aspect ecology Technical Briefing Note

Ref: 1005971 BIA vf4

Project: Land North East of M42 Junction 10

Technical Briefing Note: Biodiversity Impact Assessment

Date: November 2021

1. Background

- 1.1. Aspect Ecology is advising Hodgetts Estates in respect of ecological issues relating to land northeast of M42 junction 10. An outline planning application is being submitted for industrial development of the site.
- 1.2. To inform the application, Aspect Ecology has undertaken a biodiversity impact assessment to determine the level of biodiversity net gain that could be achieved under the scheme. This note sets out the results of this assessment.

2. Methodology

- 2.1. To quantify the level of biodiversity net gain that can be delivered under the proposed development, the change in biodiversity value resulting from the scheme has been calculated using the Biodiversity Impact Assessment calculator tool (in MS Excel spreadsheet format) in use by Warwickshire County Council (the Council's preferred metric) as implemented across the sub-region through the Coventry, Solihull and Warwickshire Sub Regional Green Infrastructure.
- 2.2. To establish the habitat baseline, broad habitat areas have been identified based on the survey work undertaken at the site (see Appendix 5971-01/BIA1), with habitat condition and connectivity scores assigned based on the information set out in the associated Guidance Document¹, previous discussions with WCC officers and professional judgement. The 'biodiversity impact' of the proposed development has been calculated using the most recent version (v19.1) of the spreadsheet tool, based on the current proposed layout.
- 2.3. As the application is in outline, a detailed proposals plan is not available to assess in full the postdevelopment habitat creation and enhancement. Accordingly, the Parameters Plan and Illustrative Landscape Design Plan (see Appendix 5971-01/BIA2) have been used to identify where areas of habitat creation and enhancement will be provided, with specific areas of individual land treatments provided by the landscape architects based on these drawings. As can be seen on the parameters plan and illustrative landscape design plan, the proposals include significant areas of open space, planting, landscaping and drainage features, together with an internal access road. Indicative figures have been used for these habitat areas, and these will be refined at the detailed design and reserved matters stages, once detailed landscaping plans are available for the site. In addition, a number of additional enhancement measures are proposed

¹ Warwickshire County Council (February 2018) *Guide to Warwickshire, Coventry and Solihull Biodiversity Offsetting Biodiversity Impact Assessment Calculator v19.0 for Ecological Consultants*



within the wider offsite areas under the applicant's control located east of the site boundary, as identified within the illustrative landscape design plan for the site (see Appendix 5971-01/BIA2), which have therefore also been included within the assessment.

2.4. Calculations have also taken linear features (namely hedgerows) into account, with measurements of the existing hedgerow lengths compared to retained and proposed new hedgerow lengths.

3. Results

3.1. The results of the Biodiversity Impact (Net Gain) Assessment are detailed below and included as printouts at Appendix 5971-01/BIA3 for ease of reference, whilst the completed spreadsheet tool is attached in the original MS Excel (.xlsm) format for completeness.

<u>Habitat Areas</u>

- 3.2. As set out within the attached BIA tool, based on the parameters plan, illustrative landscape design plans and associated information and assumptions set out, the calculator tool shows an increase (as calculated) in biodiversity value 'score' (gain) of 19.26 units.
- 3.3. As such, in line with the information provided to inform the outline planning permission, based on the consideration with the standard BIA metric tool and associated assumptions and limitations, it is considered that a minimum 'net gain' in biodiversity value (as calculated using the biodiversity offsetting metric) of approximately 30.3% (based on the existing site 'value') would be achievable under the proposed parameters and no further compensation measures or offset provision would therefore appear to be required at this stage. Indeed, it is proposed that detailed design of the soft landscaping proposals at the appropriate stage focus on maximising biodiversity value, including habitat design, management and individual faunal benefits through additional faunal enhancement measures in line with the forthcoming Design Guide for the site resulting in substantial opportunities for environmental enhancement (particularly noting the existing, largely featureless arable nature of the site).

