

Warwickshire Coventry and Solihull - Biodiversity Impact Assessment Calculator

v.18.3 08/08/2014  
Amendment from v18.2 only affects green roofs, for other habitats v18.2 still usable.  
Please fill in both tables

KEY	No action required
Green	Action required
Yellow	Drop-down menu
Orange	Calculation
Light Blue	Automatic backup
Dark Blue	Result

Local Planning Authority:	Cherwell District Council
Site name:	Site 35 Phase 3
Planning application reference number:	
Assessor:	Aaron Grainger
Date:	05/05/2019

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, go to provide feedback on the calculator  
Please contact WCC Ecological Services

T. Note	code	Existing habitats on site		Habitat distinctiveness		Habitat condition		Habitats to be retained and enhanced within development		Habitats to be lost within development		Comment
		Phase 1 habitat description	Habitat area (ha)	Distinctiveness	Score	Condition	Score	Area (ha)	Existing value	Area (ha)	Existing value	
<b>Direct impacts and retained habitats</b>												
Arable F111	Other Arable	19.73	Low	2	Poor	1			19.73	0.20		Arable fields in centre of site (winter wheat at the time of the 2016 survey)
Field M4C31	Other Tall rural	0.87	Medium-Low	3	Poor	1		0.87	0.37	1.11		Arable field margins associated with the hedgerows and small strip on unknown land in the centre of the site
Roadside	Built Environment Buildings/hardstanding	1.00	None	0	Poor	1			1.00	0.00		Sections of Middleton Storey Road and Howes Lane and associated footpaths
<b>Total</b> 21.60 0.00 0.00 0.20 0.60 21.60 49.69												
<b>Indirect Negative Impacts</b>												
Value of loss from indirect impacts												
K (A x B) = U, Lx (L) = M												
Site habitat biodiversity value ZD = 37 = 21.60												
HIS = J = M												
<b>Habitat Impact Score (HIS)</b> 49.69												

T. Note	code	Proposed habitats on site (Onsite mitigation)		Target habitat distinctiveness		Target habitat condition		Time till target condition		Difficulty of creation / restoration		Habitat biodiversity value (V(C)R(P))	Comment
		Phase 1 habitat description	Area (ha)	Distinctiveness	Score	Condition	Score	Time (years)	Score	Difficulty	Score		
<b>Habitat Creation</b>													
B22	Grassland Semi-improved neutral grassland	2.92	Medium	4	Moderate	2	10 years	1.4	Medium	1.5	0.84	Wildflower grassland throughout the site shown as 'proposed meadow grass' on the Reserved Matters Phase 1 Planting Plan (RFM-XX-00-DR-L-0001-PLD1)	
F22	Wetland Inundation vegetation	0.57	High	6	Good	3	10 years	1.4	Low	1	2.35	Wetland vegetation to be created in the swales	
B22	Grassland Semi-improved neutral grassland	0.25	Medium	4	Moderate	2	5 years	1.2	Medium	1.5	1.11	Combined verge and wildflower turf	
A112	Woodland Broad-leaved plantation	0.82	Medium	4	Good	3	20 years	3	Medium	1.5	4.85	Dense woodland planting at the southern/western perimeter and woodland understorey planting in the employment/residential sections of the site (as shown on RFM-XX-00-DR-L-0001-PL01 and RF16-275-L-06)	
A14	Other Introduced shrub	0.16	Low	2	Good	3	5 years	1.2	Low	1	0.90	Assembly planting within the employment services/park area and residential scheme	
A16	Built Environment Buildings/hardstanding	12.78	None	0	Poor	1	5 years	1.2	Low	1	0.00	Buildings that form the residential and employment plots and associated hard landscaping/roads	
A3	Woodland Scattered trees	0.59	Medium	4	Good	3	25 years	2.4	Low	1	1.69	Scattered mature trees throughout the site	
A21	Woodland Dense continuous scrub	0.38	Medium-Low	3	Good	3	10 years	1.4	Low	1	2.44	Dense scrub planting in the southern and western boundaries associated with the woodland planting	
A112	Woodland Broad-leaved plantation	0.13	Medium	4	Good	3	20 years	3	Medium	1.5	1.41	Native woodland planting at boundaries of Phase 3 (see drawing 0897-RFM-XX-00-DR-L-0003-P05)	
F22	Wetland Inundation vegetation	0.22	High	6	Good	3	10 years	1.4	Low	1	2.83	Wet grassland to be created in the swales in Phase 3 (see drawing 0897-RFM-XX-00-DR-L-0003-P05)	
B22	Grassland Semi-improved neutral grassland	0.99	Medium	4	Good	3	5 years	1.2	Medium	1.5	6.60	Shortfall meadow areas Erosigate DM1 general purpose meadow mix (see drawing 0897-RFM-XX-00-DR-L-0003-P05)	
A4	Woodland Dense continuous scrub	0.22	Medium-Low	3	Good	3	10 years	1.4	Low	1	1.41	Native understorey mix (see drawing 0897-RFM-XX-00-DR-L-0003-P05)	
A14	Other Introduced shrub	0.12	Low	2	Good	3	5 years	1.2	Low	1	0.60	Assembly shrub planting (see drawing 0897-RFM-XX-00-DR-L-0003-P05)	
A3	Woodland Scattered trees	0.16	Medium	4	Good	3	25 years	2.4	Low	1	2.35	Scattered tree planting within Phase 3 (see drawing 0897-RFM-XX-00-DR-L-0003-P05)	
<b>Total</b> 21.60													
<b>Habitat Enhancement</b>													
Field M4C31	Other Tall rural	0.20	Medium-Low	3	Good	3	10 years	1.4	Low	1	0.84	Retained arable field margins	
<b>Total</b> 0.20													
Trading down correction value 0.00													
<b>Habitat Mitigation Score (HMS)</b> 49.69													
<b>Habitat Biodiversity Impact Score</b> 21.60 Gain													
Percentage of biodiversity impact loss													

