

## **Biodiversity Net Gain Assessment**

# Land at Glenelm and 160 Anyards Road, Surrey

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#### LIABILITIES:

Whilst every effort has been made to guarantee the accuracy of this report, it should be noted that living animals and plants are capable of migration/establishing and whilst such species may not have been located during the survey duration, their presence may be found on a site at a later date.

This report provides a snap shot of the species that were present at the time of the survey only and does not consider seasonal variation. Furthermore, where access is limited or the site supports habitats which are densely vegetated only dominant species maybe recorded.

The recommendations contained within this document are based on a reasonable timeframe between the completion of the survey and the commencement of any works. If there is any delay between the commencement of works that may conflict with timeframes laid out within this document, or have the potential to allow the ingress of protected species, a suitably qualified ecologist should be consulted.

It is the duty of care of the landowner/developer to act responsibly and comply with current environmental legislation if protected species are suspected or found prior to or during works.

#### 1.0 Introduction

- 1.1 The site lies to the in the north of Cobham, south of Portsmouth Road and the A307. The site (TQ 1077 6063) includes multiple buildings and hardstanding car parks. The site is surrounded by residential properties, with units of woodland and arable fields in the wider landscape. This report provides an initial BNG assessment for the proposed development site.
- 1.2 The Statutory Biodiversity Metric is used to calculate biodiversity losses and gains for terrestrial habitats within the application area. This metric underpins the Environment Bill's provisions for mandatory biodiversity net-gain in England and defines 'measurable' net gains.
- 1.3 The extent of the site is shown in Figure 1 below. Proposals for an Outline Application for the demolition of the existing buildings and erection of 26 residential dwellings, with layout, scale, access and appearance for consideration. The proposals are shown in Figure 2.



Figure 1: Site red line boundary



Figure 2: Draft Landscape Masterplan (Allen Pyke, October 2023)

1.4 Biodiversity Net Gain (BNG) principles are aimed to support both the aspired green infrastructural proposals set to define the created landscape, and support biodiversity and habitat enhancement. BNG principles are set within the Environment Bill (2021).

### 2.0 Methodology

- 2.1 In order to identify areas for ecological enhancements, a PEA (Preliminary ecological appraisal) and a condition assessment (an assessment of the quality of the habitats present within the redline boundary) was undertaken on the 14<sup>th</sup> March 2023 by the Ecology Partnership.
- 2.2 The creation of areas which would support potential net-gain areas are based on the following
  - Identification / classification of the on-site baseline habitats;
  - Identification of habitats which are of high ecological value;
  - Provision of habitat mapping;
  - Identification of potential for ecological connectivity;

- Identification of areas which support landscape development;
- Linking biodiversity net gain areas, landscape features in order to identified opportunity areas which support the Nature Recovery Network aspirations;
- Recommendations for species rich, native planting.

#### 3.0 DEFRA Metric

- 3.1 The Statutory Biodiversity Metric is used to calculate biodiversity losses and gains for terrestrial habitats within the application area. This metric underpins the Environment Bill's provisions for mandatory biodiversity net-gain in England.
- 3.2 The Biodiversity Metric uses habitat as a proxy for wider biodiversity with different habitat types scoring different values according to their relative biodiversity value and dependent on the condition and location of the habitat, to calculate 'biodiversity units'.
- 3.3 The site has been assessed in terms of the condition assessment of the baseline during 2023, following the standard metric guidelines. For example, all grassland habitats were reviewed in terms of species composition per m<sup>2</sup> and as a whole (across the whole of the site).
- 3.4 The post development areas taken from a number of broad habitat types from the emerging masterplan document. As such the exact number for the BNG will alter throughout the evolution of the master plan.
- 3.5 It must be noted that the garden habitats had been cleared of shrubs prior to the site survey, at some stage in 2023. The habitats prior to clearance have been estimated. However, this area is garden habitat and therefore the condition is a 'default' condition in the metric.

### Site Specific DEFRA Metric Calculations

3.6 The habitats currently present on site have been divided into a number of habitat types.These are shown in Table 1 and figure 3, below.

