



**envirotech**

Ecological Consultants  
Environmental and Rural Chartered Surveyors

Your Ref:  
Our Ref: AWG/5947

Harry Tonge  
Steven Abbott Associates LLP  
Chartered Town Planners  
130 Highgate  
Kendal  
LA9 4HE

Monday, 13 January 2020

Dear Mr Tonge

**Re: ECOLOGICAL ENHANCEMENT RIMMINGTON CARAVAN PARK**

In respect of construction work to be undertaken at Rimmington Caravan Pak. I would provide the following which highlights details within the submitted planning documents.

#### **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.

Ecological valuation 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 Biodiversity Metric 2.0 published as a 'beta test' has been used in this assessment. This is an experimental calculation methodology and is currently subject to review and public testing.

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. The author is a Registered Valuer with the RICS and therefore is competent in a range of valuation techniques and procedures.



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Pre development conditions are taken from site surveys by Envirotech in 2019.

Post development conditions are taken from Planting Plan Sheet 1 and 2 (Oct 2019 Rev 0)

### **"Biodiversity Metric 2.0"**

We have utilised a spread sheet for calculating the biodiversity value of the site before and after "Biodiversity Metric 2.0 Calculation Tool Beta Test - December 2019 Update". This was the most current version of the spread sheet at the time of compilation.

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

Post development conditions were taken from Planting Plan Sheet 1 and 2 (Oct 2019 Rev 0)

Pre development, the ecology report for the site indicates the site comprises a species poor grassland with hedges and fences to its boundary. The closest match to habitat type on site is Grassland - Modified grassland. This has a low distinctiveness, most of the condition criteria are being failed so it has a poor condition.

Post development, broadleaf woodland will have a medium distinctiveness and will be good condition and take 32+ years to reach target condition.

Wet woodland will have a high distinctiveness and will be good condition and take 32+ years to reach target condition.

Urban - Artificial unvegetated, unsealed surface will have a very low distinctiveness and no condition and take 0 years to reach target condition.

Urban - Suburban/ mosaic of developed/ natural surface will have a low distinctiveness and be in fairly good condition within 4 years.

All habitats will be created on site.

Using the Biodiversity Metric 2.0 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 4.62 Units, post development the site will be 8.78Units, an ecological gain of 4.16Units. On an area basis the site is therefore **89.97% better ecologically post development than pre-development.**

All hedgerows on site will be retained but improved through gapping up/ replanting. Predevelopment hedges are valued at 1.63Units. Post development hedgerows are valued at 4.78Units, a gain of 3.16 units or 193%.

**The proposal delivers an ecological gain in respect of habitats and connectivity gain in respect of hedgerow enhancement under the Biodiversity Metric 2.0 Calculation Tool Beta Test - December 2019 Update.**

Yours Sincerely



Andrew Gardner BSc (Hons), MSc, MCIEEM, MRICS, CEnv  
Director Envirotech NW Ltd

<b>On-site baseline</b>	<i>Habitat units</i>	4.62
	<i>Hedgerow units</i>	1.63
	<i>River units</i>	0.00
<b>On-site post-intervention</b> (Including habitat retention, creation, enhancement & succession)	<i>Habitat units</i>	8.78
	<i>Hedgerow units</i>	4.78
	<i>River units</i>	0.00
<b>Off-site baseline</b>	<i>Habitat units</i>	0.00
	<i>Hedgerow units</i>	0.00
	<i>River units</i>	0.00
<b>Off-site post-intervention</b> (Including habitat retention, creation, enhancement & succession)	<i>Habitat units</i>	0.00
	<i>Hedgerow units</i>	0.00
	<i>River units</i>	0.00
<b>Total net unit change</b> (including all on-site & off-site habitat retention/creation)	<i>Habitat units</i>	4.16
	<i>Hedgerow units</i>	3.16
	<i>River units</i>	0.00
<b>Total net % change</b> (including all on-site & off-site habitat creation + retained habitats)	<i>Habitat units</i>	89.97%
	<i>Hedgerow units</i>	193.84%
	<i>River units</i>	0.00%

Habitats and areas				Habitat distinctiveness		Habitat condition		Ecological connectivity			Strategic significance			Suggested action to address habitat losses	Ecological baseline	
Ref	Broad Habitat	Habitat type	Area (hectares)	Distinctiveness	Score	Condition	Score	Ecological connectivity	Connectivity	Connectivity multiplier	Strategic significance	Strategic significance	Strategic position multiplier		Total habitat units	
1	Grassland	Grassland - Modified grassland	2.31	Low	2	Poor	1	Low	Unconnected habitat	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness or better habitat required	4.62	
2																
3																
4																
5																
Total site area ha			2.31												Total Site baseline	4.62

Post development/ post intervention habitats																		
Proposed habitat	Area (hectares)	Distinctiveness	Score	Condition	Score	Ecological connectivity			Strategic significance			Temporal multiplier		Difficulty multipliers		Habitat units delivered		
						Ecological connectivity	Connectivity	Connectivity multiplier	Strategic significance	Strategic significance	Strategic position multiplier	Time to target condition/years	Time to target multiplier	Difficulty of creation category	Difficulty of creation multiplier			
Woodland and forest - Other woodland; broadleaved	0.2	Medium	4	Good	3	High	Highly connected habitat	1.15	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	32+	0.320	Medium	0.67	0.59		
Woodland and forest - Wet woodland	0.02	High	6	Good	3	Low	Unconnected habitat	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	32+	0.320	Medium	0.67	0.08		
Urban - Artificial unvegetated, unsealed surface	0.22	V.Low	0	N/A - Other	0	N/A	Assessment not appropriate	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	0	1.000	Low	1	0.00		
Urban - Suburban/ mosaic of developed/ natural surface	1.87	Low	2	Fairly Good	2.5	Low	Unconnected habitat	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	4	0.867	Low	1	8.11		
Totals		2.31															Total Units	8.78

UK Habitats - existing habitats				Habitat distinctiveness		Habitat condition		Ecological connectivity			Strategic significance			Suggested action to address habitat losses	Ecological baseline	
Baseline ref	Hedge number	Hedgerow type	length KM	Distinctiveness	Score	Condition	Score	Ecological connectivity	Connectivity	Connectivity multiplier	Strategic significance	Strategic significance	Strategic position multiplier		Total hedgerow units	
1	1	Native Hedgerow	0.37	Low	2	Moderate	2	Medium	Moderately connected habitat	1.1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	1.628	
2																
3																
4																
5																
Total Site length/KM			0.37												Total Site baseline	1.63

Post development/ post intervention habitats																				
Proposed	Change in distinctiveness and condition				Length KM	Distinctiveness	Score	Condition	Score	Ecological connectivity			Strategic significance			Temporal multiplier		Difficulty Multipliers		Hedge units delivered
	Distinctiveness movement	Condition movement	Strategic significance	Strategic significance						Strategic position multiplier	Time to target condition/years	Time to target multiplier	Difficulty of enhancement Category	Difficulty of Enhancement Multiplier						
Native Species Rich Hedgerow	Low - Medium	Lower Distinctiveness Habitat - Good	0.37	Medium	4	Good	3	Medium	Moderately connected habitat	1.1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	10	0.700	Medium	0.67	3.16		
Total site length			0.37															3.16		