KEY	No action required
Green	Action required
Yellow	Drop-down menu
Orange	Calculation
Light Blue	Automatic backup
Dark Blue	Result
Red	Loss to biodiversity
Green	Gain to biodiversity

Warwickshire Coventry and Solihull - Biodiversity Impact Assessment Calculator - Linear Features

Please fill in both tables

KEY	
No action required	
Action required	
Drop-down menu	
Calculation	
Automatic backup	
Overall Result	

**Linear Features**  
Hedges and other linear features can offer a higher biodiversity value per length than a standard area of habitat due to factors such as connectivity and must therefore be compensated for in parallel to the standard metric.

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T. Note	code	Phase 1 habitat description	Existing linear features on site		Linear distinctiveness		Linear condition		Linear Features to be retained with no change within development		Linear Biodiversity Value		Comment
			Length (km)	Score	Score	Score	Length (km)	Existing value	Length (km)	Existing value	Length (km)	Existing value	
<b>Direct Impacts and retained features</b>													
	123	Hedges: Hedge with trees	2.40	Medium-High	5	Moderate	2		2.40	15.80	0.82	13.98	
	126	Ditches: Dry ditch	1.32	Low	2	Poor	1		0.70	1.40	0.62	1.24	
<b>Total</b>			<b>3.72</b>					<b>0.70</b>	<b>1.40</b>	<b>1.50</b>	<b>15.80</b>	<b>1.44</b>	<b>14.36</b>
<b>Indirect Negative Impacts</b>													
		Before/After Impact											
		Before											
		After											
		Before											
		After											
		Before											
		After											
		Before											
		After											
		<b>Total</b>	<b>0.00</b>					<b>0.00</b>					
<b>Linear Impact Score (LIS)</b>										<b>9.44</b>		<b>LIS = J + M</b>	

CAUTION - Destruction of features of medium or high distinctiveness, e.g. hedgerows and streams, may be against local policy. Has the mitigation hierarchy been followed: can impact to these habitats be avoided? Any unavoidable loss of valuable habitats must be replaced like-for-like, e.g. Loss of hedgerows must be replaced with similar or better hedgerows. All newly planted hedgerows should be native species-rich hedgerows.

