

# Technical Briefing Note

Ref: 1005971 BIA vf5

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Project: Land North East of M42 Junction 10

## Technical Briefing Note: Biodiversity Impact Assessment

Date: February 2023

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### 1. Background

- 1.1. Aspect Ecology is advising Hodgetts Estates in respect of ecological issues relating to land north-east 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. In addition, following submission of the application (ref: PAP/2021/0663) and receipt of consultation comments a number of minor amendments to the proposals and associated submitted information have been made in order to address officer comments and accordingly, the biodiversity impact assessment has been updated to reflect the updated position. This note sets out the results of this (updated) biodiversity impact assessment in order to inform the application.

### 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 Document<sup>1</sup>, 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 post-development 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

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

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 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.

#### Habitat Areas

- 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 16.99 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 26.5% (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 19.83 hedge biodiversity impact units (representing a gain of approximately 298% based on the existing calculated hedgerow value at the site).

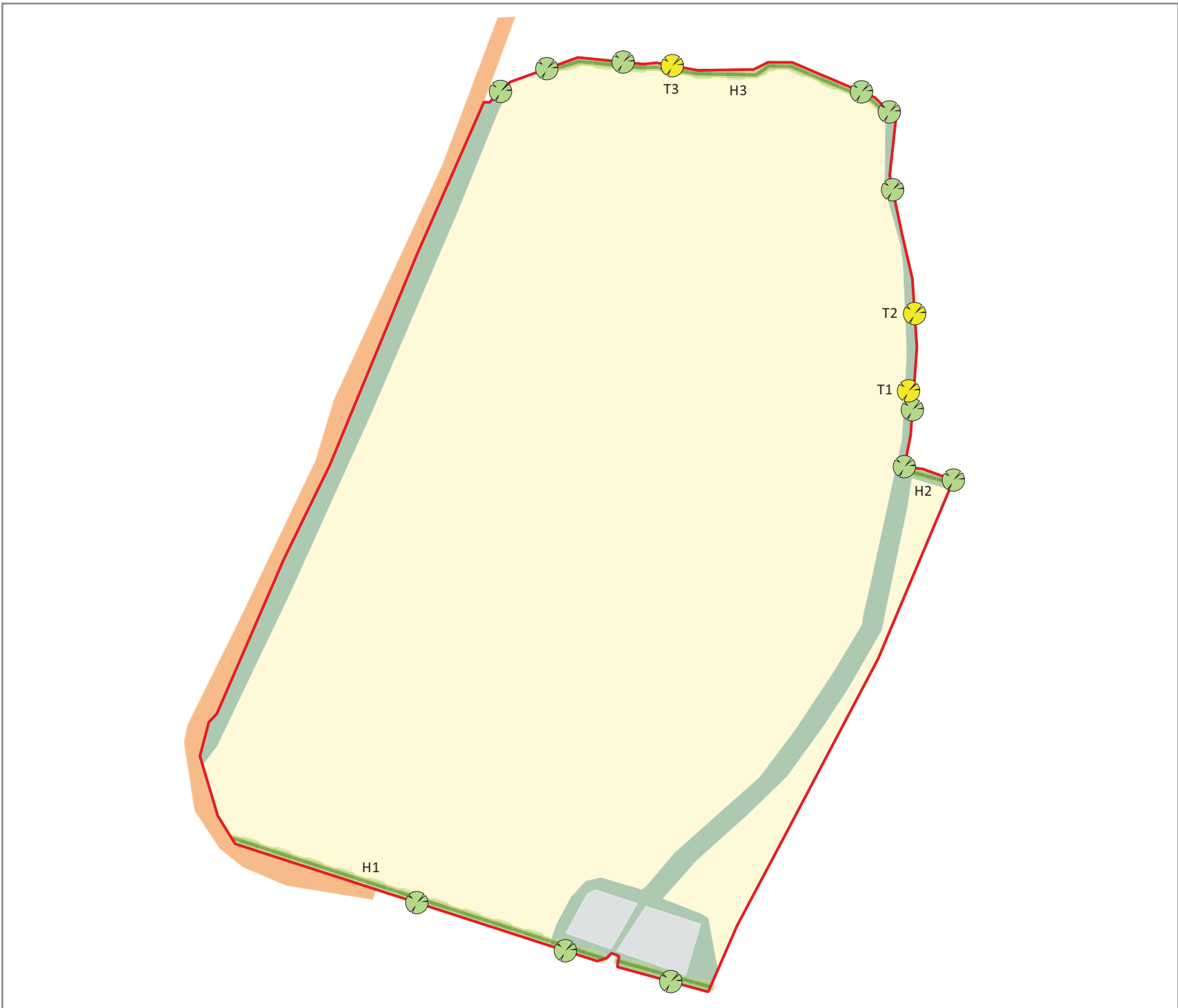
#### **4. Overall BIA Consideration**

- 4.1. Overall, on the basis of the above consideration in relation to the WCC offsetting metric, 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 biodiversity units within the site would be achievable under the proposed parameters, with an indicative 'score' of approximately +16.99 'habitat biodiversity units' (representing an identified gain of approximately 26.5%) and +19.83 'linear biodiversity units' (representing an identified gain of approximately 298%) 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.









