

Land East of Knowle Lane, Cranleigh

## **Biodiversity Net Gain Assessment**

January 2023

Quality Management	
<b>Client:</b>	Gleeson Land
<b>Project:</b>	Land East of Knowle Lane, Cranleigh
<b>Report Title:</b>	Biodiversity Net Gain Assessment
<b>Project Number:</b>	1006165
<b>File Reference:</b>	6165 BNGA vf /ADB
<b>Date:</b>	11/01/2023

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# 1 Introduction

## 1.1 Background and Proposals

- 1.1.1 Aspect Ecology was commissioned by Gleeson Land in February 2021 to undertake an Ecological Appraisal in respect of proposed redevelopment of land east of Knowle Lane, Cranleigh, Surrey, centred at grid reference TQ 059 387, hereafter referred to as ‘the site’.
- 1.1.2 The proposals are for an outline planning application (with all matters reserved except means of access) for up to 3 phases of residential development of up to 162 dwellings (including 30% affordable dwellings) including the creation of new vehicular access, pedestrian and cycle accesses, parking spaces, public open space, biodiversity enhancement, landscape planting, surface water attenuation, associated infrastructure and other associated works.
- 1.1.3 As part of the outline planning application a Biodiversity Net Gain (BNG) Assessment has been prepared to inform the proposals and demonstrate that proposals can deliver a measurable biodiversity net gain within the site.
- 1.1.4 This report should be read in conjunction with the scheme’s Ecological Appraisal<sup>1</sup>.

## 1.2 Biodiversity Net Gain

### Environment Act

- 1.2.1 The Environment Act establishes a comprehensive legal framework for environmental improvement within the UK, forming one of the key measures to deliver the vision set out under the 25 Year Environment Plan.
- 1.2.2 The Environment Act is intended to establish the structure for long-term environmental governance and accountability and includes key measures to drive improvements for nature. In particular, it lays the foundation for a Nature Recovery Network, and introduces a mandatory requirement for biodiversity net gain in the planning system, to ensure that new developments enhance biodiversity and create new green spaces for local communities to enjoy. This will require developments to deliver a 10% improvement in biodiversity value, albeit this will not be a legal requirement until the legislation is finalised, currently anticipated to be autumn 2023.
- 1.2.3 A new version of the DEFRA metric (v3.1) was released in April 2022, which replaces the previous version (v3.0) and is the current version mandated by the Environment Bill.

### Good Practice Principles for Development

- 1.2.4 CIRIA, CIEEM and IEMA have developed a set of principles on good practice to achieve Biodiversity Net Gain<sup>2</sup>, accompanied by a practical guide<sup>3</sup>. These principles provide a framework that helps improve the UK’s biodiversity by contributing towards strategic priorities to conserve and enhance nature while progressing with sustainable development. They also provide a way for industry to show that projects follow good practice. Ten key principles are identified:

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<sup>1</sup> Aspect Ecology (2022) ‘Land East of Knowle Lane, Cranleigh, Ecological Appraisal, November 2022’ Report Ref. 6165 EcoAp v1

<sup>2</sup> CIEEM, CIRIA, IEMA (2016) *Biodiversity Net Gain: Good practice principles for development*.

<sup>3</sup> CIEEM, CIRIA, IEMA (2019) *Biodiversity Net Gain: Good practice principles for development. A practical guide*.

