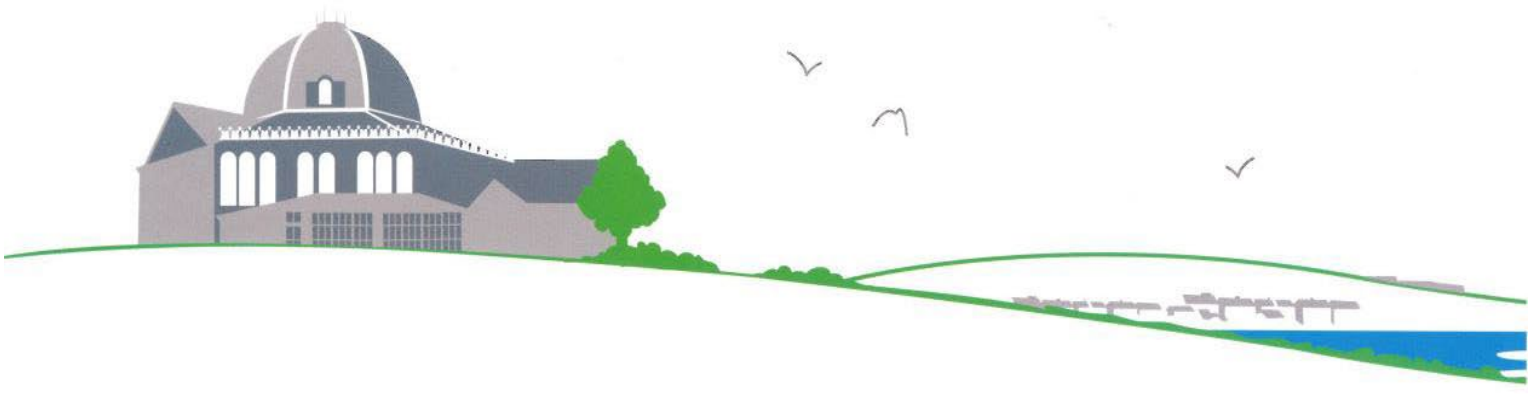
Penny Anderson Associates Ltd
CONSULTANT ECOLOGISTS

STACK (MANCHESTER) LIMITED

FORMER HATCH SITE

BIODIVERSITY NET GAIN ASSESSMENT



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FORMER HATCH SITE

BIODIVERSITY NET GAIN ASSESSMENT

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May 2024

This project has been undertaken in accordance with PAA policies and procedures on quality assurance.

Signed:_____

Penny Anderson Associates Ltd
CONSULTANT ECOLOGISTS

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1. INTRODUCTION

1.1 Penny Anderson Associates (PAA) was commissioned by Stack (Manchester) Limited to complete a Biodiversity Net Gain (BNG) feasibility assessment of the Former Hatch Site (hereafter referred to as the 'site') located off Oxford Road in central Manchester, nearby postcode M1 7ED.

1.2 The BNG assessment is based on a Preliminary Ecological Appraisal (PEA) of the site previously carried out and reported (PAA 2024). A Preliminary Roost Assessment (PRA) for bats was also completed by PAA and found negligible roosting opportunities for bats within the site.

1.3 The PEA survey provided an ecological baseline of the site and assessed the ecological value of the habitats prior to development, to enable an assessment of the longer-term effect of the development on habitats and protected species.

1.4 This report forms part of the evaluation of the potential impacts of the proposed development on ecological features of the site. It uses a specific evaluation process set out in the relevant legislation[1] to quantify the value of habitats and features in 'biodiversity units' using the Statutory Metric to assess if the development is likely to result in no net loss, net loss or net gain to biodiversity. Under the Statutory Metric approach, the stated target a development is required to attain is a net gain of +10%

Policy Context

1.5 The Environment Act 2021 aims to improve air and water quality, protect wildlife, increase recycling and reduce plastic waste. The act is part of the legal framework for environmental protection. The Act includes provisions to strengthen and improve the duty on public bodies to conserve and enhance biodiversity, including mandating a net gain of biodiversity through the planning system.