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## Appendix 5971-01/BIA1:

Existing Habitats and Ecological Features Plan



Key:

-  Site Boundary
-  Arable
-  Grassland, Tall Herb, Bramble and Scattered Scrub
-  Hardstanding
-  Offsite Scrub
-  Hedgerow
-  Tree with Low Potential to Support Roosting Bats
-  Tree



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Land at J10, M42, North  
 Warwickshire  
 Habitats and Ecological Features

5971/ECO3



December 2020

PROJECT  
 TITLE  
 DRAWING NO.  
 REV  
 DATE

## Appendix 5971-01/BIA2:

Proposed Scheme Plans:

*Parameters Plan*

*EIA Site Location Plan*

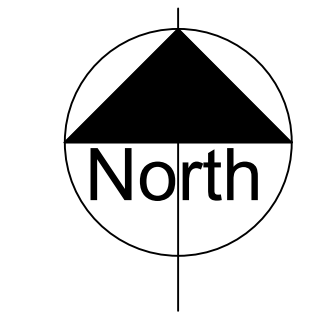
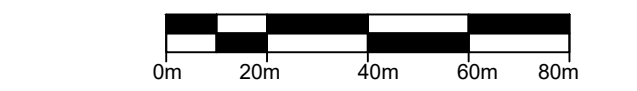
*Illustrative Landscape Design Plan*





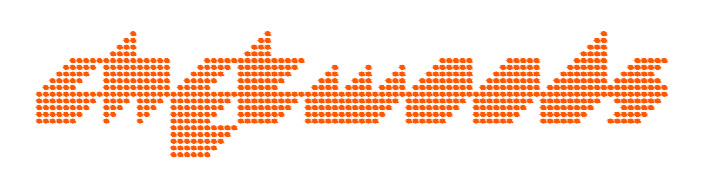


**NOTES:**  
 Copyright Chetwoods (Birmingham) Limited. No implied licence exists.  
 Contractors must verify all dimensions on site before commencing any work or their drawings. This drawing is not to be scaled. Use figured dimensions only. Subject to statutory approvals and survey.  
 Building areas are liable to adjustment over the course of the design process due to the ongoing construction detailing developments.  
 Please note the information contained within this drawing is solely for the benefit of the employer and should not be relied upon by third parties.  
 The CDM hazard management procedures for the Chetwoods aspects of the design of this project are to be found on the "Chetwoods - Hazard Analysis and Design Risk Assessment" and/or drawings. The full project design team comprehensive set of hazard management procedures are available from the Principle Designer appointed for the project.  
 Please note Title Plans have been scaled using Ordnance Survey features which may have altered over time. Complete accuracy cannot be guaranteed without further on-site survey.  
 Any dimensions given are to be confirmed with site measure.