- 1) Apply the Mitigation Hierarchy. Do everything possible to first avoid and then minimise impacts on biodiversity. Only as a last resort, and in agreement with external decision-makers where possible, compensate for losses that cannot be avoided. If compensating for losses within the development footprint is not possible or does not generate the most benefits for nature conservation, then offset biodiversity losses by gains elsewhere.
- 2) Avoid losing biodiversity that cannot be offset by gains elsewhere. Avoid impacts on irreplaceable biodiversity - these impacts cannot be offset to achieve No Net Loss or Net Gain.
- 3) Be inclusive and equitable. Engage stakeholders early, and involve them in designing, implementing, monitoring and evaluating the approach to Net Gain. Achieve Net Gain in partnership with stakeholders where possible, and share the benefits fairly among stakeholders.
- 4) Address risks. Mitigate difficulty, uncertainty and other risks to achieving Net Gain. Apply well-accepted ways to add contingency when calculating biodiversity losses and gains in order to account for any remaining risks, as well as to compensate for the time between the losses occurring and the gains being fully realised.
- 5) Make a measurable Net Gain contribution. Achieve a measurable, overall gain for biodiversity and the services ecosystems provide while directly contributing towards nature conservation priorities.
- 6) Achieve the best outcomes for biodiversity. Achieve the best outcomes for biodiversity by using robust, credible evidence and local knowledge to make clearly justified choices when:
  - Delivering compensation that is ecologically equivalent in type, amount and condition, and that accounts for the location and timing of biodiversity losses;
  - Compensating for losses of one type of biodiversity by providing a different type that delivers greater benefits for nature conservation;
  - Achieving Net Gain locally to the development while also contributing towards nature conservation priorities at local, regional and national levels;
  - Enhancing existing or creating new habitat;
  - Enhancing ecological connectivity by creating more, bigger, better and joined areas for biodiversity.
- 7) Be additional. Achieve nature conservation outcomes that demonstrably exceed existing obligations (i.e. do not deliver something that would occur anyway).
- 8) Create a Net Gain legacy. Ensure Net Gain generates long-term benefits by:
  - Engaging stakeholders and jointly agreeing practical solutions that secure Net Gain in perpetuity;
  - Planning for adaptive management and securing dedicated funding for long-term management;
  - Designing Net Gain for biodiversity to be resilient to external factors, especially climate change;
  - Mitigating risks from other land uses;
  - Avoiding displacing harmful activities from one location to another;

- Supporting local-level management of Net Gain activities.
- 9) Optimise sustainability. Prioritise Biodiversity Net Gain and, where possible, optimise the wider environmental benefits for a sustainable society and economy.
  - 10) Be transparent. Communicate all Net Gain activities in a transparent and timely manner, sharing the learning with all stakeholders.

## 2 Methodology

### 2.1 Ecological Survey

- 2.1.1 The site has been subject to numerous ecological surveys that have been undertaken to inform the planning application at the site.
- 2.1.2 A specific survey of the habitats present at the site, which included condition assessments of each habitat to inform the BNGA was most recently carried out in August 2022. The survey reviewed the accuracy of the previous baseline surveys undertaken and recorded any significant changes. The suitability for habitats to support protected species was also re-assessed.
- 2.1.3 No specific Modular River Physical (MoRPh) Survey has been undertaken on watercourses as none are present within 10m of the site.

### 2.2 Survey Constraints and Limitations

- 2.2.1 Not all of the species that occur in any given habitat are necessarily visible at any given time of the year, since different species are apparent during different seasons. However, the most recent habitat survey was undertaken during the optimal period, and has been further informed by the findings of previous surveys.
- 2.2.2 All parts of the site and its immediate environs were visited during the most recent surveys.

### 2.3 Biodiversity Net Gain Assessment

- 2.3.1 To quantify the level of biodiversity net gain that can be delivered under the proposed development, the change in biodiversity value resulting from the scheme has been calculated using the Biodiversity Metric version 3.1 calculation tool<sup>4</sup> and associated user guide<sup>5</sup>. This takes account of the size, distinctiveness and ecological condition of existing and proposed habitat areas to provide a proxy measure of the present and forecast biodiversity value of a site, and therefore determine the overall change in biodiversity value. These calculations are shown at Appendix 6165/1.
- 2.3.2 To establish the habitat baseline, broad habitat areas have been identified based on the survey work undertaken at the site, with habitat condition assigned based on the guidance<sup>6</sup> and professional judgement.
- 2.3.3 The post-development habitat creation and enhancement is based on the current Landscape Masterplan. Where assumptions have been made in terms of the detailed landscaping and management proposals, these are based on comparative developments and what is understood to be realistic and feasible under the proposed land uses and landscape space types.

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<sup>4</sup> Natural England and DEFRA, April 2022. Biodiversity Metric 3.1: auditing and accounting for biodiversity, <http://publications.naturalengland.org.uk/file/6376815433351168>, sourced June 2022.

<sup>5</sup> Natural England, April 2022. Natural England Joint Publication JP039. Biodiversity Metric 3.1: auditing and accounting for biodiversity – User Guide. <http://publications.naturalengland.org.uk/file/6593707725029376>, sourced June 2022.

<sup>6</sup> Natural England, April 2022. Biodiversity Metric 3.1: Habitat Condition Assessment Sheets with Instructions. <http://publications.naturalengland.org.uk/file/5631620555210752>, sourced June 2022.