Linear Features

- 3.4. Based on the parameters plan, it is likely that the Proposal will result in the necessary loss of approximately 40m of hedgerow, in order to facilitate the permitted development, including in relation to relevant highways visibility splays and associated considerations. However, considerable areas of new planting are proposed, such that it is anticipated that additional lengths of new connected hedgerow habitats within the site will provide suitable compensation in line with offsetting guidance (and not taking into account improved management of existing hedgerows within the new open space areas). Indeed, as part of the proposed offsite enhancement measures, considerable lengths of new native hedgerow are included within the proposed illustrative landscape design plan for the site (see Appendix 5971-01/BIA2), which have therefore been incorporated within the current calculations..
- 3.5. Linear habitat calculations are set out in the linear impact assessment worksheet within the BIA spreadsheet tool, based on the above considerations. Based on the calculated hedgerow losses and associated proposed new hedgerow planting, the proposals would appear to result in a calculated net gain of 9.66 hedge biodiversity impact units (representing a gain of approximately 158% based on the existing calculated hedgerow value at the site).



4. Overall BIA Consideration

- Overall, on the basis of the above consideration in relation to the WCC offsetting metric, 4.1. including local guidance, it can be concluded that, subject to appropriate detailed landscape design and planting information, along with the provision of the measures set out (including offsite enhancement measures within the adjacent land under the control of the applicant, as detailed at the proposed illustrative landscape design plan), a substantial calculated increase in in biodiversity units within the site would be achievable under the proposed parameters, with an indicative 'score' of approximately +19.26 'habitat biodiversity units' (representing an identified gain of approximately 30.3%) and +9.66 'linear biodiversity units' (representing an identified gain of approximately 158%) identified based on the information and assumptions set out. The vast majority of habitats at the site that are to be affected are of extremely low quality (intensive arable land), the loss of which to the proposals (as previously set out) would be of no wider ecological significance. Indeed the detailed design of the substantial landscaped areas in accordance with the proposed Design Guide, along with the proposed additional enhancement measures within the adjacent offsite land under the control of the applicant would result in significant environmental enhancement, including specific benefits for a range of faunal species and benefits to wildlife in the long term.
- 4.2. In addition, in line with the information set out elsewhere, a number of faunal enhancements are proposed under the scheme, including provision of bird and bat boxes, insect hotels, and refugia/hibernacula, along with wildlife interpretation boards, which together are anticipated to provide further gains in biodiversity at the site. It is not possible to quantify faunal enhancement measures within the WCC calculator and accordingly these are therefore considered additional to the calculated Net Gain figures using the tool.
- 4.3. On this basis (and subject to detailed design, including the final detailed landscape planting information at the appropriate stage and implementation of the permitted scheme, including long term management), the proposals are considered to result in a substantial calculated net gain in biodiversity and there would appear to be no requirement for further measures or biodiversity offsetting in regard to the proposals. The proposals would therefore appear to be fully in line with relevant planning policy requirements in regard to biodiversity net gain, including in particular Policy LP16 within the North Warwickshire Local Plan.



Appendix 5971-01/BIA1:

Existing Habitats and Ecological Features Plan



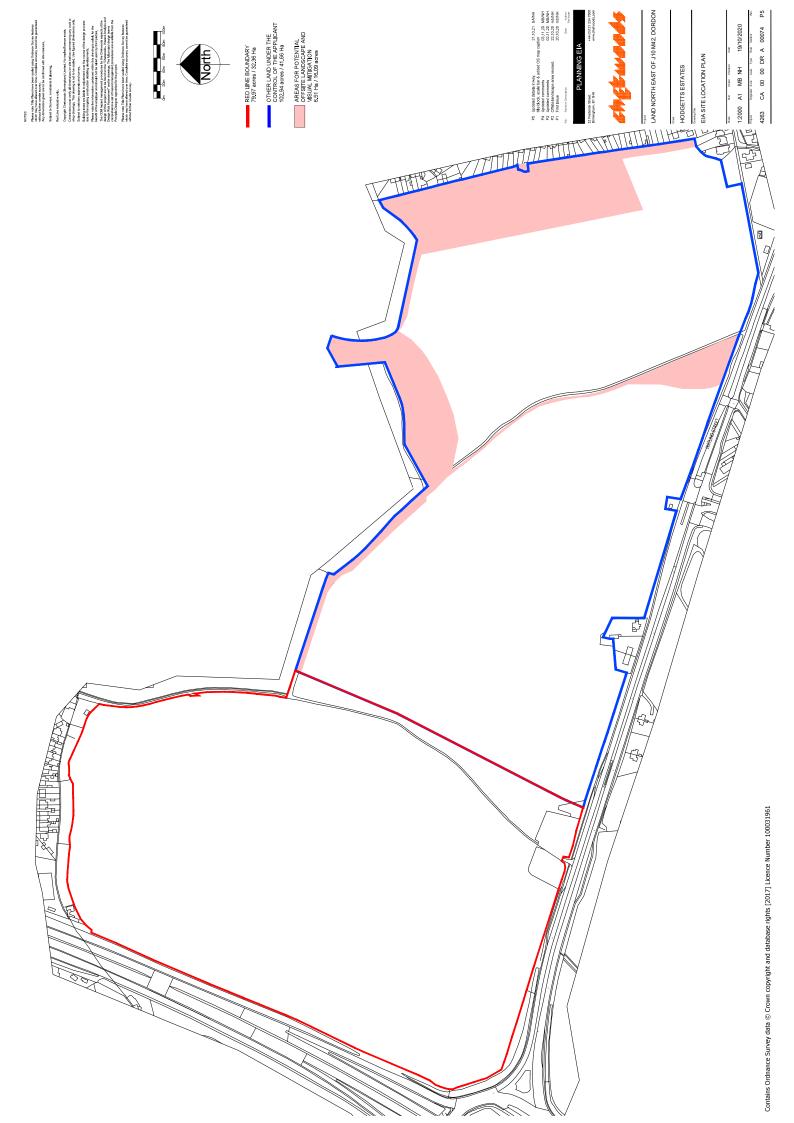
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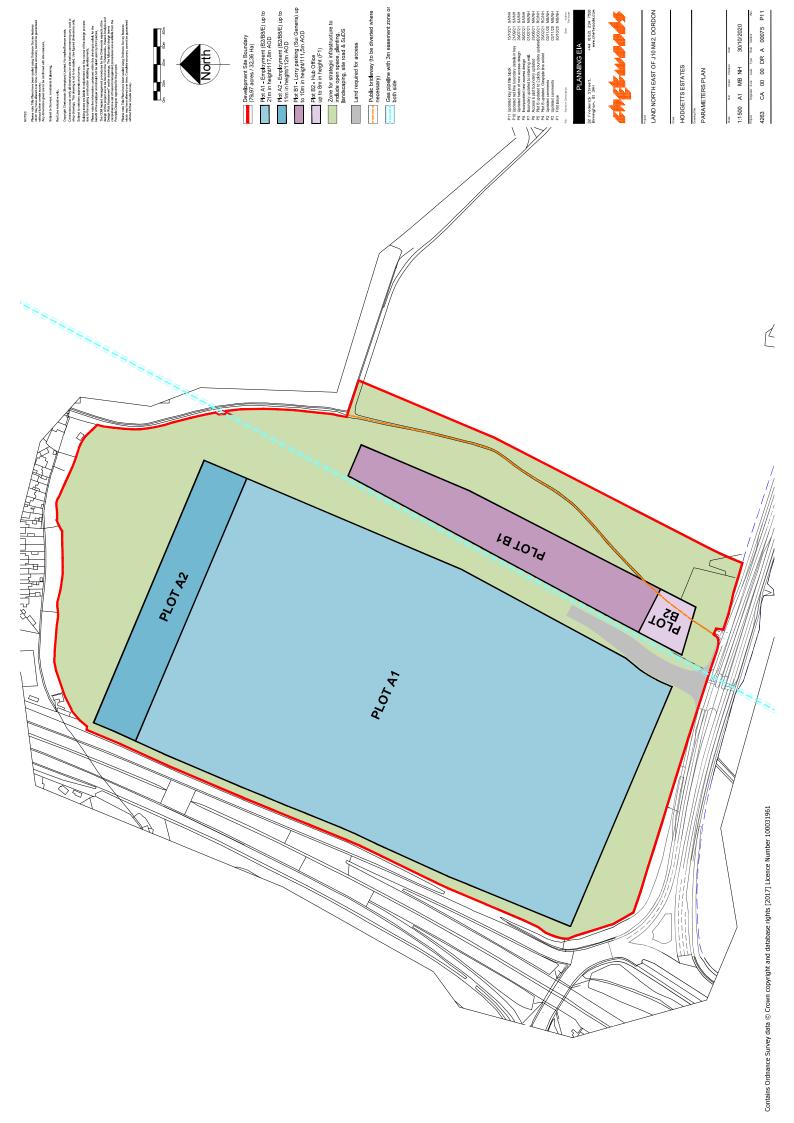