- Development Site Boundary (79.97 acres / 32.36 Ha)
- Plot A1 - up to 117.8m AOD
- Plot A2 - up to 113m AOD
- Plot B1 - up to 111m AOD
- Plot B2 - up to 102m AOD
- Zone for green infrastructure to include open space, planting, landscaping, site road, on-site connectivity enhancements & SuDS
- Land required for access
- Public bridleway (to be diverted where necessary)
- Gas pipeline with 3m easement zone on both side

Rev	Revision Description	Date	Author	Reviewer
<b>PLANNING EIA</b>				
32 Frederick Street, Birmingham, B1 3HH			+44 (0)121 234 7500 www.chetwoods.com	



Project  
**LAND NORTH EAST OF J10 M42, DORDON**

Client  
**HODGETTS ESTATES**

Drawing Title  
**PARAMETERS PLAN**

Scale	Size	Drawn	Checked	Date			
1:1500	A1	MB	NH	30/10/2020			
Project	Originator	Zone	Level	Type	Rate	Number	Rev.
4263	CA	00	00	DR	A	00075	P18





- LEGEND**
-  EXISTING HEDGEROW
  -  EXISTING CONTOURS
  -  PROPOSED DRAINAGE BASIN
  -  PROPOSED TREE PLANTING
  -  PROPOSED ORCHARD TREE PLANTING
  -  PROPOSED REINFORCEMENT / NEW NATIVE HEDGEROWS
  -  PROPOSED ORNAMENTAL PLANTING
  -  PROPOSED SHRUB PLANTING
  -  PROPOSED WET GRASSLAND AND REED BEDS
  -  PROPOSED MILD FLOWER MEADOW
  -  PROPOSED SPECIES-RICH GRASSLANDS
  -  AGRICULTURAL LAND TO BE RETAINED
  -  OPEN SPACE TRANSFER DESIGNATION
  -  PROPOSED WAREHOUSES
  -  PROPOSED OFFICE HUB
  -  PROPOSED MAIN ROADS
  -  PROPOSED MINOR ROADS
  -  PROPOSED PARKING
  -  PROPOSED FOOTWAYS / CYCLEWAYS
  -  EXISTING / CONVERTED PUBLIC RIGHTS OF WAY
  -  PROPOSED RECREATIONAL ROUTES
  -  PROPOSED TRIM TRAIL



MA2 JUNCTION 10

**ILLUSTRATIVE LANDSCAPE DESIGN PLAN**





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## Appendix 5971-01/BIA3:

Completed WCC BIA Tool Pages





Key:

- Site Boundary
- Survey Area
- Arable
- Improved Grassland, Scattered Scrub & Ruderal Vegetation
- Hardstanding
- Off-site Arable
- Woodland
- Hedgerow
- Off-site Hedgerow



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<p>Land at J10, M42, North Warwickshire Pre-development Habitat Measurements</p>	<p>PROJECT TITLE DRAWING NO. REV DATE</p>
<p>5971/BNG1 B/JP October 2022</p>	<p>5971/BNG1 B/JP October 2022</p>







- Key:**
- Site Boundary
  - Off-site Land
- Proposed Habitats within the Site**
- Developed land; Sealed surface (19.7ha)
  - Wildflower Grassland & Scattered Scrub (2.71ha)
  - New Woodland (8.19ha)
  - Introduced Shrub (0.77ha)
  - Attenuation Basin (0.77ha)
  - Retained Hedgerow (0.75km)
- Proposed Off-site Habitats**
- New Woodland (2.51ha)
  - Orchard (3.4ha)
  - Proposed Native Hedgerow with Trees (2.23km)
  - Retained Hedgerow (Off-site) (2.34km)