Table 1: On-site habitat breakdown – Pre-Development (	).46 ha
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Habitat	Area (ha)	Condition
Developed land; sealed	0.29	This habitat type was used to describe hardstanding &
surface		buildings that dominated the site.
		Considered 'N/A-Other' condition
Vegetated Garden	0.19	This habitat was used to describe the garden on site
		Default ' <b>Poor</b> ' condition
Urban Tree	0.0489	Used to describe an estimated three medium trees present
	This area is not used in	within the garden.
	the total area as it is	
	representative of the	Estimated 'Moderate' condition
	ecological value of the	
	trees	
Total	0.48	



Figure 3: Existing site habitats

- 3.7 The habitats proposed i.e., post development on site have been estimated from the proposed layout (Allen Pyke Drawing no. 3139-APA-ZZ-XX-LA-L-1001 P00.03).
- 3.8 The proposed layout and associated habitats are shown in Figure 2 below. The habitats shown in the post development plans are the habitats which have been included within the DEFRA metric.



Figure 4: Proposed post development habitats

3.9 The habitat types and areas from the proposal are shown below in Table 2.

Habitat type	Area (ha)	Condition					
Developed land; sealed	0.29	This habitat includes the buildings and areas of					
surface		hardstanding in the proposals.					
		Considered <b>'N/A-Other'</b> condition.					
Vegetated Garden	0.09	Used to describe the new gardens and areas of grassland					
		on the site					
		Due to management being up to occupants of new					
		housing, a condition assessment is not applicable					
		Considered ' <b>Poor</b> ' condition					
Other neutral grassland	0.02	Used to describe areas of species-rich flowering lawn					
		areas					
		Considered ' <b>Poor</b> ' condition					
Introduced shrub	0.06	Used to describe areas of non-native ornamental					
		herbaceous and shrub planting.					

Table 2: Habitat Breakdown – Post Development 0.46 ha

		Default ' <b>Poor</b> ' condition					
Urban Tree	0.1629	Used to describe the planting of 40 small trees in 'poor'					
	This area is not used in the	condition.					
	total area as it is						
	representative of the	Considered 'Poor' condition					
	ecological value of the trees						
Total	0.48						

- 3.10 The proposed development is removing the existing vegetated garden and hardstanding habitat on site and replacing it with new residential dwellings with larger areas of vegetated garden, shrub, flowering lawns, and hardstanding. Urban trees are to be planted around the site.
- 3.11 The headline results are shown in Figure 3 below.

FINAL RESULTS								
	Habitat units	0.07						
Total net unit change	Hedgerow units	0.00						
(Including all on-site & off-site habitat retention, creation & enhancement)	Watercourse units	0.00						
	Habitat units	8.96%						
Total net % change	Hedgerow units	0.00%						
(Including all on-site & off-site habitat retention, creation & enhancement)	Watercourse units	0.00%						
Trading rules satisfied?	¥es ✓							

#### Figure 3: Headline results

- 3.12 Initial calculations indicate that a 8.96% net gain would result from the current agreed site layout. Vital to achieving this are a large number of new trees planted throughout the site, replacing those lost for development.
- 3.13 It should be noted the biodiversity units calculated for the site post-development do not take into consideration enhancement features added such as log piles, bird nesting boxes or bat boxes/tubes, all of which should be installed across the site. It is therefore likely the net biodiversity gain would be higher as a result of these additional measures.

#### 5.0 Enhancements

- 5.1 Recommended enhancements have been outlined within the preliminary ecological appraisal (The Ecology Partnership, 2023). These include:
  - Bird boxes hung on mature trees around the site
  - Bat boxes on mature trees around the site
  - Bee bricks integrated within new buildings
  - The use of hedgehog highways and hedgehog tunnels.