Appendix 5971-01/BIA2:

Proposed Scheme Plans:

Parameters Plan EIA Site Location Plan Illustrative Landscape Design Plan









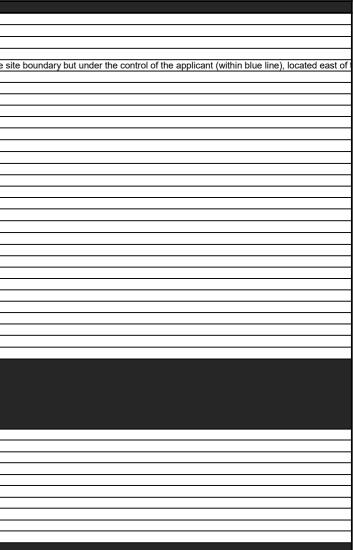
Appendix 5971-01/BIA3:

Completed WCC BIA Tool Pages

Warwickshire, Coventry & Solihull - Habitat Impact Assessment Calculator

KEY				Please fill in both tables
	No action required			Please do not edit the formulae or structure
	Enter value	Local Planning Authority:	North Warwickshire Borough Council	To condense the form for display hide vacant rows, do not delete
	Drop-down menu	Site name:	Land at M42 J10	them
	Calculation	Planning application reference number:		If additional rows are required, or to provide feedback on the
	Automatic lookup	Assessor:	Aspect Ecology CL	calculator please contact WCC Ecological Services 01926
	Automatic Condition setting	Date:	15/11/2021	418060
	Result		-	
	-			Habitat Biodiversity Value

		Existing habitats on site Please enter <u>all</u> habitats within the site boundary		Habitat dist	inctiveness	Habitat o	ondition	no chan	e <u>retained</u> with age within opment	enhanc	e retained and <u>ed</u> within opment		o be <u>lost</u> within elopment	
T. Note	code	Phase 1 habitat description	Habitat area (ha)	Distinctiveness	Score	Condition	Score	Area (ha)	Existing value	Area (ha)	Existing value		Existing value	Comment
		Direct Impacts and retained habitats			A		В	С	$A \times B \times C = D$	E	$A \times B \times E = F$	G	A x B x G = H	
	J11	Other: Arable	29.68	Low	2	Poor	1			8.37	16.74	21.31	42.62	
	n/a	Built Environment: Buildings/hardstanding	0.41	none	0	Poor	1					0.41	0.00	
	B4	Grassland: Improved grassland	2.27	Low	2	Poor	1					2.27	4.54	
	11.1	Other: Arabia	5.45	Low	2	Deer	1			2.05	4.10	3.40	6.80	Additional land outsite the si
	J11	Other: Arable	0.40	LOW	2	Poor				2.00	4.10	3.40	0.00	Additional land outsite the si
		Tota	I 37.81	1			Tota	0.00	0.00	10.42	20.84	27.39		J
											Site babitat b	iodiversity value	$\Sigma D + \Sigma F + \Sigma H$	
		Indirect Negative Impacts						Value of loss fr	rom indirect impa	acte	Sile Habilat b	iouiversity value	74.80	
Be	fore/afte	Including off site habitats						K x A x B		1013				
	impac		к					= Li, Lii	Li - Lii					
	Before	9												
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			0.00						0.00		Habitat Imp	act Score (HIS)		
										L			55.50	