**aspect ecology**

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Land at J10, M42, North Warwickshire	PROJECT
Post-development Habitat Measurements	TITLE
5971/BNG2	DRAWING NO.
C/JP	REV
October 2022	DATE





Site name: Land at M42 J10

Planning reference number: PAP/2021/0663

	Habitat Area (ha)	Hedgerow impact (km)	Connectivity Features (km)	Habitat Biodiversity Value	Hedgerow Biodiversity Value	Connectivity Biodiversity Value
<b>Existing</b>						
Onsite Biodiversity Impact	27.35	0.04	0.00	76.03	6.66	0.00
Indirect Biodiversity Impact	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total habitat / linear features impacted</b>	<b>27.35</b>	<b>0.04</b>	<b>0.00</b>	<b>76.03</b>	<b>6.66</b>	<b>0.00</b>
<b>Retained / Created / Enhanced</b>						
Onsite biodiversity retained	0.00	0.75	0.00	0.00	0.00	0.00
Onsite Creation	27.35	2.23	0.00	50.22	20.07	0.00
Biodiversity retained and enhanced	10.70	0.00	0.00	42.80	0.00	0.00
<b>Total biodiversity retained/enhanced</b>	<b>38.05</b>	<b>2.98</b>	<b>0.00</b>	<b>93.02</b>	<b>20.07</b>	<b>0.00</b>
<b>Trading Down</b>	n/a	n/a	n/a	0.00	0.00	0.00
<b>Biodiversity Impact</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>16.99</b>	<b>19.83</b>	<b>0.00</b>

Habitat Impacts	Loss	Gain	Impact	%age losses	Compensatory Unit loss	Indicative Offset (ha)	WCC Offset units	WCC Indicative Offset Contribution
Woodland Habitat	1.00	55.55	54.55					
Grassland Habitat	3.54	6.27	2.73					
Wetland Habitat	0.00	8.40	8.40					
Other Habitat (incl. Built Env)	50.09	1.40	-48.69			Transferred to Wetland		
<b>Total</b>	<b>54.63</b>	<b>71.62</b>	<b>16.99</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>£0</b>
		Trading down	0.00					
			16.99					

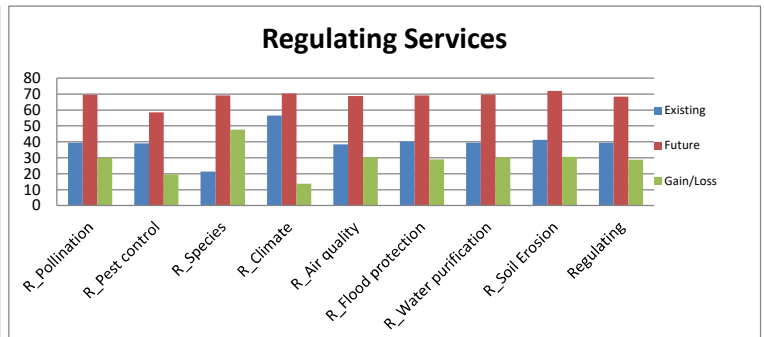
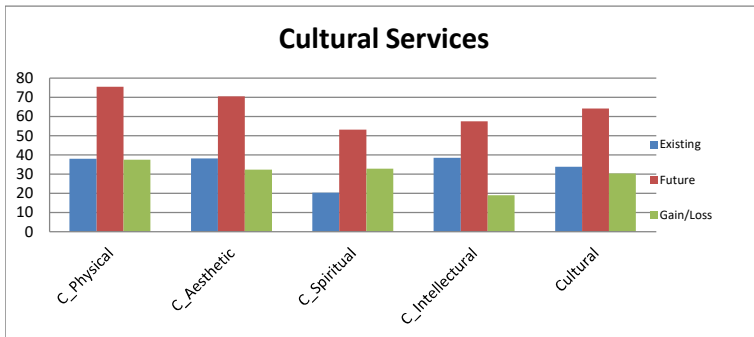
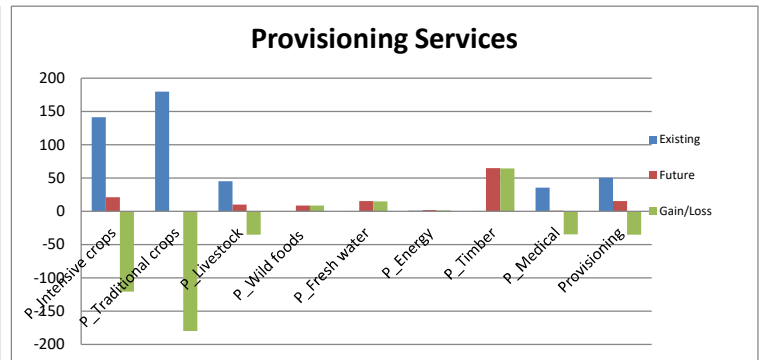
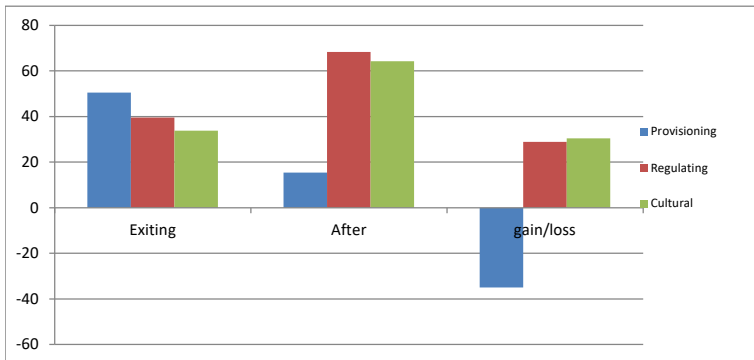
Warwickshire County Council is currently transferring 'Other' habitat loss to Wetland Creation

