
**Land at Johnson Drive
Finchampstead**

Report for:
Palatine Homes Limited
Ospreys
Scotswood Close
Beaconsfield
Buckinghamshire
HP9 2LJ

INTRODUCTION

AA Environmental Limited (AAe) has been commissioned by Palatine Homes Limited to complete a Biodiversity Net Gain (BNG) calculation for the above site. The purpose of the assessment is to provide a comparison between the biodiversity value of the site before and after development. The BNG assessment has been completed based on the existing and proposed habitats for the site (Figures 1 and 2). This revision includes changes to the baseline value of the site and, in particular, the number of individual trees recorded within the tree groups¹ and updated soft landscaping proposals.

The redevelopment proposals are for the construction of eight new residential dwellings, with associated hard and soft landscaping, following the demolition of the existing buildings and clearance of some vegetation. The boundary vegetation will be retained, protected and enhanced with a wildlife corridor provided.

METHODOLOGY

The Department of Levelling Up, Housing and Communities released an updated National Planning Policy Framework (NPPF) in December 2023, which encourages new developments to secure measurable 'net gains' for biodiversity. The Environment Bill gained Royal Assent in November 2021, which mandates Biodiversity Net Gain (BNG) as a condition of planning permission, meaning that all new major developments in England, submitted after 12 February 2024, will have to provide a minimum 10% increase in biodiversity on site, once development is complete. Applications submitted before this date were in a transitional period where any 'gain' is acceptable (unless otherwise stated in the Local Plan).

In order to calculate BNG for a site, existing and proposed habitats are entered into DEFRA's Biodiversity Metric 4.0² and are automatically 'scored' on their relative biodiversity value and are then classified according to their condition and location, to calculate site specific 'biodiversity units'. The pre-development biodiversity unit is then compared to the proposed, post-development biodiversity unit, allowing the difference in biodiversity to be measured.

NET LOSS

If the development results in a biodiversity loss, then this becomes an 'offset requirement' and compensation will be required. At the moment there are three main options to compensate for the loss of biodiversity, as detailed below:

1. Identify an area of land off-site and enter into an agreement with the landowner to create and manage the site for nature conservation value.
2. Make a financial contribution to the Council (if they have a scheme in place) or another offsetting provider such as the Environment Bank.
3. Install a range of enhancement measures on site such as integrated bird and bat boxes and other features for wildlife (e.g. insect boxes, log piles etc.).

¹ Site visit to record the number and size of trees completed on Thursday 26 September 2024.

² The DEFRA Metric current at the date of the planning submission.

In the event that compensation is required then the preference would be to enter into an agreement with the local planning authority, who may have specific initiatives in the area which will benefit local wildlife.

DEFRA's Biodiversity Metric will be the metric that underpins the Environment Act's provisions for mandatory biodiversity net gain in England.

RESULTS

Site Description

The site is located off Johnson Drive in Finchampstead, centred at National Grid Reference: SU 805651 and covers approximately 1.32 hectares. The site comprised the existing buildings, associated hardstanding with grassland and woodland areas. The site was bordered by woodland to the north and east and by residential properties and associated gardens to the south and west.

Habitats

The site comprised a number of buildings set within hardstanding, with an area of grassland and woodland. The existing buildings, hardstanding and grassland will be removed to create eight residential dwellings with associated gardens and areas of new planting. The scheme will retain and enhance boundary vegetation with a wildlife corridor provided. The wildlife corridor will be planted with mixed scrub and sown with wildflower seed mixes from Emorsgate including EW1F (woodland mixture) and EH1 (hedgerow mixture). In addition, new native tree planting will be carried out on the site. Details of the species planting are shown in the Landscaping Plan by Treetop Landscapes Ltd (a copy has been attached at Appendix B for reference).

The site could be further enhanced by providing roosting, nesting and sheltering opportunities for a range of species and the creation of new wildlife habitats, such as some of those recommended by the Chartered Institute of Ecology Environment and Management's published Biodiversity Net Gain Good Practice Guidance, and listed below:

- Nest boxes
- Bat boxes
- Bug hotels
- Hedgehog houses
- Log piles
- Pollinator nest sites
- Planting wildflowers

Details of existing and proposed habitats have been provided in Table 1.