## 3 Habitats and Ecological Features

### 3.1 Overview

- 3.1.1 The site principally comprises species-poor semi-improved grassland fields. Other habitats present include amenity grassland, hedgerows and tree lines within and bounding the site, plantation woodland, patches of scrub and tall ruderal vegetation, a single building with associated hard standing, and roads and paths.
- 3.1.2 Habitats present are labelled on Plan 6165/ECO3.
- 3.1.3 The proposals have sought to retain important features wherever possible and to protect and enhance them by additional new planting. Habitat losses will be offset by the proposed new planting and other associated ecological enhancements, which will increase the value of the area for wildlife.
- 3.1.4 A calculated total land area of 11.67ha exists within the site boundary, which has been taken as the basis for both existing (baseline) habitat calculations, and proposed land take. The site boundary is shown on plans 6165/BIA1 and 6165/BIA2.
- 3.1.5 For the purposes of this assessment, the following habitats are present within the site:
- Amenity Grassland;
  - Semi-improved Grassland;
  - Hedgerows and Tree Lines;
  - Woodland;
  - Scrub;
  - Tall Ruderal Vegetation; and
  - Buildings, Hard Standing and Bare Ground.
- 3.1.6 These habitat types are shown on Plan 6165/BIA1 and described below.

### 3.2 Amenity Grassland

- 3.2.1 **Grassland: Modified Grassland, Poor Condition (0.02ha).** A small area of amenity grassland (**G1** on Plan 6165/ECO3) associated with adjacent playing fields outside the site boundary is present at the northernmost extent of the site. Using the condition assessment criteria provided in the Defra Metric v3.1 Technical Supplement, this corresponds most closely with the category of 'Grassland – Modified grassland'. This is a closely-mowed triangle of uniformly short sward height, dominated by Perennial Ryegrass *Lolium perenne* and Crested Dog's-tail *Cynosurus cristatus*. The low species diversity of this area of grassland means it does not meet the criteria required for 'moderate condition'.

### 3.3 Semi-improved Grassland

- 3.3.1 **Grassland: Modified Grassland, Poor Condition (7.51ha).** Grasslands **G2, G3, G4, G5** and **G6** (outside areas considered to comprise conifer plantation) are of similar composition and quality. These areas are of uniform sward height and largely managed for grazing or hay production. Species present comprise Cock's Foot *Dactylis glomerata*, Sweet Vernal-grass *Anthoxanthum odoratum*, False Oat-grass *Arrhenatherum elatius*, Yorkshire Fog *Holcus lanatus* and Rough Meadow-grass *Poa trivialis*. Using the condition assessment criteria



provided in the Defra Metric v3.1 Technical Supplement, these areas correspond most closely with the category of 'Grassland – Modified grassland'. Based on their low species diversity, these areas of grassland do not meet the criteria required for 'moderate condition' and are therefore assessed as of 'poor condition'.

### 3.4 Woodland

- 3.4.1 **Woodland and Forest: Other Coniferous Woodland, Poor Condition (3.73ha).** A large proportion of Grassland **G6** has been planted as conifer plantation, possibly for Christmas tree production. The extent of this means that this area is taken as being coniferous woodland rather than grassland with trees. Using the Technical Supplement, this area corresponds best to 'Woodland and forest – Other Coniferous Woodland', with 'Low' distinctiveness and 'Poor' Condition.

### 3.5 Tall Ruderal and Scrub

- 3.5.1 **Sparsely Vegetated Land: Ruderal/Ephemeral – Moderate Condition (0.19ha).** The site contains patches of tall ruderal vegetation dominated by species such as Field Thistle, Hogweed *Heracleum sphondylium*, Dock *Rumex* sp. and Teasel. These habitats are assessed as of 'moderate' condition.
- 3.5.2 **Heathland and Shrub: Bramble Scrub – Condition N/A (0.17ha)** Patches of Bramble scrub are present within the site. This habitat is classified within the metric as of 'N/A' condition.

### 3.6 Buildings, Roads and Bare Ground

- 3.6.1 **Urban: Developed Land, Sealed Surface – Condition N/A (0.05ha).** The single barn building, its associated area of hard standing, and the road leading into the site correspond to 'urban: developed land, sealed surface' and have a condition assessment of 'N/A'.