Hedgerow Impacts	Loss	Gain	Trading down	Impact	Unit loss	Indicative Offset (km)	WCC Offset units	WCC Offset Contribution
Hedgerow	0.24	20.07		19.83				

**SUMMARY**

This development will result in 16.99 Habitat Biodiversity Units gain; 19.83 Hedgerow Units gain and 0 Connectivity Biodiversity Units loss

**ECOSYSTEM SERVICES ANALYSIS**







T. Note	Proposed habitats on site (Onsite mitigation)			Target habitats distinctiveness		Target habitat condition		Time till target condition		Difficulty of creation / restoration		Habitat biodiversity value	Comment
	code	Phase 1 habitat description	Area (ha)	Distinctiveness	Score	Condition	Score	Time (years)	Score	Difficulty	Score		
	<b>Habitat Creation</b>			N	O	P		Q	R			(N x O x P) / Q / R	
n/a	Built Environment: Buildings/hardstanding	19.70	none	0	Poor	1	3 Years	1.1	Low	1		0.00	
B22	Grassland: Semi-improved neutral grassland	2.00	Medium	4	Moderate	2	15 years	1.7	Medium	1.5		6.27	
A22	Woodland: Scattered scrub	0.71	Medium	4	Good	3	15 years	1.7	Low	1		5.01	
F22	Wetland: Inundation vegetation	0.77	High	6	Moderate	2	3 Years	1.1	Low	1		8.40	
J14	Other: Introduced shrub	0.77	Low	2	Poor	1	3 Years	1.1	Low	1		1.40	
A5	Woodland: Orchard	3.40	High	6	Moderate	2	10 years	1.4	Low	1		29.14	Additional offsite enhancement Measures (see Proposed Illustrative Landscape Design)
	<b>Total</b>			<b>27.35</b>									
	<b>Habitat Enhancement</b>						Existing value S (= F)					((NxOxP)-S)/Q/R	
A112	Woodland: Broad-leaved plantation	8.19	Medium	4	Moderate	2	16.38	32+ years	3	Low	1	16.38	In line with WCC standard position, new native woodland created over existing arable land to provide enhanced
A112	Woodland: Broad-leaved plantation	2.51	Medium	4	Moderate	2	5.02	32+ years	3	Low	1	5.02	Additional offsite enhancement Measures (see Proposed Illustrative Landscape Design). In line with WCC stan
	<b>Total</b>			<b>10.70</b>									