T. Note	code	Phase 1 habitat description	Proposed linear features on site (include mitigation)		Target linear distinctiveness		Target linear condition		Time till target condition		Difficulty of creation / restoration		Linear biodiversity value (N x O x P) / Q / R	Comment
			Length (km)	Score	Score	Score	Time (years)	Score	Difficulty	Score				
<b>Linear Creation</b>														
	121	Hedges: Native species rich intact hedge	0.61	High	6	Moderate	2		10 years	1.4	Low	1	5.21	
<b>Total</b>			<b>0.61</b>											
<b>Linear Enhancement</b>														
	122	Hedges: Hedge with trees	1.58	Medium-High	5	Good	3		10 years	1.4	Low	1	6.64	
<b>Total</b>			<b>1.62</b>											
<b>Linear Mitigation Score (LMS)</b>										<b>0.00</b>		<b>LMS = LMS - LMS</b>		
<b>Linear Biodiversity Impact Score</b>										<b>1.44</b>		<b>LBS = LMS + LBS</b>		
<b>Percentage of linear impact loss</b>										<b>1.44</b>		<b>Gain</b>		

KEY	
No action required	
Action required	
Drop-down menu	
Calculation	
Automatic backup	
Overall Result	
	Loss to biodiversity
	Gain to biodiversity

### Biodiversity Impact Assessment Summary

Site name:	Axis J9 Phase 3
Planning reference number:	

Habitats	Area (ha)	Habitat Biodiversity Value
Total existing area onsite	21.36	41.29
Habitats negatively impacted by development Habitat Impact Score	21.16	40.69
On site habitat mitigation Habitat Mitigation Score	21.36	43.00
<b>Habitat Biodiversity Impact Score</b>		
If -ve further compensation required		<b>2.31</b>
Percentage of biodiversity impact		
Linear features	Length (km)	Linear Biodiversity Value
Total existing length onsite	3.72	26.64
Linear features negatively impacted by development Linear Impact Score	1.44	9.44
On site linear mitigation Linear Mitigation Score	2.13	10.85
<b>Linear Biodiversity Impact Score</b>		
If -ve further compensation required		<b>1.41</b>
Percentage of linear biodiversity impact		

CAUTION - Destruction of habitats of high distinctiveness, e.g. lowland meadow, ancient woodland or species-rich hedgerows, may be against local policy. Has the mitigation hierarchy been followed, can impact to these habitats be avoided? Any unavoidable loss of habitats of high distinctiveness must be replaced like-for-

For any questions with regard to biodiversity impact and this development please contact Warwickshire County Council Ecological Services:

email: [planningecology@warwickshire.gov.uk](mailto:planningecology@warwickshire.gov.uk)  
tel: 01926 418060

If there is an anticipated loss to biodiversity and no further ecological enhancements can be incorporated within the development it may be possible to compensate for this loss through a biodiversity offsetting scheme.

Please contact The Environment Bank for discussions on potential receptor sites in your area:

email: [lmartland@environmentbank.com](mailto:lmartland@environmentbank.com)  
tel: 01926 412772



