

Ecological Consultants Environmental and Rural Chartered Surveyors

Your Ref:

Our Ref: AWG/5896

To whom it may concern

Wednesday, 11 September 2019

RE: CHATBURN ROAD - BIO-DIVERSITY OFFSETTING CALCULATIONS

In respect of the above site we have been asked to assess the potential for bio-diversity gain associated with the proposal.

We would comment as follows

BIODIVERSITY CALCULATIONS

In respect of biodiversity, defining enhancement proves problematic as "valuing" the natural environment requires a standardised methodology and baseline values against which to compare a site before and after.

Biodiversity offsetting using Defra matrics has attempted this and is currently the accepted method of valuing ecological habitat.

Defra metrics is complicated, and is highly sensitive to the type and condition of the habitat being lost, and the type and condition of the habitat being created on-site in mitigation and also off-site in compensation. Differences in habitat type and condition can make a large difference to the amount of offsetting required.

The assessment hereafter is in accordance with and follows the methodology reported in "Biodiversity offsetting Pilots Guidance for Developers (DEFRA, 2012)"

The author of this report is a Rural Practice Chartered Surveyor, Chartered Environmentalist and full member of the Chartered Institute of Ecology and Environmental Management.

We have utilised a spreadsheet for calculating the biodiversity value of the site before and after which was developed by the Environment Bank and Warwickshire County Council both of who were



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involved in the pilot project for biodiversity offsetting. Biodiversity offsetting calculations were undertaken with version WCS_BIA_v.19.0. This was the most current version of the spreadsheet at the time of compilation.

Baseline conditions were taken as reported by Envirotech (2019) following a site visit.

Post development conditions were taken from the Proposed Landscape Plan Aug 2019.

The ecology report for the site indicates the poor semi-improved grassland has a low distinctiveness and low condition.

Planting will be undertaken to retained edges, new trees planted and bulb planting undertaken.

Using the DEFRA Matrics calculations for habitat types, distinctiveness, condition, difficulty of creation and allowing suitable discount periods for the habitats to reach their target value, the site pre development is 5.94 Units, post development the site will be 5.22 Units, an ecological loss of 0.72 Units. On an area basis the site is therefore 12.12% worse ecologically post development than predevelopment.

The spreadsheet calculations are appended.

Yours Sincerely

Andrew Gardner BSc (Hons), MSc, MCIEEM, MRICS, CEnv, Dip NDEA

Director Envirotech

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Existing	Habitat Area (ha)	Hedgerow impact (km)	Connectivity Features (km)	Habitat Biodiversity Value	Hedgerow Biodiversity Value	Connectivity Biodiversity Value
Onsite Biodiversity Impact	1.98	0.00	0.00	5.94	0.00	0.00
Indirect Biodiversity Impact	0.00	0.00	0.00	0.00	0.00	0.00
Total habitat / linear features impacted	1.98	0.00	0.00	5.94	0.00	0.00
Retained / Created / Enhanced						
Onsite biodiversity retained	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Creation	1.98	0.00	0.00	5.22	0.00	0.00
Biodiversity retained and enhanced	0.00	0.00	0.00	0.00	0.00	0.00
Total biodiversity retained/enhanced	1.98	0.00	0.00	5.22	0.00	0.00
Trading Down	n/a	n/a	n/a	0.00	0.00	0.00
Biodiversity Impact	n/a	n/a	n/a	-0.72	0.00	0.00

Habitat Impacts	Loss	Gain	Impact	%age losses	Compensatory Unit loss	Indicative Offset (ha)	WCC Offset units	WCC Offset Contribution
Woodland Habitat	0.00	0.00	0.00					
Grassland Habitat	5.94	2.98	-2.96	100.00	-0.72	1.08	-0.72	£33,106
Wetland Habitat	0.00	0.00	0.00					
Other Habitat (incl. Built Env)	0.00	2.24	2.24					
Total	5.94	5.22	-0.72	100.00	-0.72	1.08	-0.72	£33,106
		Trading down	0.00					
			-0.72					

Hedgerow Impacts	Loss	Gain	Trading down	Impact	Unit loss	Indicative Offset (ha)	WCC Offset units	WCC Offset Contribution
Hedgerow	0.00	0.00		0.00				

SUMMARY

This development will result in -0.72 Habitat Biodiversity Units loss; 0 Hedgerow Units loss and 0 Connectivity Biodivesity Units loss

	Existing habitats on site Please enter <u>all</u> habitats within the site boundary		Habitat distinctiveness		Habitat condition		Habitats to be <u>retained</u> with no change within development		Habitats to be retained and enhanced within development		Habitats to be <u>lost</u> within development		
T. Note	code	Phase 1 habitat description	Habitat area (ha)	Distinctiveness	Score	Condition	Score	Area (ha)	Existing value	Area (ha)	Existing value	Area (ha)	Existing value
		Direct Impacts and retained habitats	()		А		В	С	$A \times B \times C = D$	E	$A \times B \times E = F$	G	$A \times B \times G = H$
	B6	Grassland: Poor semi-improved grassland	1.98	Medium-Low	3	Poor	1					1.98	5.94
		The second secon											
		Tota	1.98				Tota	0.00	0.00	0.00	0.00	1.98	
											Cita habitat h	adiversity velve	∑D + ∑F + ∑H 5.94
											Site habitat b	odiversity value	

		Proposed habitats on site (Onsite mitigation)		Target habitats					Time till target condit		rest	of creation / oration	Habitat biodiversity value
T. Note	code	Phase 1 habitat description	Area (ha)	Distinctiveness		Condition	Score		Time (years)		Difficulty	Score	
		Habitat Creation	N		0		Р			Q		R	$(N \times O \times P) / Q / R$
	n/a	Built Environment: Buildings/hardstanding	1.16	none	0	Poor	1		3 Years	1.1	Low	1	0.00
	B22	Grassland: Semi-improved neutral grassland	0.41	Medium	4	Good	3		3 Years	1.1	Medium	1.5	2.98
	n/a	Built Environment: Gardens (lawn and planting)	0.41	Low	2	Good	3		3 Years	1.1	Low	1	2.24
		T-10	1.00										
		Tota	1.98	1									
		Habitat Enhancement						Existing value S (= F)					((NxOxP)-S)/Q/R
		Tota	0.00								Trading down	correction value	0.00
		Tota	3.00	4									
											iabitat iviitigati	on Score (HMS)	
													HBIS = HMS - HIS
										Hab	itat Biodiversi	ty Impact Score	-0.72
										Perce	entage of biodive	ersity impact loss	12.12

	Loss	Gain	Impact
Woodland Habitat	0.00	0.00	0.00
Grassland Habitat	5.94	2.98	-2.96
Wetland Habitat	0.00	0.00	0.00
Other Habitat (including Built Environment)	0.00	2.24	2.24
Total	5.94	5.22	-0.72
		Trading down	0.00
_			-0.72