Trading down correction value	0.00
<b>Habitat Mitigation Score (HMS)</b>	<b>71.62</b>
HBIS = HMS - HIS	
<b>Habitat Biodiversity Impact Score</b>	<b>16.99</b> Gain
Percentage of biodiversity impact loss	

	Loss	Gain	Impact
Woodland Habitat	1.00	55.55	54.55
Grassland Habitat	3.54	6.27	2.73
Wetland Habitat	0.00	8.40	8.40
Other Habitat (including Built Environment)	50.09	1.40	-48.69
<b>Total</b>	<b>54.63</b>	<b>71.62</b>	<b>16.99</b>
Trading down			0.00
			16.99

# Warwickshire, Coventry & Solihull - Hedge Impact Assessment Calculator

Please fill in both tables

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 site.

These units are not transferrable as compensation for either the Habitat or Connectivity Impact Assessment scores.

Please do not edit the formulae or structure  
To condense the form for display hide vacant rows, do not delete them  
If additional rows are required, or to provide feedback on the calculator please contact WCC Ecological Services

Existing Hedgerow features on site				Hedgerow distinctiveness		Hedgerow condition assessments												Hedgerow features to be retained with no change within development		Hedgerow features to be retained and enhanced within development		Hedgerow features to be lost within development		Comment
T. Note	code	Hedgerow habitat description	Feature length (km)	Distinctiveness	Score	A1	A2	B1	B2	C1	C2	D1	D2	Condition Score	Length (km)	Existing value	Length (km)	Existing value	Length (km)	Existing value				
Direct Impacts and retained features						A						C		E		G								
												A x B x C = D		A x B x E = F		A x B x G = H								
H1	n/a	Hedges: non species rich hedge	0.42	Low	2	Pass	Pass	Pass	Pass	Pass	Fail	Pass	Fail	3	0.38	2.28					0.04	0.24		
H2	n/a	Hedges: non species rich hedge	0.05	Low	2	Pass	Pass	Pass	Fail	Pass	Fail	Pass	Pass	3	0.05	0.30								
H3	n/a	Hedges: species rich hedge	0.32	Medium	4	Pass	Pass	Pass	Pass	Pass	Fail	Pass	Pass	3	0.32	3.84								
Total			0.79												0.75	8.42	0.00	0.00	0.00	0.00	0.00	0.24		
																Value of loss from indirect impacts		Site Hedge Biodiversity Value		ΣD + 2F + 2H				
																K x A x E = LI - LI		8.66						
Indirect Negative Impacts																M		HIS = J + M						
Total																0.00		Hedge Impact Score (HIS)		0.24				

Proposed hedge features on site (Onsite mitigation)				Target hedge distinctiveness		Hedgerow condition assessments												Time till target condition		Difficulty of creation / restoration		Linear biodiversity value (N x O x P) / Q / R	Comment
T. Note	code	Phase 1 habitat description	Length (km)	Distinctiveness	Score	A1	A2	B1	B2	C1	C2	D1	D2	Condition Score	Time (years)	Score	Difficulty	Score					
Hedgerow Creation						O						Q		R									
												S ( = F )											
n/a		Hedges: species rich hedge with trees	2.23	High	6	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	3	20 years	2	Low	1	20.07				
Total			2.23																				
Hedgerow Enhancement																		Trading down correction value		0.00			
Total																		Hedge Mitigation Score (HMS)		20.07			
																HIS + HMS		18.53		Gain			
																Hedge Biodiversity Impact Score		18.53		Percentage of linear impact loss			

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

ecology • landscape planning • arboriculture

aspect

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