

## Q6.6 - APPENDIX 2 - OFFSETTING CALCULATIONS

## Offsetting Calculations

The habitats to be permanently lost were input into the developers offsetting calculator in the biodiversity planning toolkit <http://www.biodiversityplanningtoolkit.com/biodiversity.asp> provided by the Association of Local Government Ecologists. The calculator, metrics and underlying assumptions within the toolkit are directly based on the DEFRA guidance (*Biodiversity Offsetting Pilots. Guidance for developers. DEFRA, March 2012*).

Not all the phase 1 habitat survey codes are supported by the offsetting calculator, nor do they correlate with the broad categories identified in the landscape and ecology masterplan. However where habitat types have been combined (e.g. ponds and swamp, improved and semi-improved grassland) the distinctiveness criteria is the same for both habitats and therefore the multipliers applied by the calculator will be the same. Where combinations of habitat (i.e. trees and shrub/ scrub) have different values the calculation has been applied to the separate habitats and then summed.

Note the offset calculator is in biodiversity units not hectares.

Table 1

*Biodiversity Offsetting Calculation*

	Permanent loss in hectares	Offset calculator in biodiversity units	Notes
Trees & Shrubs/ scrub	5.7	42.74	8.58 units for lowland deciduous woodland (inc . 0.09ha mixed plantation) and 34.16 units for scrub. Woodland high and scrub moderate distinctiveness.
Grass & wild flora mix (for grassland losses)	7.93	15.86	Low distinctiveness
Pond	1.48	10.46	All wetland habitats entered as pond. Both Pond and swamp have high distinctiveness.
Other tall herb and fern-ruderal	1.26	2.53	Low distinctiveness
Cultivated/disturbed land-arable	12.73	25.46	Low distinctiveness
Cultivated/disturbed land-amenity grassland	0	0	Low distinctiveness
Cultivated/disturbed land-ephemeral/short perennial	0.2	0.4	Low distinctiveness
Bare ground	0.23	0.46	Low distinctiveness
<b>Total</b>	<b>29.53</b>	<b>97.91</b>	

The two principle multipliers within the developers offsetting calculator are habitat distinctiveness and habitat condition.

The distinctiveness is set by tables based on the DEFRA publication *Appendix 1 - Distinctiveness Bands for the Biodiversity Offsetting Pilot 2011*. The distinctiveness bands are predetermined and the value is applied automatically when the habitat type is selected. Habitats with high distinctiveness attract a multiplier of 6, moderate 4 and low distinctiveness 2 units (*Biodiversity Offsetting Pilots. Guidance for developers. DEFRA, March 2012*)

For habitat condition the multiplier is 3 for good condition, 2 for moderate and 1 for poor condition habitat. For most habitats the condition has been set as poor to reflect the disturbed or immature state of the habitats present within the project site. The exception is scrub habitat which has been assessed as moderate.

As with any metric based model the output is conditional on the inputs, which are in part open to disputation. The current assessment would indicate a

requirement for 97.34 biodiversity units. This assessment takes no account of the mitigation proposed in the landscape and ecology masterplan. Nor does it take into account the availability of offset providers trading in biodiversity units, or the multipliers applied to any such offset traders may be required when they attempt to provide offsets.