		Proposed habitats on site (Onsite mitigation)		Target habitats		Target habit				get condition	resto	of creation / oration	Habitat biodiversity value	
T. Note	code	Phase 1 habitat description	Area (ha)	Distinctiveness	Score	Condition	Score		Time (years)	Score	Difficulty	Score		Comment
		Habitat Creation	N		0		Р			Q		R	(N x O x P) / Q / R	
	n/a	Built Environment: Buildings/hardstanding	20.10	none	0	Poor	1		3 Years	1.1	Low	1	0.00	
	B22	Grassland: Semi-improved neutral grassland	2.14	Medium	4	Moderate	2	1	15 years	1.7	Medium	1.5	6.71	
	A22	Woodland: Scattered scrub	0.57	Medium	4	Good	3	1	15 years	1.7	Low	1	4.02	
		Wetland: Inundation vegetation	1.14	High	6	Moderate	2	1	3 Years	1.1	Low	1	12.44	
	J14	Other: Introduced shrub	0.04	Low	2	Poor	1		3 Years	1.1	Low	1	0.07	
								1						
	A5	Woodland: Orchard	3.40	High	6	Moderate	2		10 years	1.4	Low	1	29.14	Additional offsite enhancem
				Ť										
								1						
								1						
		Tota	27.3	9										
		Habitat Enhancement						Existing value S (= F)	:				((NxOxP)-S)/Q/R	
	A112	Woodland: Broad-leaved plantation	8.37	Medium	4	Moderate	2	16.74	32+ years	3	Low	1	16.74	In line with WCC standard p
	A112	Woodland: Broad-leaved plantation	2.05	Medium	4	Moderate	2	4.10	32+ years	3	Low	1	4.10	Additional offsite enhancem
		Tota	10.42	2								correction value		
											Habitat Mitigati	on Score (HMS)	73.22	
													HBIS = HMS - HIS	
										На	bitat Biodiversi	ty Impact Score	19.26	Gain
										Perce	entage of biodive	ersity impact loss	10.20	
											sinage of biodive	and a mipuot lood		1

s Gain

		LOSS	Gain	Impact
	Woodland Habitat	0.00	54.00	54.00
	Grassland Habitat	4.54	6.71	2.17
	Wetland Habitat	0.00	12.44	12.44
Other Habitat (including	Built Environment)	49.42	0.07	-49.35
	Total	53.96	73.22	19.26
			Trading down	0.00
	-			19.26

ement Measures (see Proposed Illustrative Landscape Design)

d position, new native woodland created over existing arable land to provide enhanced ement Measures (see Proposed Illustrative Landscape Design). In line with WCC stan

Warwickshire, Coventry & Solihull - Hedge Impact Assessment Calculator

Total

KEY	
	No action required
	Enter value
	Drop-down menu
	Calculation
	Automatic lookup
	Result

This sheet calculates the impacts to hedges and lines of trees in and around the

Please fill in both tables Please do not edit the formulae or structure

	No action required		This sheet calcula	ates the impacts	to hedges and	lines of trees in	and around the									To condense t	he form for displ	ay hide vacant		
	Enter value		site.													rows, do not d			1	
	Drop-down menu															If additional ro	ws are required,			
	Calculation		These units are n	ot transferrable a	as compensatio	n for either the H	labitat or									or to provide fi	edback on the c	alculator		
	Automatic lookup		Connectivity Impa	act Assessment	scores.											please contact	t WCC Ecologica	I Services		
	Result																		-	_
																Hedgerow Biodiversity Value		ie		1
															features to be	Hedgerow Biodiversity Value Hedgerow features to be retained and <u>enhanced</u> within develops			ures to be lost	
	Existing Hedgerow features on site		Hedgerow dis	stinctiveness				Hedge	row condition a	assessments				retained wi	ith no change	retained a	nd enhanced	within development		
														within de	evelopment	within de	evelopment	within dev	elopinent	
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	Fi	eature			A1	A2	B1	B2	C1	C2	D1	D2	Condition							Comment
Note cod		ngth (km)	Distinctiveness										Score	Length (km)	Existing value	Length (km)	Existing value	Length (km)	Existing value	
	Direct Impacts and retained features			A											A x B x C = D	E	A x B x E = F		A x B x G = H	
n/a		0.40	Low	2	Pass	Pass	Pass	Pass	Pass	Fail	Pass	Fail	3	0.36	2.16			0.04	0.24	4
n/a	Hedges: non species rich hedge	0.04	Low	2	Pass	Pass	Pass	Fail	Pass	Fail	Pass	Pass	3	0.04	0.25					
n/a	Hedges: species rich hedge	0.29	Medium	4	Pass	Pass	Pass	Pass	Pass	Fail	Pass	Pass	3	0.29	3.47					4
																				4
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	Total	0.73											Totals	0.69	5.88	0.00	0.00	0.04	0.24	
																			ΣD + ΣF + ΣH	
																	-			
																	Site Hedge	Biodiversity Value	6.12	4
	Indirect Negative Impacts													Value of loss f	rom indirect imp	acts				
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im		к												= Li, Lii	Li - Lii					
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0.00 M HS = J + M Hedge Impact Score (HIS) 0.24