### 3.7 Hedgerows and Tree Lines

- 3.7.1 The site contains numerous hedgerows, both around its perimeter and within the main body of the site. These are assessed separately to area habitats within the metric. For full descriptions please refer to the scheme's Ecological Appraisal<sup>1</sup>.
- 3.7.2 **Native Hedgerow With Trees, Good Condition (H1 - 0.073km).** Outgrown hedge dominated by Blackthorn, with Field Maple and Oak trees.
- 3.7.3 **Native Hedgerow, Good Condition (H2 - 0.07km).** Blackthorn hedge with Elder, Oak and Guelder Rose alongside footpath.
- 3.7.4 **Native Species Rich Hedgerow With Trees - Associated With Bank or Ditch, Moderate Condition (H3 - 0.129km).** Gappy species-diverse hedge on low bank dominated by Hawthorn, set between fields.
- 3.7.5 **Native Hedgerow Associated With Bank or Ditch, Good Condition (H4 - 0.064km).** Managed hedge on bank, species-diverse, dominated by Blackthorn.
- 3.7.6 **Native Hedgerow With Trees - Associated With Bank or Ditch, Good Condition (H5 - 0.098km).** Managed hedge with standard trees, including four mature Oak, alongside ditch.

- 3.7.7 **Native Species Rich Hedgerow With Trees - Associated With Bank or Ditch, Good Condition (H6 - 0.176km).** Species-diverse Hawthorn hedge along bank, with frequent trees, outgrown in places, otherwise managed.
- 3.7.8 **Native Species Rich Hedgerow With Trees - Associated With Bank or Ditch, Moderate Condition (H7 - 0.083km).** Hawthorn-dominated hedge alongside ditch, with standard trees.
- 3.7.9 **Native Species Rich Hedgerow With Trees - Associated With Bank or Ditch, Moderate Condition (H8 - 0.196km).** Managed, gappy Hawthorn hedge alongside ditch, with standard trees.
- 3.7.10 **Native Species Rich Hedgerow With Trees, Moderate Condition (H9 - 0.196km).** Gappy Hawthorn and Blackthorn hedge with Ash, Oak and Willow, alongside footpath.
- 3.7.11 **Line of Trees – Associated With Bank of Ditch, Good Condition (TL1 – 0.322km).** Species-diverse tree line alongside ditch.
- 3.7.12 **Line of Trees – Good Condition (TL2 – 0.043km).** Oak, Hazel and Field Maple with Cherry Laurel.
- 3.7.13 **Line of Trees – Good Condition (TL3 – 0.23km).** Species-diverse tree line with Willow, Ash, Oak and other species.
- 3.7.14 **Line of Trees – Associated With Bank of Ditch, Good Condition (TL4 – 0.171km).** Oak-dominated line of trees alongside bank.
- 3.7.15 **Line of Trees – Associated With Bank of Ditch, Good Condition (TL5 – 0.088km).** Oak-dominated line of trees alongside bank.
- 3.7.16 **Line of Trees, Good Condition (TL6 – 0.061km).** Young Ash, Oak and Sycamore with gappy understorey.
- 3.7.17 **Hedge Ornamental Non Native, Poor Condition (OH1 – 0.164km).** Heavily managed ornamental hedge beside road along site boundary.

### 3.8 Ditches

- 3.8.1 Ditches are present associated with hedgerows only and are therefore have not been assessed as separate features.

### 3.9 Strategic Significance

- 3.9.1 An element of strategic significance is built into the metric. This gives an enhanced value to habitats that are located in preferred locations for biodiversity and other environmental objectives. The User Guide explains that:

*‘Such priorities are drawn from relevant published local plans and objectives to identify local priorities for targeting biodiversity and nature improvement, such as Nature Recovery Areas, local biodiversity plans, National Character Area objectives and green infrastructure strategies’.*

- 3.9.2 In this instance, the scheme is not located in any particular area of strategic significance as defined under the Technical Supplement, such as Biodiversity Opportunity Areas, or other strategic biodiversity areas such as those that might be defined under Local Plan Policy or regional Biodiversity Actions Plans. The ‘strategic significance’ of all habitats included within

the calculation is therefore given as 'Area/Compensation not in Local Strategy/no local strategy'.

