

Land North of Barkby Road, Syston

Biodiversity Net Gain Assessment Technical Note

edp4685_r007b

1. Introduction

- 1.1 This Biodiversity Net Gain Assessment Technical Note has been prepared by The Environmental Dimension Partnership Ltd (EDP) on behalf of Taylor Wimpey (UK) Ltd (hereafter referred to as 'the Applicant') in relation to proposed development of the Land to the North of Barkby Road, Syston (hereafter referred to as 'the Site').
- 1.2 The development proposals are the subject of an outline planning application (OPA, Ref: P21/2639/2) for the construction of up to 195 new dwellings, together with open space, landscaping and drainage infrastructure, with all matters reserved except for access into the site from Barkby Road.
- 1.3 An Ecological Appraisal report (report reference: edp4685_r005) was produced by EDP in November 2021 to support the OPA, which included a biodiversity net gain assessment. In response to comments on the application by the Local Highways Authority, the Applicant has requested that the biodiversity net gain assessment be updated to include the removal of the western section of the southern boundary hedgerow (hedgerow H7, see **Plan EDP 1**), as shown at **Appendix EDP 1**. This is to allow for wider visibility splays from the proposed access, requiring the repositioning of the footway along Barkby Road and the removal of the existing hedgerow.

2. Site Context

- 2.1 The site measures circa. 8.3 hectares (ha) and is centred approximately at Ordnance Survey Grid Reference (OSGR) SK 632 111, within the administrative boundary of Charnwood Borough Council. It is located along the eastern edge of the town of Syston in Leicestershire, c. 8.3km north-east of Leicester, between the villages of Barkby and Queniborough. Bounding the site to the south is Barkby Road, with modern development and arable land beyond, to the east is Queniborough Road with arable land beyond, to the west is the edge of Syston town and to the north is further agricultural land.
- 2.2 The site comprises two arable fields, bounded by species-poor, intensively managed hedgerows and wet and dry ditches. The principal ecological features within the site (identified through site survey) are described and illustrated within the Ecological Appraisal (edp4685_r005).

3. Biodiversity Net Gain Assessment

- 3.1 The original Biodiversity Net Gain assessment was undertaken using the Biodiversity Metric 3.0 (JP039) (published 17 July 2021) by an ecologist with experience of using such calculators, in October 2021.
- 3.2 Details of that biodiversity net gain assessment are included within the Ecological Appraisal report (report reference: edp4685_r005), which includes details of habitat losses, new habitats and assumptions made in the process of the assessment.
- 3.3 The amendments to the biodiversity net gain assessment that have resulted in the scores detailed within this report include:
- The removal of the western extent of hedgerow H7 along the southern boundary; and
 - The creation of a native species-rich hedgerow to replace the lost hedgerow to the north of the repositioned footpath.

4. Results

- 4.1 The biodiversity net gain calculations pertaining to habitat areas and linear habitat features based on the initial indicative plans are provided in full within the Ecological Appraisal report and achieve a net gain to biodiversity of 2.49 units (14.94%) and 4.33 linear units (57.04%).
- 4.2 The updated scores following the removal of the southern boundary hedgerow are summarised in **Table EDP 4.1**.

Table EDP 4.1: Headline Results of Biodiversity Net Gain Assessment

	Habitat Units	Linear Units
Baseline	16.68	7.60
Proposed	19.17	11.26
Total Net Unit Change	+2.49	+3.66
Total Net % Change	+14.94%	+48.18%

- 4.3 The Metric includes an assessment of whether certain trading rules have been met by the proposed scheme. Trading rules applied by the metric require that any loss of habitat is replaced on a 'like for like' or 'like for better' distinctiveness basis, to prevent 'trading down' whereby more ecologically valuable habitats are lost and replaced with larger area of lower value habitats.
- 4.4 Under the above assessment the Trading Rules for the metric are satisfied.