		Proposed hedge features on site (Onsite mitigation)		Target hedge d	listinctiveness		Hedgerow condition assessments					Time till target condition Difficulty of creation / restoration		of creation / oration]					
T. Not	e code	Phase 1 habitat description	Length (km)	Distinctiveness	Score	A1	A2	B1	B2	C1	C2	D1	D2	Condition Score		Time (years)	Score	Difficulty	Score	Linear biodiversity value	Comment
		Hedgerow Creation	N		o										1		0		R	(N x O x P) / Q / R	
	n/a	Hedges: species rich hedge with trees	1.10	High	6	Pass	Pass	Pass	Pass	Page	Pass	Pass	Pass	3		20 years		Low	1	9,90	
	Teu		1.10	11911		1 455	1 455	1 455	1 435	1 455	1 455	1 455	1 455	<u> </u>		20 years		2011		3.30	
																					l
-																					
		Total Hedgerow Enhancement	1.10	1											Existing value S (= F)	•				((N×O×P)- S) /Q/R	
															S(=F)					S) /Q/R	
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																	rercentage of lif	iear impactioss			

KEY	
	No action required
	Action required
	Drop-down menu
	Calculation
	Automatic lookup
	Overall Gain
	Overall Loss



Site name: Land at M42 J10 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	27.39	0.04	0.00	74.80	6.12	0.00
Indirect Biodiversity Impact	0.00	0.00	0.00	0.00	0.00	0.00
Total habitat / linear features impacted	27.39	0.04	0.00	74.80	6.12	0.00
Retained / Created / Enhanced						
Onsite biodiversity retained	0.00	0.69	0.00	0.00	0.00	0.00
Onsite Creation	27.39	1.10	0.00	52.38	9.90	0.00
Biodiversity retained and enhanced	10.42	0.00	0.00	41.68	0.00	0.00
Total biodiversity retained/enhanced	37.81	1.79	0.00	94.06	9.90	0.00
Trading Down	n/a	n/a	n/a	0.00	0.00	0.00
Biodiversity Impact	n/a	n/a	n/a	19.26	9.66	0.00

Habitat Impacts	Loss	Gain	Impact	%age losses	Compensatory Unit loss	Indicative Offset (ha)	WCC Offset units	WCC Indicative Offset Contribution	County Cour is currently
Woodland Habitat	0.00	54.00	54.00						transferring
Grassland Habitat	4.54	6.71	2.17						'Other' habita
Wetland Habitat	0.00	12.44	12.44						loss to Wetla Creation
Other Habitat (incl. Built Env)	49.42	0.07	-49.35			Transferred to \	Netland		Creation
Total	53.96	73.22	19.26	0.00	0.00	0.00	0.00	£0	
		Trading down	0.00			_	-	-	-
			19.26						
									_

Hedgerow Impacts	Loss	Gain	Trading down	Impact	Unit loss	Indicative Offset (km)	WCC Offset units	WCC Offset Contribution
Hedgerow	0.24	9.90		9.66				

SUMMARY

This development will result in 19.26 Habitat Biodiversity Units gain; 9.66 Hedgerow Units gain and 0 Connectivity Biodivesity Units loss

80 **Provisioning Services** 60 200 150 40 Provisioning Existing 100 20 Regulating 50 Euture 0 Cultural 0 Gain/Los Exiting After ain/loss ,0005 005 -50 -20 Nild -100 2-350 -40 -200 -60 **Cultural Services Regulating Services** 80 70 60 50 40 30 20 10 0 80 70 60 50 40 30 20 10 0 Existing Existing Future Gain/Loss R-Water puffication R-Soil Hoston Gain/Loss Regulating R-Flood Protec CIntellectural c.Spiritual C Physical Cultural R.Clin R Air dur R. Poli R. Pest C Aesthe

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

ECOSYSTEM SERVICES ANALYSIS

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