1.6 In England, BNG is mandatory from 12th February 2024 under Schedule 7A of the Town and Country Planning Act 1990 (as inserted by Schedule 14 of the Environment Act 2021). Developers must deliver a BNG of +10%. This means a development will result in more or better-quality natural habitat than there was before development.

1.7 Furthermore, the National Planning Policy Framework (NPPF 2023) provides guidance for local authorities on the content of the Local Plans and is a material consideration in determining planning applications. Briefly, with an overall focus on sustainable development, the NPPF states that developments should aim to engender positive outcomes for habitats and biodiversity, with a particular focus on the maintenance and creation of ecological networks.

1.8 The NPPF identifies the following principals that should be applied by local planning authorities when determining planning applications:

a) 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;

b) Development on land within or outside a Site of Special Scientific Interest (SSSI), and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the

[1] https://www.gov.uk/guidance/understanding-biodiversity-net-gain

benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of SSSI;

c) 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; and

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.

1.9 The NPPF states that the planning system should contribute to and enhance the natural environment through a range of actions, including:

- Protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);
- Recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;
- Maintaining the character of the undeveloped coast, while improving public access to it where appropriate;
- Minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;
- Preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and
- Remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.

1.10 To protect and enhance biodiversity and geodiversity, plans should:

- Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and
- 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.

2. BIODIVERSITY NET GAIN METRIC METHOD

2.1 The baseline habitats were mapped in the field using UKHab Version 2.0 (UKHab Ltd 2023). They were then digitised accurately to British National Grid using Ordnance Survey vector mapping as a base, along with high resolution Google Earth aerial photography as a guide.

2.2 The Statutory Metric was applied, which is mandatory for the majority of applications submitted under the Town and Country Planning Act 1990 (as amended) and replaces the earlier Defra Metric versions. The Statutory Metric is used to calculate the biodiversity units of a site before and after the proposed development. The Statutory Metric and associated guidance notes were available via the Defra web pages[2].

2.3 The information required to complete the Statutory Metric for this baseline assessment is:

- Area of each habitat (ha);
- Habitat type; and
- Habitat condition.

2.4 The Metric requires that each habitat is given a 'distinctiveness' score that includes parameters such as species-richness, diversity, rarity and the degree to which habitats support species rarely found in other habitats. This is completed automatically by the Statutory Metric when the habitat type is selected, and the categories comprise:

- Very High;
- High;
- Medium;
- Low; and
- Very Low.

2.5 The Metric also requires a 'condition' assessment for each habitat and feature, based on the guidelines and targets provided in the methodology for the specific habitat type (Natural England 2023). Condition categories available within the Metric (which vary slightly depending on the habitat classification) are:

- Good;
- Fairly Good;
- Moderate;
- Fairly Poor;
- Poor; and
- Not Applicable.

2.6 The Metric requires the Geographic Information Systems (GIS) generated area data (in ha) to be input for each of the habitats as classified under each of the following categories: baseline habitat to be lost during the development, baseline habitat to be enhanced, and habitat to be created,

[2] *https://www.gov.uk/government/publications/statutory-biodiversity-metric-tools-and-guides?fbclid=IwAR3t_S8djN97HZzsb8H9ISdfVqDiUZJcSR7pp4Kz5zHRFK5KWoLjPBlmRcw*

along with the associated characteristics (condition, strategic significance) and automatically generated data (e.g. distinctiveness).

2.7 Linear features, such as hedgerows and streams are assessed separately within the methodology, including any streams or rivers within 10m of the application site boundary. The existing length of the feature is entered (in linear km) in the on-site hedge baseline spreadsheet, and on-site watercourse baseline spreadsheet and the feature condition is selected based on the guidelines presented in the methodology.

2.8 The hedgerow lengths to be removed or enhanced are then added to the spreadsheet along with any new linear features to be created. The units calculated pre- and post-development are compared and the number of 'hedge units' or 'river units' is automatically calculated.

2.9 On this site, however, no streams or hedgerow features were present within the baseline habitats.

2.10 Proposed habitats on-site were then entered based upon the landscape plan proposals, again by area or length. The target habitat distinctiveness is automatically calculated but the target habitat condition must be added by the Ecologist.