#### 6.0 Conclusions

- 6.1 The baseline condition of habitats on site is considered to be low, given the dominance of low value vegetated garden and hardstanding.
- 6.2 The current proposals are for the existing hardstanding and vegetated garden area on site to be replaced by residential homes with associated access, parking, and vegetated gardens.
- 6.3 Under the current proposals, the scheme would result in a 8.96% net gain.
- 6.4 Recommended additional enhancements for the scheme have been given within this report, which are not recognised within the Defra metric. These will ensure that the proposed scheme retains value for biodiversity post-development, creating opportunities for wildlife on site and within the wider area.

			Project Name: Map Reference:	1		Г		Ārea hal	bitat summary		1											
		A-1 On-Site Habitat Baseline					Total Net Unit Change			0.07												
			A-I On-Site Habitat Baseline	J				t % Change ules Satisfied	8.96% ¥es √													
		Condens	se / Show Columns Condense / Show F	ows		L	Trading R	ales Satisfied	1	:es √	l											
		N	Main Menu																			
		Existing area habitats					Distinctiveness	Condition	Strategic	significance		Ecological baseline										
	Ref	Broad Habitat	Habitat Type	Irreplaceabl		rea ctares)	Distinctiveness	Condition	Strategic	significance	Required Action to Meet Trading Rules	Total habitat units										
	1	Urban	Vegetated garden	No		).19	Low	Condition Assessment N/A	no loc	n not in local strategy/ al strategy	Same distinctiveness or better habitat required ≥	0.38										
	2	Urban	Developed land; sealed surface	No		).29	V.Low	N/A-Other	Area/compensatio no loc	n not in local strategy/ al strategy	Compensation Not Required	0.00										
	3	Individual trees	Urban tree	No	0.	0489	Medium	Moderate		n not in local strategy/ al strategy	Same broad habitat or a higher distinctiveness habitat required (≥)	0.39										
	4			Total	abitat area	0.53						0.77										
			Site Area (Excluding area of individual trees, green wall			).53 ).48						0.77										
ſ		I	Project Name: Map Reference:			1	Area habitat	summary														
		Ā	-2 On-Site Habitat Creation		Total Net U	nit Chang	e	0.07						IF(logic								
						% Change		8.96%														
		Condense / Show Colu	se / Show Columns Condense / Show Rows Trading Rules Satisfied Yes / Area Check Area Acceptable /																			
		Main Menu			meu	JAICER		meancepta														
r r									Postinter	vention habitats												
					Distinctivenes	s Cond	lition	Strategic signi		Temporal multiplier		1	Difficulty									
Ref	Broad H	abitat	Proposed habitat	Ārea (hectares)	Distinctivenes	s Cond	lition	Strategic significance		Strategic significance		Strategic significance				Standard or adjus	ted time to target condition	Final time to target condition (years)	Final difficulty of creation	Habitat units delivered		
1	Urb	an	Developed land; sealed surface	0.29	V.Low	N/A-0	Other Area/c	/compensation not in local strategy/ no local strategy								Standard time to	target condition applied	0	Low	0.00		
2	Urb	an	Vegetated garden	0.09	Low	Cond Asses t N	smen Area/c	compensation not in local strategy/ no local strategy		compensation not in local strategy/ no local strategy		Standard time to	target condition applied	1	Low	0.17						
3	Individu	al trees	Urban tree	0.1629	Medium	Po	or	compensation not in local strategy/ no local strategy				/compensation not in local strategy/ no local strategy						Standard time to	target condition applied	10	Low	0.46
4	Urb	an	Introduced shrub	0.06	Low	Cond Asses t N	Area/c smen /A	compensation not in local strategy/ no local strategy		compensation not in local strategy/		Standard time to	target condition applied	1	Low	0.12						
5	Grass	land	Other neutral grassland	0.02	Medium	Po	or Area/c	Area/compensation not in local strat no local strategy		Standard time to	target condition applied	2	Low	0.07								
6																						
7				-																		
8				•																		
10																						
11			Total habitat area	0.62										0.82								
			Site Ārea (Excluding area of individual trees, green walls, intertidal hard structures)	0.46										0.82								
		M <sup>2</sup> to hectares conversion tool: Select a unit Hectares M <sup>2</sup>																				

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