quality

Habitat Type

Areas of existing habitat that make up the on-site baseline were identified during a field survey and condition assessment undertaken 10th May 2022 by Helen Butt, Senior Ecologist of ECOSA. The field survey followed UKHab classifications (UK Habitat Classification Work Group, 2018) as this is the classification system used (with some minor modifications) within DEFRA's Biodiversity Metric 3.1 Calculation Tool.

Habitat Area

Areas of existing, retained and proposed habitats were mapped and measured by ECOSA using ArcGIS. The extents of existing habitats are based on information collected during the condition assessment survey and using aerial photography and Ordnance Survey (OS) mapping resources (**Map 2**). The extents for retained and proposed habitats were based on information provided by the proposal plan (**Appendix 1**). This information was subsequently used to generate a Post-Development Habitat Map in ArcGIS (**Map 3**). Non-linear habitats are measured in hectares while linear features are measured by length in kilometres. Therefore, for the purposes of the calculation they are addressed separately with separate biodiversity units calculated for linear and non-linear features.

Habitat Distinctiveness

The distinctiveness of a habitat represents its relative quality and importance compared to other habitat types, based on an assessment of the distinguishing features of a habitat, including consideration of species richness, rarity and the degree to which a habitat supports species rarely found in other habitats. The Habitat Distinctiveness scores are automatically assigned by the calculator in accordance with the assessment methodology detailed in the Biodiversity Metric 3.1 Technical Supplement (Panks, et al., 2022).

Habitat Condition

The condition of a habitat represents its relative quality judged against the perceived ecological optimum state for that particular habitat type. Therefore, habitat condition is specific to the habitat type and not comparable between habitat types (unlike Habitat Distinctiveness). The condition of existing habitats was assessed during the condition assessment survey undertaken on 10th May 2022. The condition assessment was based on the criteria within the Biodiversity Metric 3.1 Technical Supplement (Panks, et al., 2022). Some habitat types (for example most agricultural habitats and hardstanding) are not subject to assessment and are assigned default scores by the calculation tool. For proposed habitat creation a 'Target Condition' is assigned, this is the condition that it is proposed the habitat will achieve post-development and is based on the same criteria as the condition assessment.

Strategic Significance

The Strategic Significance multiplier gives additional unit value to habitats that are located in preferred locations for biodiversity and other environmental objectives. For the purposes of this assessment non-statutory designated sites such as Sites of Importance for Nature Conservation (SINCs) are considered to be areas formally identified in the local strategy, and on-site habitats adjacent or connected to these areas are considered to be 'ecologically desirable'.

2.2.2 Additional Factors for Habitat Creation and Enhancement

In addition to the above components, several additional multipliers are assigned to habitats which are proposed to be created or enhanced post-development. These factors take into account the risks associated with attempting to establish new habitats and are detailed below.

Difficulty Risk

This is the risk associated with the delivery of biodiversity creation or enhancement due to uncertainty in the effectiveness of techniques to create or restore a particular habitat type. For some habitat types it is much more difficult to replicate habitat losses because of the unique physical and ecological features of the habitat.

Temporal Risk

For some habitat types, it can take a long time to achieve the Target Condition (see Habitat Condition paragraph above). If there is a significant time lag between initial habitat loss and establishing new habitats of adequate condition to compensate for this loss, there will be lower levels of biodiversity for this period of time. The temporal risk multiplier reflects this temporary reduction in quality.

Spatial Risk

Where habitat creation is being undertaken to offset habitat loss as a result of the proposals, it is beneficial for such offsetting to be delivered in proximity to the original loss, ideally within the site itself, so that the ecosystem services provided by such habitat will benefit receptors that are affected by the proposals. Where this is not possible, it is considered that locating off-site compensation within the local planning authority area or the same National Character Area represents a minimal risk. For offsetting delivered further afield a negative multiplier is applied.

3.0 RESULTS

3.1 Introduction

The detailed metric calculation is provided within **Appendix 2** and supported by a baseline habitat map (**Map 2**) and post-development habitat map (**Map 3**). Further information on the approach taken in this calculation are provided in this section.