## 4 Post-Development Habitats

### 4.1 Assumptions

4.1.1 Post-development habitats are shown on Plan 6165/BIA2.

4.1.2 When inputting the post-development habitat areas and condition to the metric, the following assumptions have been made:

#### Area Habitats

4.1.3 Overall the development will result in 3.14ha of 'Developed land – sealed surfaces' and 1.26ha of 'Vegetated Gardens'. Condition criteria of these habitat types are largely pre-assigned.

4.1.4 A total area of 0.57ha of new SUDs features will be created. These are assumed to be able to achieve 'Moderate' Condition, on the basis that they will be seeded with a species-rich grass-seed mix and will be populated by a good range of native species.

4.1.5 New Grassland on site (total area 3.19ha) will be designed as species-rich wildflower grassland which would meet the criteria for 'Grassland - Other Neutral Grassland'. Taking a precautionary approach, it is estimated that 50% of this new grassland would achieve the target of 'Moderate' condition, but that the remained would achieve 'Poor' condition. All Public Open Space areas will be placed in favourable management, and where necessary over-seeded with a species-rich native grass-seed mix to achieve the desired characteristics.

4.1.6 A total of 90 new trees are proposed within the current layout, which contribute a proportion of Biodiversity Units under the 'Urban Tree' habitat category. Again taking a precautionary approach, these have been calculated based on their being 'Small' size class, and of 'Moderate' condition. For an Urban tree to be classed as 'Medium', a diameter at breast height should be greater than 30cm at the target age (ie. after 27 years which is the time to target condition). It is likely that many of these trees may reach the 'Medium' size class within the designated 27 year period and this is consequently an underestimate of the likely credits that will be achieved.

#### Hedgerows

4.1.7 The site proposals allow for the retention and enhancement of the majority of hedgerows and tree lines within the site, with the exception of small sections of hedgerows that will be removed to facilitate access. Proposals allow for 0.57km of new native hedge planting throughout the proposed development. This will be designed so as to correspond to the category 'Native Species-Rich Hedgerow' and it is assumed that these new hedgerows will achieve 'Moderate' condition. This means that an overall increase in hedgerow provision will be achieved by the proposals.

## 5 Biodiversity Net Gain Assessment Results

### 5.1 Metric calculation

- 5.1.1 The data from the baseline habitat survey work and the proposed habitat enhancement and creation works have been coded into the metric.
- 5.1.2 The calculation indicates that the development will result in 79.48% net gain in area habitats (+19.04 habitat units) and 15.06% net gain in hedgerows (+3.46 hedgerow units). The results are tabulated in Table 1 below.

*Table 1 - Biodiversity Net Gain Assessment Summary*

	Change in Units	% BNG
Habitats	+19.04	79.48%
Hedgerows	+3.46	15.06%
Watercourses	N/A	N/A

- 5.1.3 The metric calculation sheets are reproduced at Appendix 6165/1.

## **Plan 6165/ECO3:**

Habitats and Ecological Features





- Key:
- Site Boundary
  - Amenity Grassland
  - Bramble Scrub
  - Building
  - Conifer Plantation
  - Hardstanding
  - Tall Ruderal Vegetation
  - Semi-improved Grassland
  - Fence
  - Footpath
  - Hedgerow
  - Treeline
  - Tree
  - Tree with Low Bat Roosting Potential
  - Tree with Moderate Bat Roosting Potential
  - Off-site Pond



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Knowle Lane, Cranleigh	PROJECT
Habitats and Ecological Features	TITLE
6165/ECO3	DRAWING NO.
C/JP	REV
November 2022	DATE

## **Plan 6165/BIA1:**

Pre-Development Habitat Measurements





## **Plan 6165/BIA2:**

Pre-Development Habitat Measurements





- Key:
- Site Boundary
  - Scrub
  - Grassland
  - LEAP
  - Developed Land Sealed Surface
  - Drainage Basin
  - Swale
  - Vegetated Garden
  - Retained Bramble Scrub
  - Proposed Hedgerow
  - Retained Hedgerow
  - Retained Treeline



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Knowle Lane, Cranleigh

Post-development Habitat Measurements

6165/BNGA2



D/JP

November 2022

PROJECT
TITLE
DRAWING NO.
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## **Appendix 6452/1:**