Table 1: Habitat Areas

Existing Habitat Baseline		
Habitat	Area (ha)	Comment
Modified grassland	0.62	
Developed land; sealed surface	0.27	
Vegetated garden	0.24	
Other woodland; broadleaved	0.10	All to be retained
Ruderal/Ephemeral	0.04	
Watercourse footprint	0.02	All to be retained
Introduced shrub	0.02	
Mixed scrub	0.01	
Urban tree*	0.3176	x42 small and x4 medium trees existing on site, with x1 medium tree to be retained (T33).
Total area (ha)	1.32	
Habitat Units	5.34	As per Headline Results

Existing Hedgerow Baseline			
Hedgerow	Length (km)	Comment	
Non-native and ornamental hedgerow	0.06	0.05 km to be retained	
Hedgerow Units	0.06		
Existing Watercourse Baseline			
Hedgerow	Length (km)	Comment	
Dry ditch	0.10	All to be retained	
Watercourse Units	0.40		
Proposed Habitat Creation			
Habitat	Area (ha)	Comment	
Vegetated garden	0.50		
Developed land; sealed surface	0.33		
Mixed scrub	0.22		
Other neutral grassland	0.14		
Introduced shrub	0.01		
Urban tree*	0.7736	x30 new trees to be planted. These will be planted as heavy standards, located outside of private gardens, with x20 assessed to reach 'medium size' classification after 30 years growth and x10 to be 'small'.	
Total area (ha)	1.32	Including retained habitat areas	
Habitat Units	6.85	As per Headline Results	
Proposed Hedgerow Creation			
Hedgerow	Length (km)	Comment	
Native hedgerows	0.46		
Total Length (km)	0.51	Including retained hedgerow lengths	
Hedgerow Units	1.64	Including retained units	
Results	Unit Change	Habitat	1.51
		Hedgerow	1.58
		Watercourse	0.00
	Percentage Change	Habitat	28.30%
		Hedgerow	2630.02%
		Watercourse	0.00%

*Urban Tree areas are not included within the total area calculation of the Defra 4.0 Metric.

Biodiversity Net Gain Calculation

The assessment has resulted in an overall net gain of 1.51 habitat units, the equivalent increase of 28.30%, a net gain of 1.58 hedgerow units, the equivalent increase of 2630%, and the watercourse being retained (a copy of the Headline Results has been attached at Appendix A). In addition, other enhancement measures such as the provision of wildlife boxes and other features, which are not factored in on the DEFRA Metric, will provide additional opportunities and benefits for local wildlife.

SUMMARY

The re-assessment has been completed based upon the Existing Habitats Plan produced by AAe (Figure 1) and the updated Proposed Habitats Plan (Figure 2). The redevelopment proposals are for the construction of eight new residential dwellings, with associated hard and soft landscaping, following the demolition of the existing buildings and clearance of some vegetation. The boundary vegetation will be retained, protected and enhanced with a wildlife corridor provided.

The assessment completed demonstrates that the scheme could achieve a biodiversity net gain due to new tree planting and a wildlife corridor including mixed scrub and wildflower planting, in full compliance with national and local policy. In addition, there are opportunities to introduce a range of new habitats along with other benefits, such as the provision of wildlife boxes and other features, and if designed sensitively and managed appropriately will result in an overall ecological benefit in comparison to the existing onsite conditions.