3.1.1 Condition Assessment

Details of the condition criteria met by each habitat are provided in **Appendix 3**.

3.1.2 Strategic Significance

The strategic significance for the site is categorised as 'area/compensation not in local strategy/no local strategy.' This is applied where there is no such strategy available and there is no evidence to suggest that the habitat is of strategic significance.

3.2 Pre-Development Habitats

Baseline habitats are shown on **Map 2**. The current on-site baseline units are 0.00 habitat units.

Habitats are classified according to the UKHab classification (UK Habitat Classification Work Group, 2018). The current on-site baseline habitats within the development red-line boundary comprise 0.1 hectares of developed land; sealed surface. No other habitats are present on site.

3.2.1 Habitat Loss

A total of 0.1 hectares of developed land; sealed surface will be lost as part of the proposals.

3.3 Post-Development Habitats

Post-development habitats are shown on **Map 3**. The anticipated post-development biodiversity units are +0.03 habitat units.

Habitats are classified according to the UKHab classification (UK Habitat Classification Work Group, 2018). The anticipated post-development habitats within the development red-line boundary comprise developed land; sealed surface, vegetated garden, and introduced shrub.

3.3.1 *Habitat Creation*

Developed land; sealed surface will cover 0.09 hectares and will comprise the new buildings and hardstanding including car parking spaces and cycle/bin storage areas. The new residential dwellings will be provided with gardens laid to lawn - identified as vegetated garden and will cover 0.005 hectares. New areas of introduced shrub will be included within the scheme, such as within the raised planter in the centre of the site, and these habitats will cover 0.009 hectares.

4.0 CONCLUSION

The scheme is anticipated to deliver +0.03 habitat biodiversity units. This represents a **net gain** of 100%. Therefore, it can be concluded that the proposals will deliver a measurable biodiversity net gain over the current baseline situation.

5.0 REFERENCES

CIEEM, 2017. *Guidelines for Ecological Report Writing*. 2nd ed. Winchester: Chartered Institute of Ecology and Environmental Management.

ECOSA, 2023. *Maple Place (Former Crockery and Samson's Gym), Eastleigh - Ecological Impact Assessment*, North Baddesley, Hampshire: Ecological Survey and Assessment Limited.