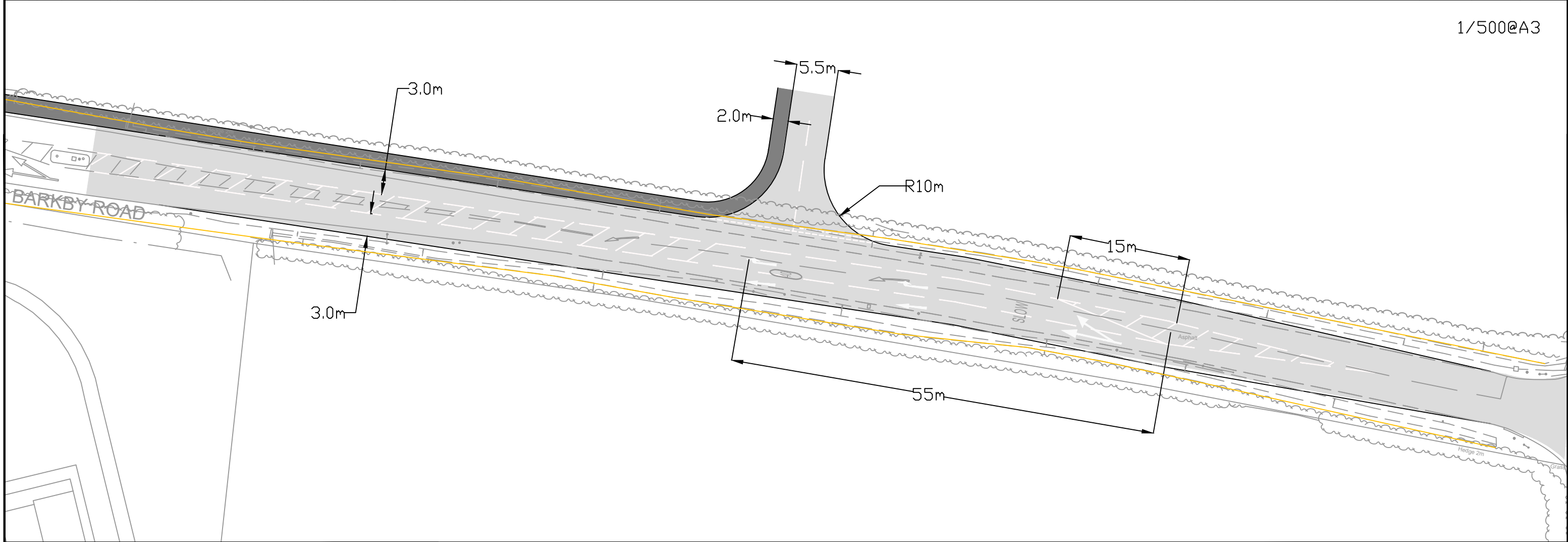
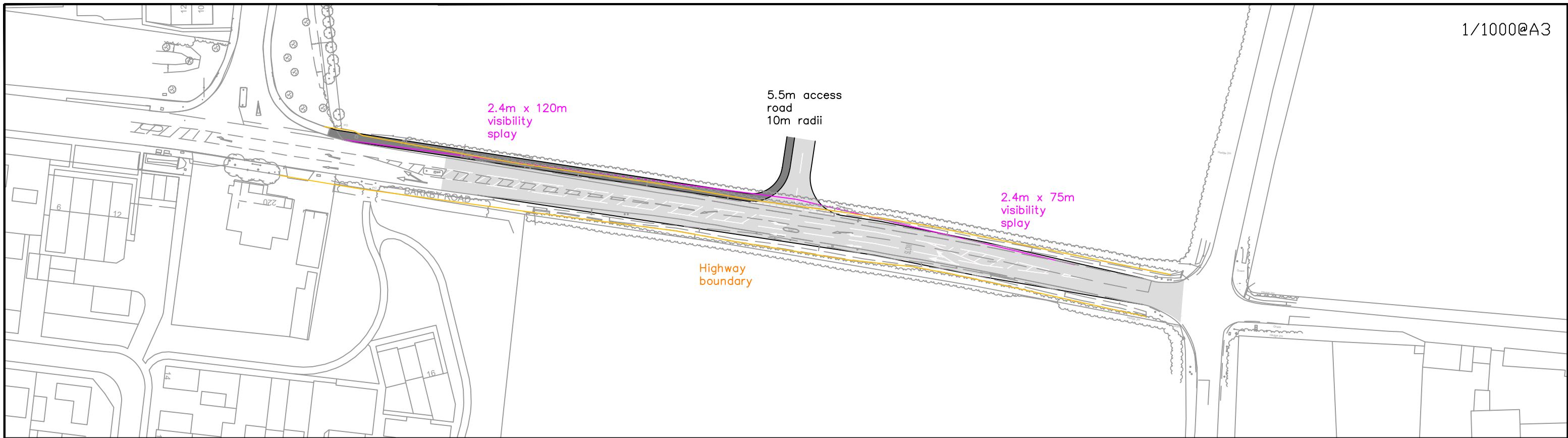
5. Discussion and Conclusions

- 5.1 Given that the amendment to the layout still result in a net gain in linear units of +3.66 units and +48.18%, these changes do not impact the schemes' ability to deliver a significant net gain which complies with local planning policy.



