Biodiversity Net Gain Assesment

Hawkshaw Business Park

Longsight Lane

Introduction

This assessment has been carried out to establish the biodiversity baseline in relation to proposed development within Hawkshaw Business Park. The assessment has been carried out by John Metcalfe, BSc Hons Ecology.

The proposed development is to construct a building with associated car parking within the existing site.

Habitat type has been mapped using the standard habitat mapping convention UK Habitat Classification V2 (Butcher et all, 2023) for the purposes of using the Smal Sites Statutory Biodiversity Metric.

Using the baseline survey, pre-construction ecology was measured against proposed habitat changes arising from future ecological enhancements as shown in the illustrative landscape plan.

This report presents the results of the desk based study to assess net change in biodiversity units following removal of habitat for the proposed development within the site.

Ecological Context

The site is 0.21ha comprising concrete and stone hardcore areas with a rank grassland bank (Modified grassland g4). Figure 1 shows the site area.

Policy Context

The primary aims of Biodiversity Net Gain are to secure a measurable improvement in habitat for biodiversity, to minimise biodiversity losses and to help to restore ecological networks whilst streamlining development processes.

The National Planning Policy Framework (NPPF) makes provision for the delivery of biodiversity net gain with a requirement for 10% net gain requirement in the Environment Bill.

Methods

Introduction

The small sites biodiversity metric is designed to quantify biodiversity to improve planning, design, land management and decision making (Natural England (2024).

This assessment has been carried out as a desk exercise using the information gathered as the field survey carried out at the site and the illustrative landscape plan.

Assessment Methods

This assessment uses methods set out within the Small Sites Metric (Statutory Biodiversity Metric) User Guide (Feb 2024).

The metric uses three core measurements:

- Habitat Areas
- Length of linear terrestrial habitats
- Length of linear aquatic habitats.

Habitat area is multiplied by several factors that indicate it's quality; distinctiveness, condition, strategic location and connectivity which gives a biodiversity unit value. This can be used for future and created habitats. Additionally where habitats are to be enhanced or newly created, the risk of failure is accounted for by applying multipliers for risk factors including (difficulty, time to target condition and off site risk)

Habitats are classified using the UK Habitats Classification V2 system (Butcher et al., 2023)

Biodiversity Assessment

The baseline BNG value is calculated using the Small Sites Metric and the UK Habitats v2 methodology.

The baseline value has been calculated from a site visit undertaken on 15th November 2024. The habitat was inspected and species recorded with It is understood that there will be no substantive changes to habitat condition at the time the planning application is made.

It is understood that there have been no habitat features which have been purposefully degraded after January 30th 2020.

It is understood that if planning permission is granted the development would be subject to biodiversity net gain condition.

The type area and distinctiveness values are shown as Table 1.

Habitat	Area (ha)	Distinctiveness
Modified grassland	0.0182	V. Low
Urban sealed surface	0.1242	V.Low
Urban unsealed surface	0.0680	V Low

Table 1 Habitat Area Distinctiveness Values

There are no irreplaceable habitats on the site.

There are no High or Very High distinctiveness habitats on the site.

The UK Habs V2 survey has been used to identify relevant habitat areas, linear habitat areas and watercourse units.

These habitats have been input into the Small Sites Metric calculator and indicate a total of 0.0728 habitat units. There are no hedgerow or watercourse habitats on site. The results of the calculations are presented in the full biodiversity assessment calculation in the Excel document Small Sites Statutory Biodiversity Metric (see attached).