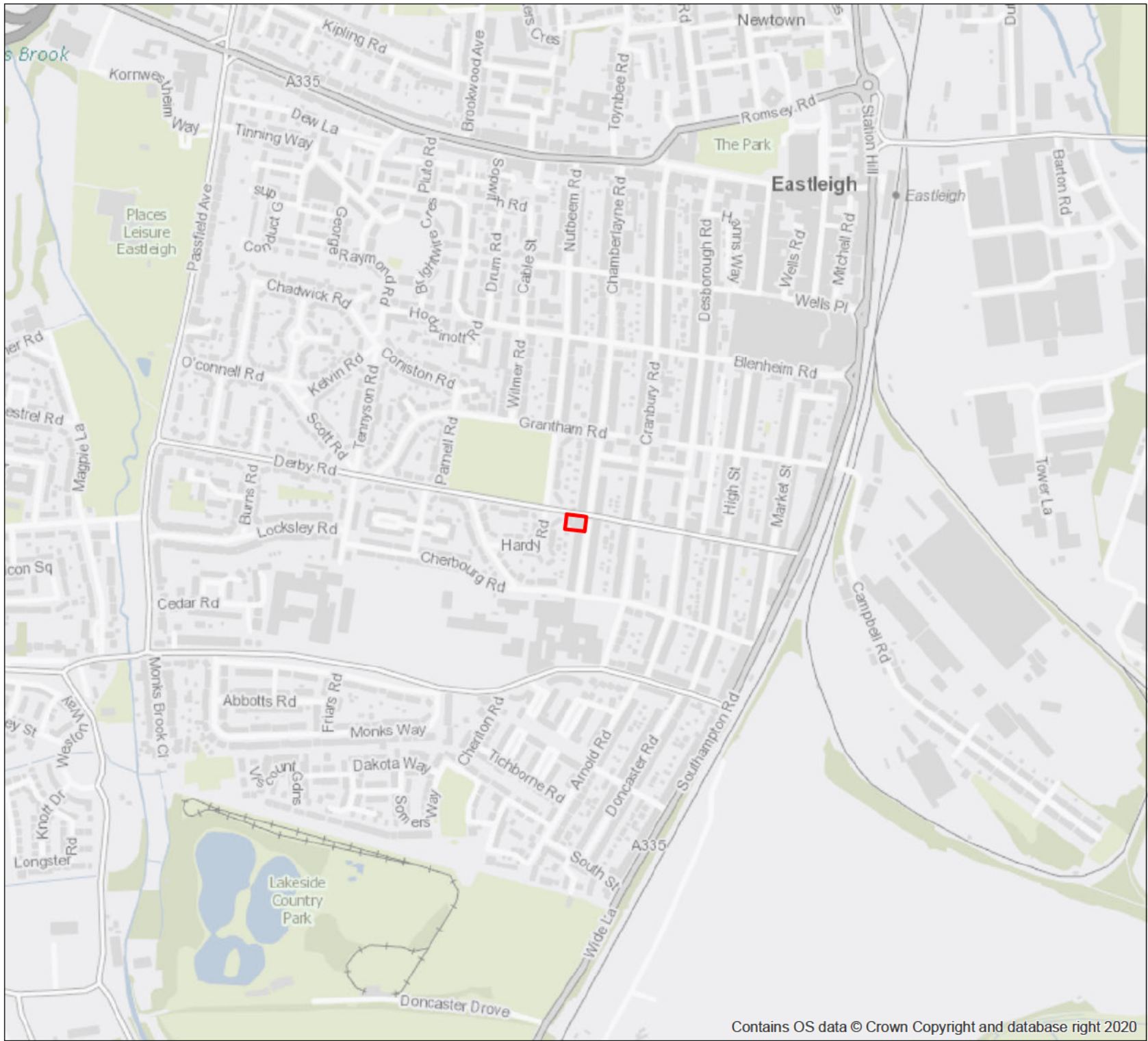
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Natural England, 2023. *The Biodiversity Metric 3.1 (JP029)*. [Online] Available at: <http://publications.naturalengland.org.uk/publication/5850908674228224> [Accessed February 2023].

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Map 1 Site Location Plan



MAPLE PLACE (FORMER CROCKERY AND SAMSON'S GYM), DERBY ROAD, EASTLEIGH, HAMPSHIRE

BIODIVERSITY NET GAIN ASSESSMENT

Map 1 - Site Location Plan

Client:	Aspect (Eastleigh) Ltd
Date:	August 2023
Status:	Final (Revision 1)

KEY

 Site Boundary



Scale at A4: 1:10,000

0 100 200 400 Metres

N

Prepared by: OW	Date: 200223
Last amended by: N/A	Date: N/A

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Map 2 Baseline Habitats



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BIODIVERSITY NET GAIN ASSESSMENT

Map 2 - Baseline Habitats

Client:	Aspect (Eastleigh) Ltd
Date:	August 2023
Status:	Final (Revision 1)

KEY

-  Site Boundary
-  Developed Land; Sealed Surface



Prepared by: EV	Date: 120522
Last amended by: HB	Date: 050722



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Map 3 Post Development Habitats



MAPLE PLACE (FORMER CROCKERY AND SAMSON'S GYM), DERBY ROAD, EASTLEIGH, HAMPSHIRE

BIODIVERSITY NET GAIN ASSESSMENT

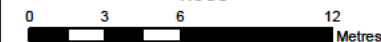
Map 3 - Post Development Habitats

Client:	Aspect (Eastleigh) Ltd
Date:	August 2023
Status:	Final (Revision 1)

KEY

-  Site Boundary
-  Urban - Developed Land; Sealed Surface (created)
-  Urban - Vegetated Garden (created)
-  Urban - Introduced Shrub (created)