Phase 1 Habitat Descriptions	Phase 1 Habitat Codes	Distinctiveness		Difficulty of creation		Difficulty of restoration	
Built Environment: Buildings/hardstanding	n/a	none	0	Low	1	Low	1
Built Environment: Gardens (lawn and planting)	n/a	Low	1	Low	1	Low	1
Woodland: Broad-leaved semi-natural woodland	A111	High	6	n/a	-	Low	1
Woodland: Broad-leaved plantation	A112	Medium	4	Medium	1.5	Low	1
Woodland: Coniferous semi-natural woodland	A121	Medium	4	n/a	-	Low	1
Woodland: Coniferous plantation	A122	Low	2	Medium	1.5	Low	1
Woodland: Mixed semi-natural woodland	A131	Medium	4	n/a	-	Low	1
Woodland: Mixed plantation	A132	Low	2	Medium	1.5	Low	1
Woodland: Wet woodland	n/a	High	6	Medium	1.5	Medium	1.5
Woodland: Dense continuous scrub	A21	Medium-Low	3	Low	1	Low	1
Woodland: Scattered scrub	A22	Medium	4	Low	1	Low	1
Woodland: Scattered trees	A3	Medium	4	Low	1	Low	1
Woodland: Broad-leaved parkland	A31	High	6	Medium	1.5	Low	1
Woodland: Coniferous parkland	A32	Medium	4	Medium	1.5	Low	1
Woodland: Recently felled woodland	A4	Low	2	n/a	-	n/a	-
Woodland: Orchard	A5	High	6	Low	1	Low	1
Grassland: Unimproved acidic grassland	B11	High	6	Medium	1.5	Low	1
Grassland: Semi-improved acidic grassland	B12	Medium-High	5	Medium	1.5	Low	1
Grassland: Unimproved neutral grassland	B21	High	6	Medium	1.5	Low	1
Grassland: Semi-improved neutral grassland	B22	Medium	4	Medium	1.5	Low	1
Grassland: Unimproved calcareous grassland	B31	High	6	Medium	1.5	Low	1
Grassland: Semi-improved calcareous grassland	B32	Medium-High	5	Medium	1.5	Low	1
Grassland: Poor semi-improved grassland	B6	Medium-Low	3	Medium	1.5	Low	1
Grassland: Improved grassland	B4	Low	2	n/a	-	Low	1
Grassland: Marsh / Marshy grassland	B5	High	6	High	3	Medium	1.5
Grassland: Dry heath / Acidic grassland mosaic	D5	High	6	Medium	1.5	Medium	1.5
Grassland: Set-aside / Arable field margins	J113	High	6	Low	1	Low	1
Grassland: Amenity grassland	J12	Low	2	Low	1	Low	1
Wetland: Standing water	G1	High	6	Medium	1.5	Medium	1.5
Wetland: Running water	G2	High	6	Medium	1.5	Medium	1.5
Wetland: Reedbed	n/a	High	6	low	1	low	1
Wetland: Sphagnum Bog	E11	High	6	Very High	10	High	3
Wetland: Acid/neutral flush	E21	High	6	High	3	Medium	1.5
Wetland: Basin Mire	E32	High	6	High	3	Medium	1.5
Wetland: Swamp	F1	High	6	High	3	Medium	1.5
Wetland: Inundation vegetation	F22	High	6	Low	1	Low	1
Other: Arable	J11	Low	2	n/a	-	n/a	-
Other: Continuous bracken	C11	Low	2	Low	1	Low	1
Other: Tall ruderal	C31	Medium-Low	3	Low	1	Low	1
Other: Non-ruderal	C32	Medium	4	Low	1	Low	1
Other: Ephemeral/short perennial	J13	Low	2	Low	1	Low	1
Other: Allotments	J112	Low	2	Low	1	Low	1
Other: Quarry	I21	Low	2	Low	1	Low	1
Other: Spoil	I22	Low	2	Low	1	Low	1
Other: Refuse tip	I24	Low	2	Low	1	Low	1
Other: Introduced shrub	J14	Low	2	Low	1	Low	1
Other: Bare ground	J4	Low	2	Low	1	Low	1
Other: Green roof	n/a	Low	2	Low	1	Low	1
<b>Linear features</b>							
Hedges: Intact hedge	J21	Medium	4	Low	1	Low	1
Hedges: Native species rich intact hedge	J211	High	6	Low	1	Low	1
Hedges: Hedge with trees	J23	Medium-High	5	Low	1	Low	1
Hedges: Native species rich hedge with trees	J231	High	6	Low	1	Low	1
Hedges: Defunct hedge	J22	Low	2	n/a	-	n/a	-
Hedges: Linear scrub	A21	Medium	4	Low	1	Low	1
Hedges: Linear trees	A3	Medium	4	Low	1	Low	1
Hedges: Introduced shrub	J14	Low	2	Low	1	Low	1
Ditches: Standing water	G1	High	6	Medium	2	Low	1
Ditches: Running water	G2	High	6	Medium	2	Low	1
Ditches: Dry ditch	J26	Low	2	Low	1	Low	1
Boundaries: Fence	J24	None	0	Low	1	Low	1
Boundaries: Wall	J25	Low	2	Low	1	Low	1
Boundaries: Dry stone wall	J25	Medium	4	Low	1	Low	1
Other: Inland cliff	I1	Medium	4	Low	1	Low	1
Other: Earth bank	J28	Low	2	Low	1	Low	1
Other: Green wall	n/a	Low	2	Low	1	Low	1

Distinctiveness	
High	6
Medium-High	5
Medium	4
Medium-Low	3
Low	2
none	0

Condition	
Good	3
Moderate	2
Poor	1

Time	
5 years	1.2
10 years	1.4
15 years	1.7
20 years	2
25 years	2.4
30 years	2.8
32+ years	3

Difficulty	
Very high	10
High	3
Medium	1.5
Low	1
n/a	0