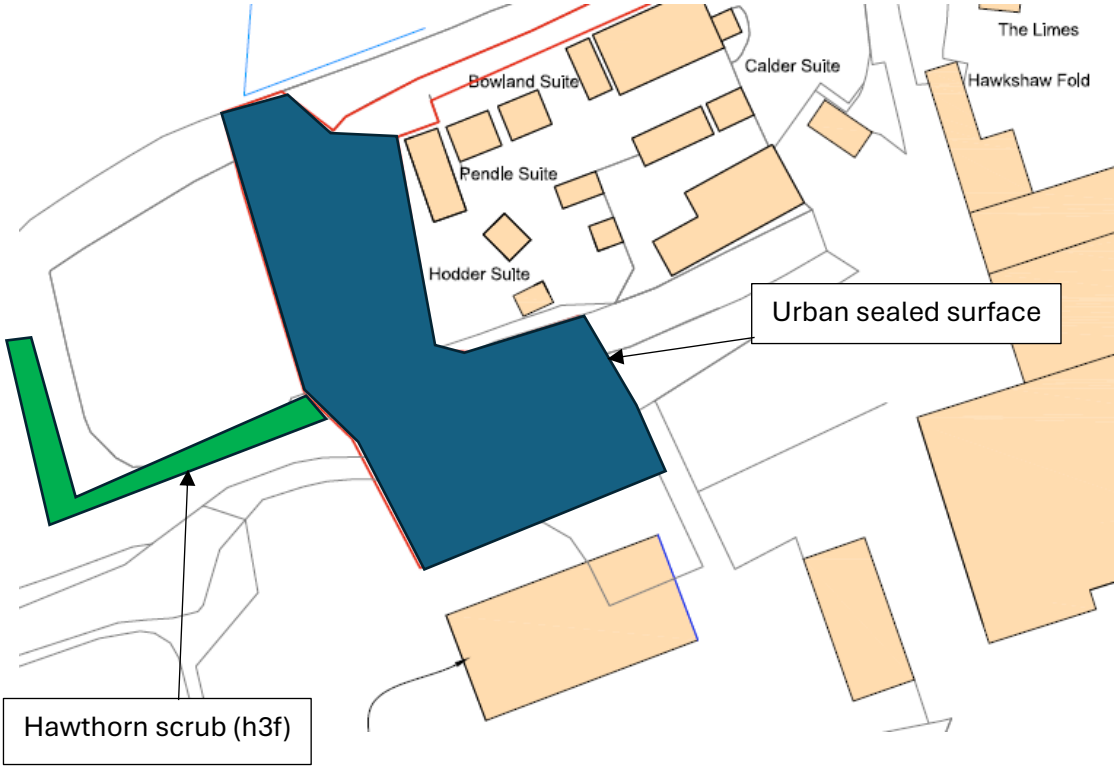
Post development Habitat Creation and Enhancement
Within the proposed avoidance, minimisation and rehabilitation/restoration, onsite BNG can be achieved. There is no requirement for offsite compensation.

The illustrative Landscape Plan has been used to identify 91m^2 of the existing modified grassland will be lost to the removal of the vegetated bank.
To compensate for this 91m^2 area of modified grassland will be enhanced to hawthorn scrub (h3f).

The unit value figures for the proposed enhancement have been calculated using the Statutory Biodiversity Metric and would comprise a total of 0.1101 habitat units.

There are no changes to default values for post development habitats.

Figure 2.



Change in Biodiversity Units Calculation

Under the proposals set out in the illustrative site plan (Figure 2) there will be a net GAIN of habitat units (+ 0.0373) with a percentage gain of +51.9% as shown in Table 2

Table 2

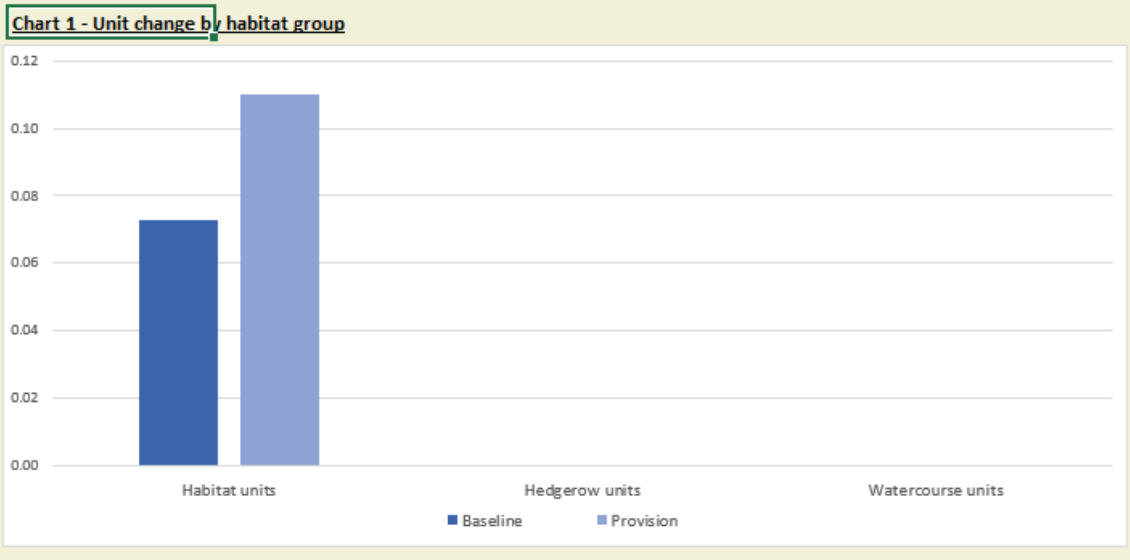
Site Name		Hawkshaw Business Park	
Sheet Name		Headline Results	