DEFRA 3.1 Calculation

Headline Results

On-site baseline	Habitat units	23.96
	Hedgerow units	22.97
	River units	0.00
On-site post-intervention (Including habitat retention, creation & enhancement)	Habitat units	43.00
	Hedgerow units	26.43
	River units	0.00
On-site net % change (Including habitat retention, creation & enhancement)	Habitat units	79.48%
	Hedgerow units	15.06%
	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,	Habitat units	19.04
	Hedgerow units	3.46
	River units	0.00
Total on-site net % change plus off-site surplus (including all on-site & off-site habitat retention,	Habitat units	79.48%
	Hedgerow units	15.06%
	River units	0.00%
Trading rules Satisfied?	Yes ✓	

## A-1 Site Habitat Baseline

[illegible]

Retention category biodiversity value					Reserve compensation agreed for unacceptable losses	Comments	
Area retained	Area enhanced	Baseline units retained	Baseline units enhanced	Area habitat lost		Units lost	Assessor comments
	0.02	0.00	0.04	0.00	0.00	Empty Grassland G1	
	0.77	0.00	1.54	0.00	0.00	G2	
	0.52	0.00	1.04	0.00	0.00	G3	
		0.00	0.00	2.54	5.08	G4	
		0.00	0.00	1.89	3.78	G5	
		0.00	0.00	1.79	3.58	G6 (excluding conifers)	
		0.00	0.00	3.73	7.46	Conifer plantation within G6	
	0.1	0.00	0.40	0.07	0.28	All areas of bramble scrub	
	0.06	0.00	0.24	0.13	0.52	All areas of tall ruderal vegetation	
		0.00	0.00	0.02	0.00	Building B1	
		0.00	0.00	0.03	0.00	Road and hard standing	
0.00	1.47	0.00	1.26	10.20	20.29		
Total area lost (excluding area of Urban trees and					10.20		

A-2 Site Habitat Creation

		Proposed habitat	Area (hectares)	Distinctiveness		Condition		Strategic significance			Post development/ post intervention habitats				Temporal multiplier		Difficulty multipliers				Habitat units delivered		Comments	
				Distinctiveness	Score	Condition	Score	Strategic significance	Strategic significance	Strategic position multiplier	Standard time to target condition/years	Habitat created in advance/years	Delay in starting habitat creation/years	Standard or adjusted time to target condition	Final time to target condition/years	Final time to target multiplier	Standard difficulty of creation	Applied difficulty multiplier	Final difficulty of creation	Difficulty multiplier applied				
Urban		Developed land; sealed surface	3.14	V.Low	0	N/A - Other	0	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	0				Standard time to target condition applied	0	1.000	Low	Standard difficulty applied	Medium	0.67	0.00	Built development and roads	
Urban		Vegetated garden	1.26	Low	2	Condition Assessment N/A	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	1				Standard time to target condition applied	1	0.965	Low	Standard difficulty applied	Low	1	2.43	Gardens	
Urban		Sustainable urban drainage feature	0.17	Low	2	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	3				Standard time to target condition applied	3	0.899	Medium	Standard difficulty applied	Medium	0.67	1.37	Storage basin	
Urban		Artificial unvegetated, unsealed surface	0.04	V.Low	0	N/A - Other	0	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	0				Standard time to target condition applied	0	1.000	Low	Standard difficulty applied	Low	1	0.00	Children's play area (LEAP)	
Urban		Biotope	0.30	Low	2	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	1				Standard time to target condition applied	1	0.965	Medium	Standard difficulty applied	Medium	0.67	0.80	Swale (grassland)	
Grassland		Other neutral grassland	1.595	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	5				Standard time to target condition applied	5	0.837	Low	Standard difficulty applied	Low	1	10.68	60% of new grassland to be wildflower grassland	
Grassland		Other neutral grassland	1.595	Medium	4	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	2				Standard time to target condition applied	2	0.931	Low	Standard difficulty applied	Low	1	5.94	60% of new grassland to be poorer quality wildflower grassland	
Heathland and shrub		Mixed scrub	1.7	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	5				Standard time to target condition applied	5	0.837	Low	Standard difficulty applied	Low	1	11.38	New mixed scrub planting	
Urban		Urban Tree	0.17	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	27				Standard time to target condition applied	27	0.382	Low	Standard difficulty applied	Low	1	1.13	New tree planting	
		Total habitat area	10.50																			Total units	33.74	
		Site Area (Including area of Urban trees and Green walls)																				10.21		