Appendix EDP 1
Proposed Site Access

(David Tucker Associates, Drawing No. 20060-02, Rev D, Dated: October 2022)



Based upon the ORDNANCE SURVEY MAPS with the permission of THE CONTROLLER OF HER MAJESTY'S STATIONERY OFFICE
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REV	DESCRIPTION	DRAWN	INITIALS	DATE	DRAWING STATUS	CHECKED BY	DATE



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JOB TITLE		System		CLIENT		Taylor Wimpey	
DRAWING TITLE							
Proposed Site Access Right Turn Lane Northern Site							
SCALE	DRAWN BY	DATE	DRAWING No	REVISION			
See Plan	BP	12-10-22	20060-02	D			



Appendix EDP 2
Biodiversity Metric 3.0 Calculations

Land North of Barkby Road, Syston

Headline Results

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On-site baseline	<i>Habitat units</i>	16.68
	<i>Hedgerow units</i>	7.60
	<i>River units</i>	0.00
On-site post-intervention <small>(Including habitat retention, creation & enhancement)</small>	<i>Habitat units</i>	19.17
	<i>Hedgerow units</i>	11.26
	<i>River units</i>	0.00
On-site net % change <small>(Including habitat retention, creation & enhancement)</small>	<i>Habitat units</i>	14.94%
	<i>Hedgerow units</i>	48.18%
	<i>River units</i>	0.00%
Off-site baseline	<i>Habitat units</i>	0.00
	<i>Hedgerow units</i>	0.00
	<i>River units</i>	0.00
Off-site post-intervention <small>(Including habitat retention, creation & enhancement)</small>	<i>Habitat units</i>	0.00
	<i>Hedgerow units</i>	0.00
	<i>River units</i>	0.00
Total net unit change <small>(including all on-site & off-site habitat retention, creation & enhancement)</small>	<i>Habitat units</i>	2.49
	<i>Hedgerow units</i>	3.66
	<i>River units</i>	0.00
Total on-site net % change plus off-site surplus <small>(including all on-site & off-site habitat retention, creation & enhancement)</small>	<i>Habitat units</i>	14.94%
	<i>Hedgerow units</i>	48.18%
	<i>River units</i>	0.00%
Trading rules Satisfied?	Yes	

Land North of Barkby Road, Syston	
A-1 Site Habitat Baseline	
Condense / Show Columns	Condense / Show Rows
Main Menu	Instructions

Ref	Habitats and areas			Distinctiveness		Condition		Strategic significance			Suggested action to address habitat losses	Ecological baseline Total habitat units
	Broad habitat	Habitat type	Area (hectares)	Distinctiveness	Score	Condition	Score	Strategic significance	Strategic significance	Strategic Significance multiplier		
1	Cropland	Cereal crops	8.34	Low	2	N/A - Agricultural	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness or better habitat required	16.68
2												
3												
4												
5			8.34									16.68

Retention category biodiversity value						Bespoke compensation agreed for unacceptable losses	Comments	
Area retained	Area enhanced	Baseline units retained	Baseline units enhanced	Area lost	Units lost		Assessor comments	Reviewer comments
		0.00	0.00	8.34	16.68			
0.00	0.00	0.00	0.00	8.34	16.68			

Land North of Barkby Road, Syston

A-2 Site Habitat Creation

Condense / Show Columns

Condense / Show Rows

Main Menu

Instructions

Broad Habitat	Proposed habitat	Area (hectares)	Post development/ post intervention habitats								Comments		
			Distinctiveness	Condition	Strategic significance		Temporal multiplier		Final difficulty of creation	Habitat units delivered	Assessor comments	Reviewer comments	
			Distinctiveness	Condition	Strategic significance		Standard or adjusted time to target condition						Final time to target condition/years
Urban	Developed land; sealed surface	3.86	V.Low	N/A - Other	Area/compensation not in local strategy/ no local strategy		Standard time to target condition applied		0	Medium	0.00	70% of developed area	
Urban	Vegetated garden	1.66	Low	Poor	Area/compensation not in local strategy/ no local strategy		Standard time to target condition applied		1	Low	3.20	30% of developed area	
Urban	Artificial unvegetated, unsealed surface	0.04	V.Low	N/A - Other	Area/compensation not in local strategy/ no local strategy		Standard time to target condition applied		0	Low	0.00	LEAP	
Heathland and shrub	Mixed scrub	0.03	Medium	Fairly Poor	Area/compensation not in local strategy/ no local strategy		Standard time to target condition applied		3	Low	0.16	Shrub planting	
Urban	Urban Tree	0.07	Medium	Fairly Poor	Area/compensation not in local strategy/ no local strategy		Standard time to target condition applied		15	Low	0.25	115 trees	
Grassland	Other neutral grassland	1.52	Medium	Moderate	Area/compensation not in local strategy/ no local strategy		Standard time to target condition applied		5	Low	10.18	Wildflower grassland in informal open space	
Grassland	Modified grassland	0.76	Low	Moderate	Area/compensation not in local strategy/ no local strategy		Standard time to target condition applied		4	Low	2.64	Amenity areas sown with flowering lawn mix	
Lakes	Ponds (Non- Priority Habitat)	0.03	Medium	Moderate	Area/compensation not in local strategy/ no local strategy		Standard time to target condition applied		3	Low	0.22	Permanent water within SuDS features	
Woodland and forest	Other woodland; broadleaved	0.2	Medium	Fairly Poor	Area/compensation not in local strategy/ no local strategy		Standard time to target condition applied		7	Low	0.94	Woodland screening along south-eastern boundary	
Wetland	Reedbeds	0.02	High	Moderate	Area/compensation not in local strategy/ no local strategy		Standard time to target condition applied		7	Medium	0.13	Marginal planting within SuDS features	
Grassland	Other neutral grassland	0.22	Medium	Moderate	Area/compensation not in local strategy/ no local strategy		Standard time to target condition applied		5	Low	1.47	Marshy/wet grassland within SuDS features	
Total area		8.34									19.17		

