C.B.E. Consulfing

Biodiversity Impact Assessment Land off Cedar Drive Bourne Lincolnshire NGR TF08645 20825

## Assessment by Christopher Barker CEnv dipHort ACIEEM



# 1. Introduction

1.1 Site Description and Location

The site being assessed comprises part of a field of improved grassland which is accessed via a small plot of land from Cedar Drive, Bourne, Lincolnshire, centred at NGR TF08645 20825. The location of the site is shown on the plan within **Figure 1** and an aerial photograph has been provided within **Figure 2** to place the site in context.



## Figure 1: Site location.

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The defined site area was the subject of an Extended Phase 1 Habitat Survey prepared by CBE Consulting based on an inspection completed in August 2020 (report reference P2085 / 0820 – 01 dated 17 August 2020.

The defined site area comprises the eastern half of a field of improved grassland cut seasonally for hay / forage. It lies to the west of the Bourne with houses to three boundaries on the western edge of the village of Bourne. There is a public footpath defining the northern and southern boundaries of the site area. To the west is the remainder of the field of improved grassland beyond which is an extensive area of broadleaved woodland.

An application has been submitted to the Local Planning Authority to redevelop the existing site and use this land for residential housing. A development plan has been prepared as part of the application process. The Local Planning Authority have requested that a biodiversity impact assessment should be carried out for the site to determine the potential impact on biodiversity which could result from the proposed redevelopment.

The current biodiversity value of the land can be assessed and determined using the information within the Phase 1 Habitat Survey prepared by CBE consulting which identifies and classifies the habitat present within the site area. The biodiversity offset methodology

developed by Warwickshire County Council has been used to complete this assessment, the details of which are provided as Appendix 1 (separate appendix). A copy of the Phase 1 Habitat plan and the proposed development plan are provided within Appendix 2.



Figure 2: Site Contextual Aerial Photograph

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# 2. Phase 1 Habitat Report and Proposed Development.

2.1 Habitat descriptions

Within the 2020 Phase I Habitat Survey the following habitats were identified within the 6.8 hectare area assessed:

- Access with unimproved grassland 950m2
- Improved grassland 66810m2
- Field boundary hedgerows and trees 80m length / 240m2

Assessment of the site using the habitat survey plan has identified that the different habitat cover the calculated areas stated above within the site and these values have been used for assessment purposes.

## 2.2 Proposed development plan

The site area within the red line measures 6.8 hectares. The proposed development utilises land in the eastern part of the larger field, lying adjacent to the existing residential housing and an access is provided from Cedar Drive. The new development incorporates significant tree planting and landscaped areas around the margins of the new housing and a SWALE is to be created adjacent to the northern boundary. The area measurements below provided by the Planning Consultant have been used to help assess the habitats to be created after development of the land.

- 1. Total Site Area = 6.8 hectares = 68,000 m<sup>2</sup>
- 2. Total Site Area (under houses and roads after development) =  $3,272 \text{ m}^2$
- 3. Total Site Area laid to residential gardens = 12,545m<sup>2</sup>
- 4. Other (Landscaping, attenuation etc) =  $7,826m^2$
- 5. Retained as improved grassland = 38,260m2
- 6. Woodland edge planting habitat creation = 5,857m2
- 7. Retained hedgerow within site interior adjacent to Swale = 240m2

'Other landscaping 7,826m2' identified by the Architect is subdivided into the following habitat areas within the proposed development plan:

- a) Swale area seasonal inundation assumed to be seeded with a wetland grass mix (EM8) containing a range of wildflower species suitable for wet areas = 4000m2 hectares
- b) Wildflower neutral grassland (EM1) land around the western and northern margin of the development area =2,200m2
- c) Scattered Trees scatted trees around the margins of the development and swale area = 1,626m2.

A significant proportion of the survey area will be retained as improved grassland and used for fodder / sileage production. The boundary within the existing woodland area will be enhanced by planting a belt of native trees and shrubs along the edge to improve and enhance this.

The surface water attenuation area will be landscaped to create a permanent small pond with species rich grassland around this which may become seasonally inundated. There will be soe native tree and shrub planting incorporated into this area.

A belts of species rich neutral meadow grassland will be established around the northern, western and southern margin of the development area which will have 350m of new native species hedgerow and scattered trees planted to define the edge of this. Within the development an existing hedgerow will be retained to define the edge of the swale area.

2.3 Biodiversity Impact Calculation

The assumptions made within the biodiversity impact calculation are stated above based on the proposed layout and areas shown within the development plan.

The development plan as it is with the assumptions made above results in a net gain in calculated biodiversity units across this site area of 1.86 units and also a gain in hedgerow biodiversity units of 1.5. This increase in biodiversity arises principally from the creation of more diverse habitats replacing areas of improved grassland and the planting a shelter belt of trees and scrub along the existing woodland edge and the planting of new species rich hedgerows with native trees around the margin of the development area.

The calculation summary sheet is provided below. The full biodiversity calculation spreadsheet is provided as Appendix 1.

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## Biodiversity Impact Assessment Summary



### Site name: Cedar Drive, Bourne Planning reference number:

## to be copied from the BIA sheet

Existing	Habitat Area (ha)	Hedgerow impact (km)	Connectivity Features (km)	Habitat Biodiversity Value	Hedgerow Biodiversity Value	Connectivity Biodiversity Value			
Onsite Biodiversity Impact	2.93	0.00	0.00	40.90	2.40	0.00			
Indirect Biodiversity Impact	0.00	0.00	0.00	0.00	0.00	0.00			
Total habitat / linear features impacted	2.93	0.00	0.00	40.90	2.40	0.00	CAUTION - Destruction of		
Retained / Created / Enhanced							e.g. lowland meadow or species-		
Onsite biodiversity retained	3.87	0.24	0.00	23.32	0.00	0.00	rich hedgerows, may be against		
Onsite Creation	2.93	0.35	0.00	19.44	1.50	0.00	local policy. Has the mitigation		
Biodiversity retained and enhanced	0.00	0.00	0.00	0.00	0.00	0.00	hierarchy been followed, can		
Total biodiversity retained/enhanced	6.80	0.59	0.00	42.76	1.50	0.00	impact to these habitats be		
Trading Down	n/a	n/a	n/a	0.00	0.00	0.00	avoided?		
Biodiversity Impact	n/a	n/a	n/a	1.86	1.50	0.00			

Habitat Impacts	Loss	Gain	Impact	%age losses	Compensatory Unit loss	Indicative Offset (ha)	WCC Offset units	WCC Indicative Offset Contribution
Woodland Habitat	0.00	5.02	5.02					
Grassland Habitat	17.58	1.60	-15.98					
Wetland Habitat	0.00	6.00	6.00					·
Other Habitat (incl. Built Env)	0.00	6.82	6.82					
Total	17.58	19.44	1.86	0.00	0.00	0.00	0.00	02
		Trading down	0.00					
			1.86					

Hedgerow	0.00	1.50		1.50					
Hedgerow Impacts	Loss	Gain	Trading down	Impact	Unit loss	Offset (km)	units	Contribution	

SUMMARY This development will result in 1.86 Habitat Biodiversity Units gain; 1.5 Hedgerow Units gain and 0 Connectivity Biodivesity Units loss



For any questions with regard to biodiversity impact and this development please contact Warwickshire County Council Ecological Services: email: planningecology@warwickshire.gov.uk or telephone 01926 418060

## Full Assessment Contained within a separate Appendix 1



Habitat Plan August 2020