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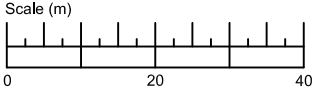
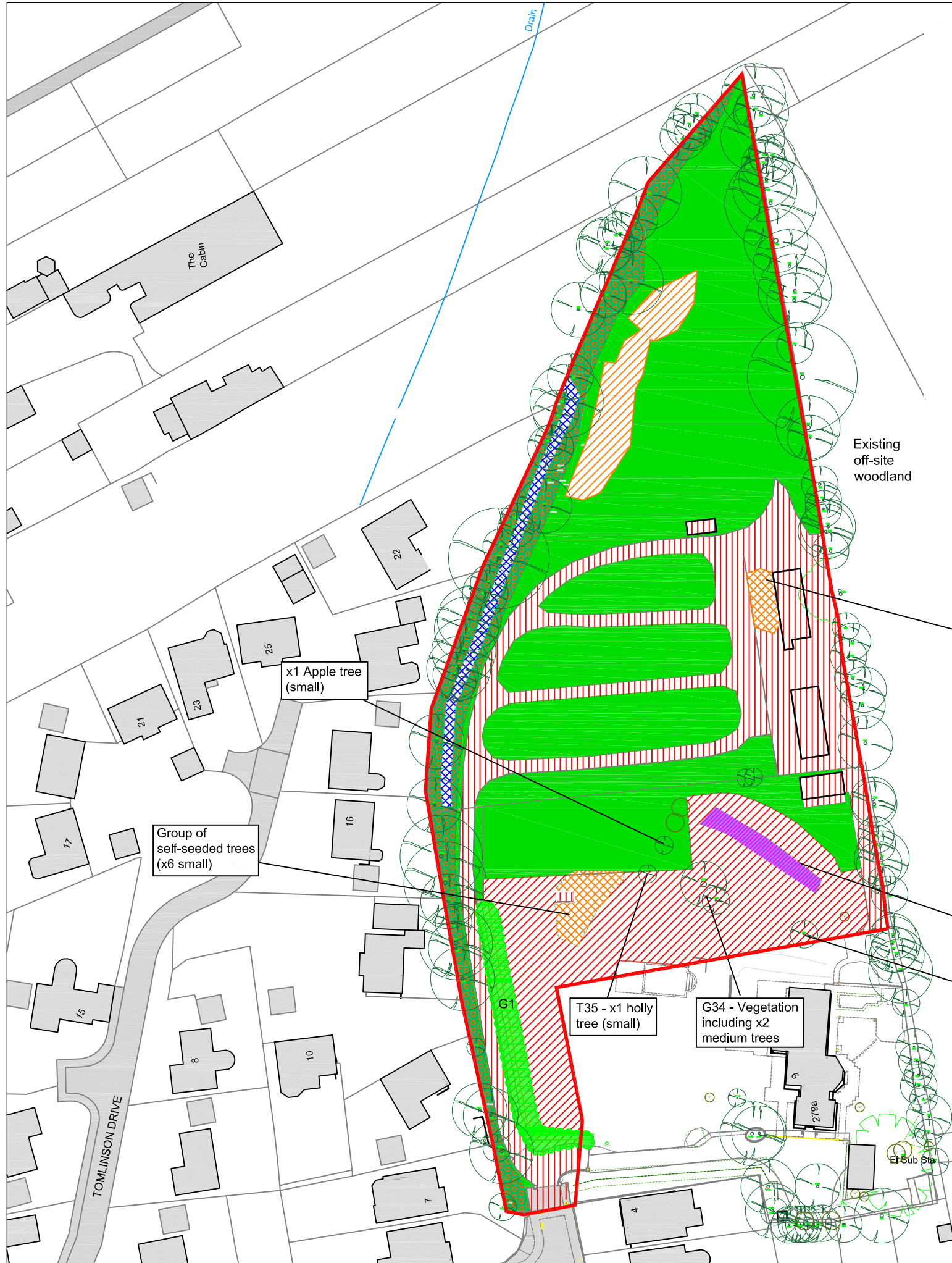
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Figures



Notes

<u>Existing Habitat Areas (ha)</u>	
Modified Grassland	0.62
Developed land; sealed surface	0.27
Vegetated Garden	0.24
Other Woodland-Broadleaved	0.10
Ruderal/ Ephemeral	0.04
Watercourse Footprint	0.02
Introduced Shrub	0.02
Mixed scrub	0.01
Urban tree*	0.3176
Total Area	1.32
* Not included in total area	
<u>Existing Hedgerow Lengths (km)</u>	
Non-native and ornamental hedgerow	0.06
<u>Existing Watercourse Lengths (km)</u>	
Dry Ditch	0.10