2.11 As part of the proposed habitat creation and restoration, the Calculator takes into account 'risk factors'. These include:

- Temporal factors – time required to reach target condition (the creation of a habitat, e.g. woodland takes time to mature and reach target condition). The temporal factor is generated automatically for each proposed habitat type but additional data covering delays in habitat creation or advance habitat creation due to specific project schedules can be accommodated in the overall assessment; and
- Difficulty factors – risk of failure of achieving habitats through restoration and/or creation. Some restoration and enhancements measures are more difficult to achieve than others. The Calculator automatically selects the level of difficulty depending on the habitat chosen.

3. PRE- AND POST-DEVELOPMENT CONDITION

Habitats – Pre-development

3.1 The pre-development habitat is mapped in Figure 1, and pre-development Habitat Condition Assessments are provided as Appendix 1. The majority of the site comprised hardstanding and built structures. The south aspect of the plot was also cast into shade by the Mancunian Way running above the site. The only habitat present were four urban trees in the northern forecourt, assessed as 'Medium' sized and of 'Poor' condition, and small patches of opportunistic ruderal/ephemeral vegetation, assessed to be of 'Poor' habitat condition (PAA 2024).

Habitats - Post-development

3.2 Appendix 2 presents the post-development habitat condition assessments, with Appendix 3 presenting the Landscaping Plan. The four urban trees present will be retained within the development proposal. The post-development habitat features **created** on-site will comprise:

- Developed land; sealed surface – the site marked on the landscaping plans as the proposed built structures, paving etc.;
- 20.4 square metres of ground level planters featuring majority native and shade tolerant species; and
- Two (2no.) new urban tree plantings within soil pits in the forecourt of the site. These are included in the metric as 'Small' size and 'Poor' condition.

4. CONCLUSIONS

4.1 The development will result in an increase from 0.26 to 0.29 area habitat units, or a +10.06% net change. No linear habitat features or watercourse features were present on the site, and no gains or losses are, therefore, calculated for these feature types.

4.2 The completed Statutory Metric, sent separately from this report, can be found at Appendix 4.

4.3 The scheme meets the required target of +10% BNG, therefore, with trading rules also being satisfied.

Table 1 Summary of Calculator Outputs

Calculator Output Category	Unit Type	Units Gained
Total Net Unit Change (including all on-site and off-site habitat retention and creation)	Area Habitat Units	+0.03
	Hedgerow Units	n/a
	Watercourse Units	n/a
Total Net Percentage Change (including all on-site and off-site habitat creation and retention)	Habitat Units (proposed enhancements and creation)	+10.06%
	Hedgerow Units (proposed enhancements)	n/a
	Stream Units	n/a

5. REFERENCES

Natural England, 2023. The Biodiversity Metric 4.0 User Guide. Natural England Joint Publication JP039.

NPPF, 2023. *National Planning Policy Framework*. Ministry of Housing, Communities and Local Government.

PAA, 2024. *Former Hatch Site, Manchester – Preliminary Ecological Appraisal and Preliminary Roost Assessment for Bats*. Prepared for Deloitte by Penny Anderson Associates.

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

6. ABBREVIATIONS

BNG	Biodiversity Net Gain
GIS	Geographic Information Systems
NPPF	National Planning Policy Framework
PAA	Penny Anderson Associates Ltd
PEA	Preliminary Ecological Appraisal
PRA	Preliminary Roost Assessment
SSSI	Site(s) of Special Scientific Interest

FIGURE

384275 384300 384325 384350

397275

397250

397225

Loverose Way

Oxford Road

81

81



Legend

Site boundary

UKHab Habitats

u1b, Developed land - sealed surface

u1b5, Buildings

Urban tree

Secondary Codes

81 Ruderal or ephemeral

British National Grid
Projection: Transverse Mercator
False Easting: 400000.000000
False Northing: -100000.000000
Central Meridian: -2.000000
Scale Factor: 0.999601
Latitude Of Origin: 49.000000

N

ISO A3

Metres

0 1 2 4 6 8 10

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Consultant Ecologists

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Telephone 01298 27086

Project Name: Hatch, Oxford Road, Manchester

Discipline: Ecology

Title:

UKHab Habitat Map

Scale	1:300			Drawing No.	Figure 1
Drawn By	CC	Originator	RL	Date	11/04/2024
Grid Ref.	384,316 397,252			Revision	1.0

Contains OS data © Crown copyright [and database right] (2024)

G:\STAC01_Hatch_Oxford_Road\Maps\Figures\Figure 1 - UKHab Habitats Map - Stack Oxford Road - STAC01 CC 240408.mxd

APPENDICES

APPENDIX 1

Pre-Development Habitat Condition Assessment Sheets

Condition Sheet: INDIVIDUAL TREES Habitat Type

Habitat Types

Individual trees – Urban trees
Individual trees – Rural trees
Complete a condition sheet for each tree or block of trees.

Please see the separate Line of trees condition sheet for a line of rural trees. You should only use the Line of trees condition assessment and record that habitat type in rural locations.

Habitat Description

Individual trees (description applied to the urban or rural environment):
Young trees over 7.5 cm in diameter at breast height whose canopies are not touching.

Urban Perimeter / Linear Blocks and Groups (description applied to the urban environment only):
Groups or stands of trees (size requirement as defined above) within and around the perimeter of urban land. This includes those along urban streets, highways, railways and canals, and also former field boundary trees incorporated into developments. Canopies should predominantly overlap continuously. Groups of urban trees that don't match the descriptions for woodland may be assessed within this category.

On-site or off-site, site name and location		**Survey date and Surveyor name**										
		Survey reference (if relating to a wider survey)										
Limitations (if applicable)		**Habitat parcel reference**										
		32	32	32	32							
		Grid reference										
Condition Assessment Criteria		**Criterion passed (Yes or No)**										**Notes (such as justification)**
A	The tree is a native species (or at least 70% within the block are native species).	N	N	N	N							All non-native
B	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Y	Y	Y	Y							Few gaps present.
C	The tree is mature (or more than 50% within the block are mature)[1].	N	N	N	N							Trees were assessed as semi-mature/early-mature rather than mature.
D	There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.	Y	Y	Y	Y							No evidence of significant adverse impacts.
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	N	N	N	N							Not present.
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	N	N	N	N							No vegetation below
	Number of criteria passed											

Condition Assessment Result (out of 6 criteria)	**Condition Assessment Score**	**Score Achieved ×/✓**									
Passes 5 or 6 criteria	Good (3)										
Passes 3 or 4 criteria	Moderate (2)										
Passes 2 or fewer criteria	Poor (1)	X	X	X	X						
Note that 'Fairly Good and Fairly Poor' condition categories are not available for this broad habitat type.											

Suggested enhancement interventions to improve condition score[2]

APPENDIX 2

Post-development Habitat Condition Assessment Sheets

Condition Sheet: INDIVIDUAL TREES Habitat Type

Habitat Types

Individual trees – Urban trees
Individual trees – Rural trees
Complete a condition sheet for each tree or block of trees.

Please see the separate Line of trees condition sheet for a line of rural trees. You should only use the Line of trees condition assessment and record that habitat type in rural locations.

Habitat Description

Individual trees (description applied to the urban or rural environment):
Young trees over 7.5 cm in diameter at breast height whose canopies are not touching.

Urban Perimeter / Linear Blocks and Groups (description applied to the urban environment only):
Groups or stands of trees (size requirement as defined above) within and around the perimeter of urban land. This includes those along urban streets, highways, railways and canals, and also former field boundary trees incorporated into developments. Canopies should predominantly overlap continuously. Groups of urban trees that don't match the descriptions for woodland may be assessed within this category.

On-site or off-site, site name and location		**Survey date and Surveyor name**	
		Survey reference (if relating to a wider survey)	
Limitations (if applicable)		**Habitat parcel reference**	32 new trees
		Grid reference	

	Condition Assessment Criteria	**Criterion passed (Yes or No)**									**Notes (such as justification)**
A	The tree is a native species (or at least 70% within the block are native species).	N	Y								Retained trees are non-native. New tree plantings will be native species of local provenance.
B	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Y	N								Few gaps present on retained trees. New tree plantings will have canopy gaps.
C	The tree is mature (or more than 50% within the block are mature)[1].	N	N								Trees were assessed as semi-mature/early-mature rather than mature. New tree plantings will not be
D	There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.	Y	Y								No evidence of significant adverse impacts.
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	N	N								Not present.
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	N	N								No vegetation below
	Number of criteria passed										

Condition Assessment Result (out of 6 criteria)	**Condition Assessment Score**	**Score Achieved ×/✓**									
Passes 5 or 6 criteria	Good (3)										
Passes 3 or 4 criteria	Moderate (2)										
Passes 2 or fewer criteria	Poor (1)	X	X								
Note that 'Fairly Good and Fairly Poor' condition categories are not available for this broad habitat type.											