B-1 Site Hedge Baseline

Condense / Show Columns Condense / Show Rows

Main Menu Instructions

Baseline ref	UK Habitats - existing habitats			Habitat distinctiveness		Habitat condition		Strategic significance			Suggested action to address habitat losses	Ecological baseline Total hedgerow units	Retention category biodiversity value						Comments	
	Hedge number	Hedgerow type	Length KM	Distinctiveness	Score	Condition	Score	Strategic significance	Strategic significance	Strategic position multiplier			Length retained	Length enhanced	Units retained	Units enhanced	Length lost	Units lost	Assessor comments	Reviewer comments
1	H1	Native Hedgerow	0.12	Low	2	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	0.48	0.12		0.48	0.00	0.00	0.00		
2	H1	Native Hedgerow	0.03	Low	2	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	0.06		0.03	0.00	0.06	0.00	0.00		
3	H2	Native Hedgerow	0.09	Low	2	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	0.18		0.09	0.00	0.18	0.00	0.00		
4	H3	Native Hedgerow	0.14	Low	2	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	0.56	0.14		0.56	0.00	0.00	0.00		
5	H3	Native Hedgerow - Associated with bank or ditch	0.08	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Like for like or better	0.64	0.08		0.64	0.00	0.00	0.00		
6	H4	Native Hedgerow	0.09	Low	2	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	0.36	0.09		0.36	0.00	0.00	0.00	0.00	
7	H5	Native Hedgerow	0.14	Low	2	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	0.56	0.14		0.56	0.00	0.00	0.00	0.00	
8	H6	Native Hedgerow - Associated with bank or ditch	0.24	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Like for like or better	1.92	0.21		1.68	0.00	0.03	0.24		
9	H7	Native Hedgerow - Associated with bank or ditch	0.25	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Like for like or better	2.00		0.09	0.00	0.72	0.16	1.28		
10	H8	Native Hedgerow	0.17	Low	2	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	0.68		0.17	0.00	0.68	0.00	0.00		
11	H8	Native Hedgerow - Associated with bank or ditch	0.02	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Like for like or better	0.16		0.02	0.00	0.16	0.00	0.00		
12																				
13																				
14																				
15																				
			1.37									7.60	0.78	0.40	4.28	1.80	0.19	1.52		



Plan EDP 1
Post-Development Habitats
(edp4685_d023a 28 October 2022 WCo/TRo)



- Site Boundary
- Area Habitats - New Habitats**
- Development
- Artificial Unvegetated, Unsealed Surface (LEAP)
- Modified Grassland
- Other Neutral Grassland (Marshy Grassland)
- Mixed Scrub
- Other Neutral Grassland (Wildflower)
- Marginal Plants (Reedbed)
- Ponds (Non- Priority Habitat)
- Other Woodland; Broadleaved
- Linear Habitats**
- New Species-rich Native Hedgerow
- Lost Native Hedgerow with Ditch
- Retained Native Hedgerow
- Retained Native Hedgerow with Ditch
- Enhanced Native Hedgerow
- Proposed Street Tree

Note: Area habitats are split 70:30 between "developed land; sealed surface" and "vegetated garden"

client
Taylor Wimpey (UK) Ltd

project title
Land North of Barkby Road, Syston

drawing title
Plan EDP 1: Biodiversity Impact Assessment (Post-Development Habitats)

date	28 OCTOBER 2022	drawn by	WC
drawing number	edp4685_d023a	checked	TRo
scale	1:1,750 @ A3	QA	GYo



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