### A-3 Site Habitat Enhancement

Project Overview		Strategic Initiatives and Projects										Operational Performance and Financial Metrics										Risk Management and Compliance										Human Resources and Organizational Development									
		Project Details		Strategic Alignment		Financial Impact		Operational Efficiency		Customer Satisfaction		Employee Engagement		Compliance Status		Risk Assessment		Mitigation Strategies		Training & Development		Recruitment & Retention		Performance Metrics		Innovation & Growth		Diversity & Inclusion		Employee Well-being											
ID	Name	Status	Priority	Owner	Manager	Start Date	End Date	Progress (%)	Budget (M\$)	Actual Spend (M\$)	Variance (M\$)	ROI (%)	Revenue (M\$)	Profit (M\$)	Growth (%)	Market Share (%)	Customer Sat. (1-5)	Employee Sat. (1-5)	Turnover (%)	Training Hrs (K)	New Hires	Promotions	Compliance Score	Incidents	Severity	Mitigation Eff.	Legal Costs (K\$)	Fines (K\$)	Reputation Impact	Diversity Score	Innovation Index	Employee Engagement	Retention Rate (%)	Success Rate (%)	ROI (%)	Impact Score					
1	Strategic Initiative: Digital Transformation	Active	High	John Doe	Jane Smith	2023-01-01	2024-12-31	75%	5.0	4.8	0.2	15%	12.0	3.0	20%	15%	4.5	4.2	5%	1000	50	10	95%	2	Low	High	100	5	10	Positive	85	90	95%	12%	15	High					
2	Operational Project: New Product Launch	Completed	Medium	John Doe	Jane Smith	2023-03-15	2023-09-30	100%	2.5	2.6	-0.1	8%	8.0	1.5	10%	10%	4.0	3.8	3%	500	20	5	98%	1	Low	Medium	80	2	5	Neutral	75	80	90%	5%	8	Medium					
3	Operational Project: IT System Upgrade	On Hold	Low	John Doe	Jane Smith	2023-06-01	2024-03-31	20%	1.0	1.1	-0.1	2%	1.0	0.2	5%	8%	3.5	3.2	1%	200	10	2	90%	3	Medium	Low	50	1	2	Negative	60	65	85%	2%	3	Low					
4	Strategic Initiative: Market Expansion	Active	High	John Doe	Jane Smith	2023-09-01	2025-06-30	40%	8.0	7.5	0.5	12%	10.0	2.5	18%	12%	4.0	3.5	4%	800	40	8	92%	2	Medium	High	90	8	12	Positive	80	85	92%	10%	12	High					
5	Operational Project: HR System Rollout	Completed	Medium	John Doe	Jane Smith	2023-04-01	2023-11-30	100%	1.5	1.6	-0.1	3%	1.5	0.3	7%	9%	3.8	3.6	2%	300	15	3	97%	1	Low	Medium	70	1	4	Neutral	70	75	88%	3%	4	Medium					
6	Strategic Initiative: Sustainability Program	Active	Medium	John Doe	Jane Smith	2023-07-01	2024-06-30	60%	3.0	3.1	-0.1	5%	3.0	0.5	10%	10%	3.8	3.5	2%	400	20	4	93%	2	Medium	Medium	85	4	6	Positive	78	82	89%	6%	6	Medium					
7	Operational Project: Customer Service Portal	On Hold	Low	John Doe	Jane Smith	2023-08-01	2024-07-31	10%	0.5	0.6	-0.1	1%	0.5	0.1	3%	5%	3.2	3.0	1%	100	5	1	88%	3	Medium	Low	40	0	1	Negative	55	60	82%	1%	1	Low					
8	Strategic Initiative: Talent Development	Active	Medium	John Doe	Jane Smith	2023-10-01	2025-09-30	30%	4.0	3.8	0.2	7%	4.0	0.8	12%	10%	3.5	3.2	3%	600	30	6	91%	2	Medium	Medium	82	6	8	Positive	72	78	87%	4%	8	Medium					
9	Operational Project: Data Analytics Platform	Completed	Medium	John Doe	Jane Smith	2023-02-01	2023-10-31	100%	2.0	2.1	-0.1	6%	2.0	0.4	9%	8%	3.6	3.4	2%	400	20	4	96%	1	Low	Medium	75	2	5	Neutral	70	75	89%	3%	5	Medium					
10	Strategic Initiative: Global Supply Chain Optimization	Active	High	John Doe	Jane Smith	2023-11-01	2025-10-31	15%	10.0	9.5	0.5	10%	10.0	2.0	15%	12%	4.0	3.5	3%	1000	50	10	94%	2	Medium	High	90	8	12	Positive	80	85	92%	10%	12	High					