Suggested enhancement interventions to improve condition score[2]

APPENDIX 3
Landscaping Plan





REV	DATE	DESCRIPTION	BY	CHK
PL02	10/04/2024	UPDATED TO SUIT GA PLAN	JW	PS
PL01	15/03/2024	ISSUED FOR PLANNING	JW	PS

GROUND FLOOR

8 No. 1500 x 400 = 4.80 sqm
4 No. 3000 x 400 = 4.80 sqm
TOTAL AREA = 9.60 sqm

FIRST FLOOR

16 No.1500 x 400 = 9.60 sqm
1 No. 3000 x 400 = 1.20 sqm
TOTAL AREA = 10.80 sqm

COMBINED TOTAL

GROUND FLOOR = 9.60 sqm
FIRST FLOOR = 10.80 sqm
TOTAL AREA = 20.40 sqm

TIMBER PLANTERS

TIMBER PLANTERS FORMED OUT OF GALVANISED STEEL FRAMEWORK WITH TIMBER DECK BOARD FACINGS AND STEEL TROUGH INSERT
TO BE PLANTED WITH SHADE TOLERANT NATIVE PLANTING

dunwoodieswift architects

CLIENT
STACK (MANCHESTER) LIMITED

PROJECT
STACK MANCHESTER

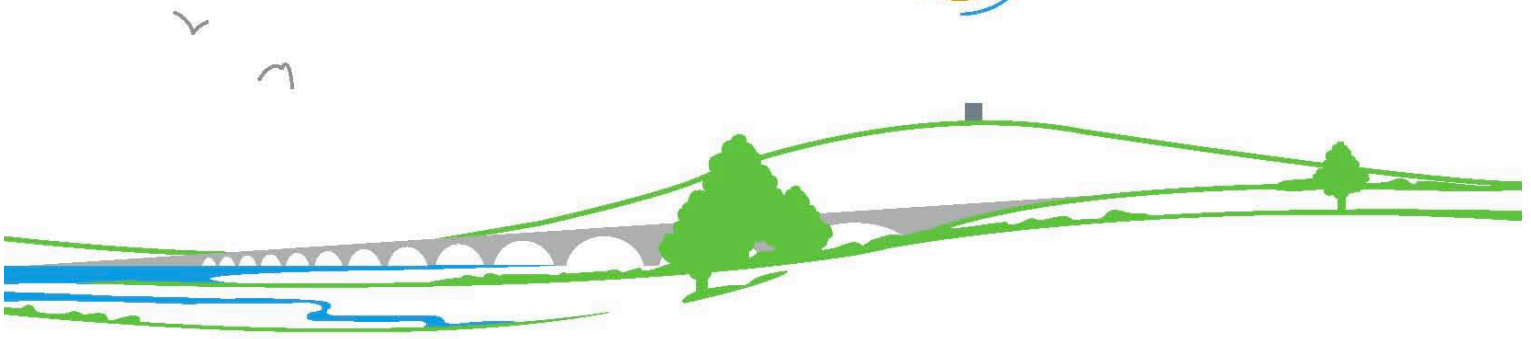
TITLE
INDICATIVE PLANTER LAYOUT

SCALE @ A1: 1:100
STATUS: SKETCH
DRAWN BY: JW
DATE: 10/04/2024
CHECKED BY: PS
PROJECT No.: 1162
DRAWING No: SK-PLANT -01
REVISION: SK01

APPENDIX 4
Biodiversity Net Gain Metric
(sent separately from this report)

Penny Anderson Associates Ltd

CONSULTANT ECOLOGISTS



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