UK HAB KEY

- Site Boundary*
- Modified Grassland*
- Vegetated Garden*
- Developed Land/Sealed Surface*
- Other Woodland-Broadleaved*
- Ruderal/ Ephemeral*
- Introduced Shrub*
- Mixed Scrub*
- Dry Ditch*
- Hedgerow*
- Individual Tree*

* Indicative location

C	Baseline habitat alterations.	HRS	04.10.24
		ARB	
B	Baseline habitat alterations.	NAB	04.07.24
		ARB	
A	Baseline habitat alterations.	KC	17.04.24
		ARB	

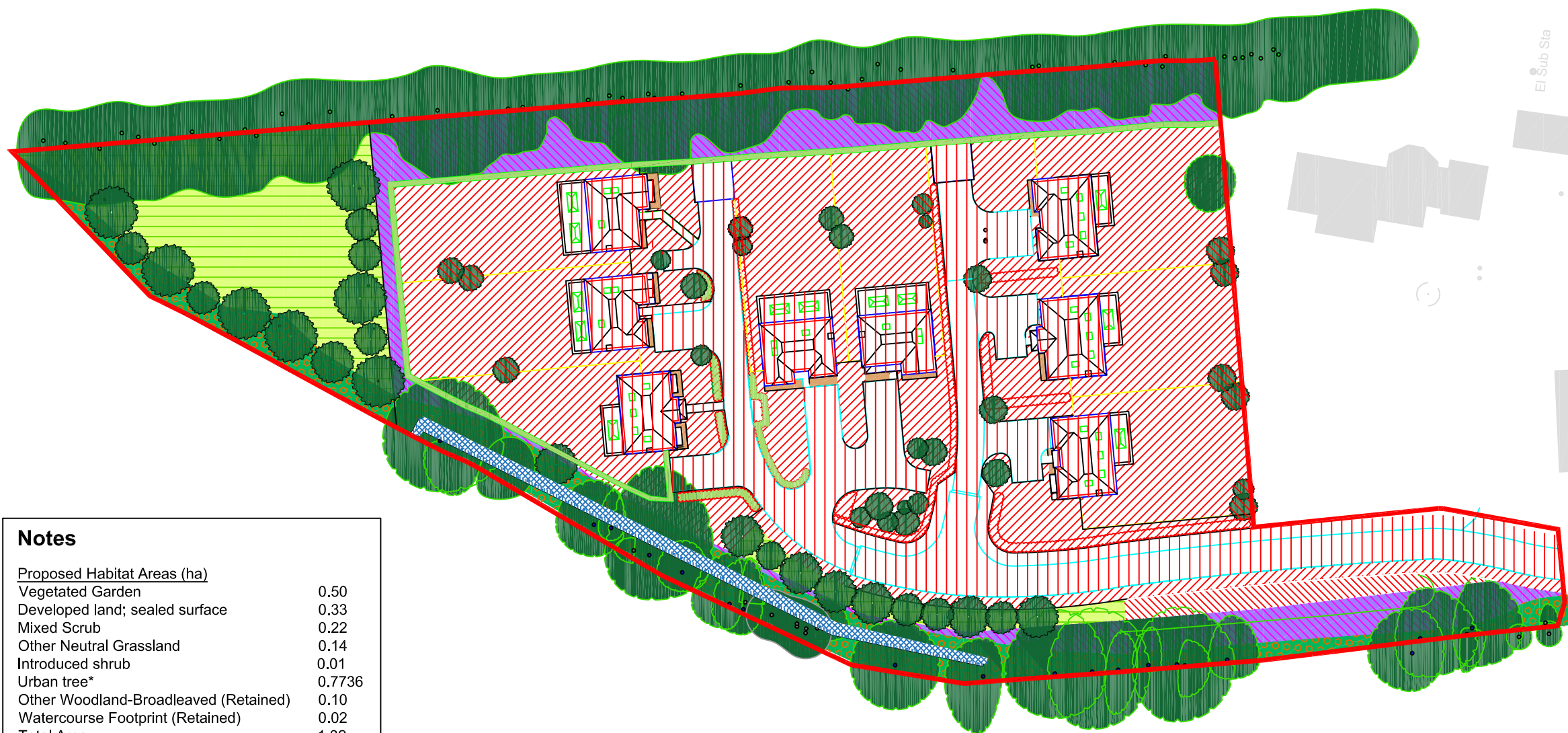
Project
233292
Land at Johnson Drive
Finchampstead