Scale at A4: 1:300



Prepared by: HB	Date: 050722
Last amended by: OW	Date: 080623

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Source: Esri, Maxar, Earthstar Geographics, IGN, and the GIS User Community

Appendix 1 Proposals Plan



Aspect (Eastleigh) Ltd
Redevelopment of
Samson's Gym

PROPOSED SITE PLAN

Manchester
Stn 700
31 Dale Street
Manchester M1 1WY
+44 (0)161 891 7536

Southampton
Ratons Park
Lymington
Southampton SO40 7PY
+44 (0)23 8661 7800

www.fdg.co.uk

FDG

fairhursts design group

Appendix 2 Detailed Metric Calculations

On-site baseline	Habitat units	0.00
	Hedgerow units	0.00
	River units	0.00
On-site post-intervention (Including habitat retention, creation & enhancement)	Habitat units	0.03
	Hedgerow units	0.00
	River units	0.00
On-site net % change (Including habitat retention, creation & enhancement)	Habitat units	100.00%
	Hedgerow units	0.00%
	River units	0.00%
Off-site baseline	Habitat units	0.00
	Hedgerow units	0.00
	River units	0.00
Off-site post-intervention (Including habitat retention, creation & enhancement)	Habitat units	0.00
	Hedgerow units	0.00
	River units	0.00
Total net unit change (including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	0.03
	Hedgerow units	0.00
	River units	0.00
Total on-site net % change plus off-site surplus (including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	100.00%
	Hedgerow units	0.00%
	River units	0.00%
Trading rules Satisfied?	Yes ✓	

Maple Place (Former Crockery and Sanson's Gym)

A-1 Site Habitat Baseline

Condense / Show Columns

Condense / Show Rows

Main Menu

Instructions

Habitats and areas				Distinctiveness	Condition	Strategic significance	Suggested action to address habitat losses	Ecological baseline
# of	Broad Habitat	Habitat Type	Area (hectares)	Distinctiveness	Condition	Strategic significance	Suggested action to address habitat losses	Total habitat units
1	Urban	Developed land; sealed surface	0.11	V Low	NA - Other	Area compensation not in local strategy or local strategy	Compensation Not Required	0.00
2								
3								
4								
5								
6		Total habitat area	0.11					0.00

Intention category biodiversity value						Respoke compensation agreed for unacceptable losses	Comments	
Area retained	Area enhanced	Baseline units retained	Baseline units enhanced	Area habitat lost	Units lost		Assessor comments	Reviewer comments
		0.00	0.00	0.11	0.00		Existing hardstanding	
0.00	0.00	0.00	0.00	0.11	0.00			
Total area lost (excluding area of Urban trees and Green walls)				0.11				

A-2 Site Habitat Creation

Condense / Show Rows

Instructions

Site Area (Excluding area of Urban trees and Green walls)	0.10
---	------

Appendix 3 Pre-Development Habitat Condition Assessment

Habitat Type	Habitat Condition Sheet ¹	Condition	No. of Criteria Met	Criteria Met/ Notes
Urban – Developed Land; Sealed Surface	N/A	N/A - Other	N/A	Automatically allocated a score of 0

¹ The habitat condition sheet sets out the criteria for the condition assessment and is assigned based on habitat type within the Biodiversity Metric Technical Supplement (Panks, et al., 2022).

Appendix 4 Post Development Habitat Condition Assessment Targets

Habitat Type	Habitat Status	Habitat Condition Sheet ²	Target Condition	Target No. of Criteria Met	Target for Criteria Met/ Notes
Urban – Developed Land; Sealed Surface	Newly Created	N/A	N/A - Other	N/A	Automatically allocated a score of 0
Urban – Vegetated Garden	Newly Created	N/A	Condition Assessment – N/A	N/A	Automatically allocated a score of 1
Urban – Introduced Shrub	Newly Created	N/A	Condition Assessment – N/A	N/A	Automatically allocated a score of 1

² The habitat condition sheet sets out the criteria for the condition assessment and is assigned based on habitat type within the Biodiversity Metric 3.1 Auditing and Accounting for Biodiversity – Technical Supplement (Panks, et al., 2022).