B-1 Site Hedge Baseline

Baseline ref	Hedge number	UK Habitats - existing habitats		Habitat distinctiveness		Habitat condition		Strategic significance			Suggested action to address habitat losses	Ecological baseline
		Hedgerow type	Length (km)	Distinctiveness	Score	Condition	Score	Strategic significance	Strategic significance	Strategic position multiplier		
1	H1	Native Hedgerow with trees	0.073	Medium	4	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Like for like or better	0.88
2	H2	Native Hedgerow	0.07	Low	2	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	0.42
3	H3	Native Species Rich Hedgerow with trees - Associated with bank or ditch	0.129	V.High	8	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Like for like	2.06
4	H4	Native Species Rich Hedgerow - Associated with bank or ditch	0.064	High	6	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Like for like or better	1.15
5	H5	Native Hedgerow with trees - Associated with bank or ditch	0.098	High	6	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Like for like or better	1.76
6	H6	Native Species Rich Hedgerow with trees - Associated with bank or ditch	0.176	V.High	8	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Like for like	4.22
7	H7	Native Species Rich Hedgerow with trees - Associated with bank or ditch	0.083	V.High	8	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Like for like	1.33
8	H8	Native Species Rich Hedgerow with trees - Associated with bank or ditch	0.196	V.High	8	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Like for like	3.14
9	H9	Native Species Rich Hedgerow with trees	0.196	High	6	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Like for like or better	2.35
10												
11	TL1	Line of Trees - Associated with bank or ditch	0.322	Low	2	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	1.93
12	TL2	Line of Trees	0.043	Low	2	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	0.26
13	TL3	Line of Trees	0.23	Low	2	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	1.38
14	TL4	Line of Trees - Associated with bank or ditch	0.171	Low	2	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	1.03
15	TL5	Line of Trees - Associated with bank or ditch	0.088	Low	2	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	0.53
16	TL6	Line of Trees	0.061	Low	2	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	0.37
17												
18	OH1	Hedge Ornamental Non Native	0.164	V.Low	1	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	0.16
			2.36									22.97

Retention category biodiversity value						Comments	
Length retained	Length enhanced	Units retained	Units enhanced	Length lost	Units lost	Assessor comments	Reviewer comments
0.073		0.88	0.00	0.00	0.00		
0.04		0.24	0.00	0.03	0.18		
0.125		2.00	0.00	0.00	0.06		
0.064		1.15	0.00	0.00	0.00		
0.098		1.76	0.00	0.00	0.00		
0.176		4.22	0.00	0.00	0.00		
0.083		1.33	0.00	0.00	0.00		
0.196		3.14	0.00	0.00	0.00		
0.193		2.32	0.00	0.00	0.04		
0.31		1.86	0.00	0.01	0.07		
0.043		0.26	0.00	0.00	0.00		
0.23		1.38	0.00	0.00	0.00		
0.171		1.03	0.00	0.00	0.00		
0.085		0.51	0.00	0.00	0.02		
0.061		0.37	0.00	0.00	0.00		
0.164		0.16	0.00	0.00	0.00		
2.11	0.00	22.60	0.00	0.05	0.27		

## B-2 Site Hedge Creation

Proposed habitats			Habitat distinctiveness		Habitat condition		Strategic significance				Temporal multiplier				Difficulty risk multipliers				Comments			
Baseline ref	New hedge number	Habitat type	Length (km)	Distinctiveness	Score	Condition	Score	Strategic significance	Strategic position multiplier	Standard Time to target condition/years	Habitat created in advance/years	Delay in starting habitat creation/years	Standard or adjusted time to target condition	Final time to target condition/years	Final time to target multiplier	Standard difficulty of creation	Applied difficulty multiplier	Final difficulty of creation	Difficulty multiplier applied	Hedge units delivered	Assessor comments	Reviewer comments
1		Native Species Rich Hedgerow	0.52	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	5		Standard time to target condition applied	5	0.837	Low	Standard difficulty applied	Low	1	3.83		
			0.52																	3.83		

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The logo for Aspect Ecology Ltd features the word "aspect" in a white, lowercase, sans-serif font. A thin, white, diagonal line is positioned above the "t", extending from the top of the letter to the right.

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