Title
Existing Habitats Plan



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Scale	Date	23.11.23	Drg. No.	Rev.
As shown	Drawn	NAB	Chkd.	ARB
Figure 1			C	



UK HAB KEY

- Site Boundary*
- Vegetated Garden*
- Developed Land/Sealed Surface*
- Mixed Scrub*
- Other Neutral Grassland*
- Other Woodland-Broadleaved*
- Dry Ditch*
- Hedgerow*
- Urban Tree (proposed)*
- Urban Tree (retained)*

* Indicative location

Notes

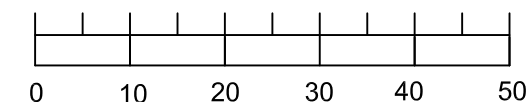
<u>Proposed Habitat Areas (ha)</u>	
Vegetated Garden	0.50
Developed land; sealed surface	0.33
Mixed Scrub	0.22
Other Neutral Grassland	0.14
Introduced shrub	0.01
Urban tree*	0.7736
Other Woodland-Broadleaved (Retained)	0.10
Watercourse Footprint (Retained)	0.02
Total Area	1.32
*Not included in total area	

N.B. Urban tree planting only included if outside of private gardens.

<u>Proposed Hedgerow Lengths (km)</u>	
Native hedgerow	0.46
Non-native hedgerow (Retained)	0.05

<u>Existing Watercourse Lengths (km)</u>	
Dry Ditch (Retained)	0.10

Scale (m)



C	Updated landscaping plan.	HRS	04.10.24
		ARB	
B	Updated landscaping plan.	NAB	04.07.24
		ARB	
A	Updated landscaping plan.	KC	17.04.24
		ARB	

Project
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Proposed Habitats Plan



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Scale	Date	23.11.23	Drg. No.	Rev.
As shown	Drawn	NAB	Chkd.	ARB
Figure 2			C	

Appendix A
Headline Results

Land at Johnson Drive (Rev C)
Headline Results
Scroll down for final results ▲

Return to

On-site baseline	Habitat units	5.34	
	Hedgerow units	0.06	
	Watercourse units	0.40	
On-site post-intervention (including habitat retention, creation & enhancement)	Habitat units	6.85	
	Hedgerow units	1.64	
	Watercourse units	0.40	
On-site net change (units & percentage)	Habitat units	1.51	28.30%
	Hedgerow units	1.58	2630.02%
	Watercourse units	0.00	0.00%

Off-site baseline	Habitat units	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Off-site post-intervention (including habitat retention, creation & enhancement)	Habitat units	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Off-site net change (units & percentage)	Habitat units	0.00	0.00%
	Hedgerow units	0.00	0.00%
	Watercourse units	0.00	0.00%

Combined net unit change (including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	1.51	
	Hedgerow units	1.58	
	Watercourse units	0.00	
Spatial risk multiplier (SRM) deductions	Habitat units	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	

FINAL RESULTS			
Total net unit change (including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	1.51	
	Hedgerow units	1.58	
	Watercourse units	0.00	
Total net % change (including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	28.30%	
	Hedgerow units	2630.02%	
	Watercourse units	0.00%	
Trading rules satisfied?	Yes ✓		

Unit Type	Target	Baseline Units	Units Required	Unit Deficit
Habitat units	0.00%	5.34	5.34	0.00
Hedgerow units	0.00%	0.06	0.06	0.00
Watercourse units	0.00%	0.40	0.40	0.00

Unit requirement not surpassed ✓
Unit requirement not surpassed ✓
Unit requirement not surpassed ✓

Appendix B

Landscaping Plan (Drawing No. TTL-SM-PHJD2103001 Rev B)