Headline Results

Headline	BNG Targets Met ✓	
Trading Rules	Trading Rules Satisfied ✓	
Next steps	Check for input errors/rule breaks present in the metric ⚠	

Baseline Units	*Habitat units*	0.0728	
	Hedgerow units	Zero Units Baseline	
	Watercourse units	Zero Units Baseline	
Post-development Units	*Habitat units*	0.1101	
	Hedgerow units	0.0000	
	Watercourse units	0.0000	
Total net unit change	*Habitat units*	0.0373	✓
	Hedgerow units	0.0000	
	Watercourse units	0.0000	
Total net % change	*Habitat units*	51.19%	✓
	Hedgerow units	% target not appropriate	
	Watercourse units	% target not appropriate	

Habitats units required to meet target	0.0000
Hedgerow units required to meet target	0.0000
Watercourse units required to meet target	0.0000



References

Butcher, B., Carey, P., Edmonds, R ., Norton, L. and Treweek, J. (2023), UK Habitat Classification – Habitat Definitions V2.01 at http:// ukhab.org

Natural England Feb 2024. Smal Sites Metric (The Statutory Biodiversity Metric)

Images

Sealed surface and rank grassland bank (modified grassland g4)

Urban sealed surface

Illustrative Landscape Scheme

The proposed BNG compensatory planting will include 91m^2 of Hawthorn scrub (h3f) planting.

The planting area is shown green in Figure 2 above.

PLANTING SCHEDULE				
3 plants/m^2 Total 273				
	Species	**Species**	**%**	**No:**
	Crataegus monogyna	Hawthorn	50	136
	Prunus spinosa	Blackthorn	30	82
	Ilex aquifolium	Holly	20	55
	Rosa canina	Dog Rose	10	27

Planting

General

All trees and shrubs shall conform to the relevant parts of B.S. 3936

Rejection of Plants

Any plant material, which does not meet the requirements of the specification, or is unsuitable or defective in any way, will be rejected. The minimum specified sizes in the plant schedule will be strictly enforced.

Planting

All planting material shall generally be planted between November and March in open cool weather. Planting shall not take place in frosty, snowy or waterlogged conditions. Where approved, pot or container grown plants may be planted outside the described season, but adequate watering shall be supplied. Torn or damaged roots and branches shall be clearly pruned prior to planting.

Planting of Transplants or Shrubs

The nature of the material to be planted is variable and the contractor shall allow for planting to be properly carried out in all cases as described in B.S. 4428: 1989. All plants shall be planted at the same depth, or very slightly deeper, as they were grown. Roots shall not be bent, broken or forced into inadequate pits or notches. Plants shall be upright, firmed in and wind resistant, with no air pockets around the roots. All pots and root wrappings shall be carefully removed prior to planting

Tree Ties and Stakes

Trees shall be twin staked with cross bar. Ties shall be approved nail-on type with cushioned spacer such as Toms, or other equal and approved. Nails shall be flat headed galvanised and shall hold the ties securely into the stake. Ties shall not be over tight on the tree stems. The following ties available from J Toms Ltd are approved: Feathered Type 04, Select standards Type L1, Extra heavy Standards Type L3.

MAINTENANCE
All dead, diseased, damaged plants must be replaced for up to 10 years with a tree of the same species and of similar size to that originally planted.

HEDGEROW PROTECTION
If required planting tubes to ensure protection from grazing animals including rabbits, hares, deer and grazing livestock.

Pruning
At appropriate time, prune plants to remove dead, dying or diseased wood and suckers to promote healthy growth and natural shape. Dress cut ends exceeding 25mm diameter with fungicidal sealant.

Watering
All plants will be watered to field capacity weekly during the months April – July for a minimum of 5 years. Watering will take place as required beyond this period in prolonged dry periods.

Litter
Site to be kept free of litter