



FUTURES ECOLOGY

Redrow Homes (Yorkshire) Ltd, R. Kershaw and S. Gill

Bradley Villa Farm, Kirklees

Biodiversity Impact Assessment

Report Reference Number: FE30/BIA02

January 2024

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1.0 **INTRODUCTION**

- 1.1 The following report has been prepared by Futures Ecology Ltd. on behalf of Redrow Homes (Yorkshire) Ltd, R. Kershaw and S. Gill. This summary report presents the results of the Biodiversity Impact Assessment (BIA) calculations using the Natural England Biodiversity Metric (BM) 3.0 Calculation Tool produced in respect of planning permission 2021/62/92086/W, for land at Bradley Villa Farm, Bradley Road, Bradley, Huddersfield, HD2 2JX (central grid reference: SE 152 205) (Kirklees Council). This supersedes the previous Biodiversity Impact Assessment (BIA) submitted with the planning application (Futures Ecology Ltd., April 2022, BIA01).

SITE LOCATION AND CONTEXT

- 1.2 The site is approximately 14.5ha in extent and comprises grazed, improved grassland fields associated with Villa Farm. Hedgerows and post and wire fences form the boundaries of the site. The Villa Farm agricultural buildings and a number of residential properties border site to the south. The M62 is located to the north of Site, the residential area of Fixby is situated to the west, with Bradley Park Golf Course to the east.

DEVELOPMENT PROPOSALS

The site has planning permission for the erection of 277 residential dwellings and associated infrastructure and access (Planning Reference: 2021/62/92086/W).

2.0 **METHODOLOGY**

FIELD SURVEY – HABITATS

Habitat Assessment & Biodiversity Net Gain

- 2.1 A Phase 1 Habitat Survey was completed on the 24th March 2020 to assess the habitats present on site and to fully inform the Biodiversity Impact Assessment (BIA) using the Natural England Biodiversity Metric 3.0. This information was used to:
- Adequately map the onsite habitats to inform the BIA; and
 - Undertake habitat condition assessments as per those outlined within The Biodiversity Metric 3.0 Technical Supplement¹.

Extended Phase 1 Survey

- 2.2 Survey methodology followed guidance from Joint Nature Conservation Committee (JNCC) 2016² comprising a walkover of the survey area mapping (using JNCC standard habitat codes) and broadly describing and classifying the principal habitat types and other features of interest.

¹ Stephen Panks A, et al. 2021. Biodiversity metric 3.0: Auditing and accounting for biodiversity –User Guide. Natural England.

² JNCC (2016) *Handbook for Phase1 Habitat Survey – a technique for environmental audit*. ISBN 0 86139 636 7

UK Hab

- 2.3 A summary of the habitats present on site is provided within the report including UK Hab equivalent habitats for the purpose of the Biodiversity Impact Assessment (BIA).

BIODIVERSITY IMPACT ASSESSMENT (BIA)

- 2.4 To quantify deliverable net gain for the application, the baseline value of the habitats within the site have been calculated utilising the Natural England Biodiversity Metric 3.0.

Survey Limitations

- 2.5 The Phase 1 habitat Survey was undertaken on the 24th March 2020, which falls outside the optimal survey period for botanical identification (April – September). However, given the habitats present within the site, it was considered adequate to accurately assess the habitat types and their condition.

3.0 BASELINE ECOLOGY

- 3.1 A Phase 1 Habitat Plan showing the baseline conditions onsite is provided as Figure 1. A summary of the habitats present is provided in Table 1 below, including UK Hab equivalent habitats for the purpose of the BIA.

Table 1: Summary of Habitats

Phase 1 Habitat Type	UK Hab (using Biodiversity Metric 3.0)	Description / Habitat Condition Assessment
Built Environment: Buildings / hardstanding	Urban – Developed land; sealed surface	Access tracks were present in the south and west of Site.
Cultivated / disturbed land – amenity grassland	Grassland – Modified Grassland	Small areas of amenity grassland were present associated with the access tracks into the site. Modified grassland in Poor condition.
Improved grassland	Grassland – Modified Grassland	The majority of the site comprised intensively managed grassland, split into several field compartments and used for grazing cattle. Less than 9 species per m2, so Modified Grassland. Meets criteria 3, 6 and 7 but fails the rest, therefore in Poor condition.
Intact hedge – species rich	Native hedgerow	H1 - fails A1, A2 - in same functional group - Moderate condition.
Introduced hedge	Hedge Ornamental Non Native	H2 - Non-native dominant - automatic Poor condition.
Defunct hedge	Native hedgerow	H3- fails B2, C1 and C2 - in same functional group - moderate condition. H5 - fails A1, A2 - in same functional group - Moderate condition. H7 - fails B1, C1 and C2 - in same functional group - Moderate condition.
Defunct hedge with trees	Native Hedgerow with trees	H4 - fails C1 and C2 - in same functional group - Moderate condition. H6 - fails B1, C1 and C2 - in same functional group - Moderate condition.

Phase 1 Habitat Type	UK Hab (using Biodiversity Metric 3.0)	Description / Habitat Condition Assessment
Line of Broadleaved Trees	Line of Trees – Associated with bank or ditch	Line of trees associated with a bank in the northern section of site. Meets criteria 1, 2 and 5, fails the rest - Good condition.
Scattered trees	Grassland – Modified Grassland	Scattered trees were present within the areas of grassland located along the site boundaries. These were limited in extent and so are included within the grassland for the purposes of this assessment.

3.2 From the completed DEFRA BM, the value of the existing habitats are **22.66 Biodiversity Habitat Units and 1.87 Hedgerow Units** (see Appendix A).

4.0 BIODIVERSITY IMPACT ASSESSMENT

4.1 In accordance with NPPF (2023³), the aim is to generate a measurable net gain for biodiversity.

4.2 Kirklees Local Plan, which was adopted in February 2019⁴. The key local policy concerned with ecology is Policy LP30 which states;

“Development proposals will be required to:-

- *result in no significant loss or harm to biodiversity in Kirklees through avoidance, adequate mitigation or, as a last resort, compensatory measures secured through the establishment of a legally binding agreement;”*

4.3 The Environment Act (2021⁵), which was enacted in November 2021 requires a minimum 10% net gain in biodiversity units. This is likely to become mandatory in January 2024.

4.4 Kirklees Council published a Biodiversity Net Gain Advice Note (2021⁶) stating a 10% net gain is required for all major developments in Kirklees, which reflects the statutory legislation.

PREVIOUS CALCULATION

4.5 The initial Biodiversity Impact Assessment submitted with the planning application (Futures Ecology, April 2022, ref: FE30/BIA01) achieved 15.5 Biodiversity Habitat Units, equating to a -31.60% net percentage loss. The habitat trading rules were unacceptable due to the loss of modified grassland. There was however a considerable net gain in hedgerow units post development, with 4.52 Hedgerow Units achieved, equating to a +141.16% net percentage gain.

4.6 A Biodiversity Credit has been purchased from Kirklees Council to offset the losses in Habitat Units to achieve a 10% net gain overall.

³ Department for Levelling Up, Housing & Communities (September 2023). National Planning Policy Framework. London

⁴ <https://www.kirklees.gov.uk/beta/planning-policy/pdf/local-plan-strategy-and-policies.pdf>

⁵ <https://www.legislation.gov.uk/ukpga/2021/30/contents/enacted>

⁶ Biodiversity Net Gain in Kirklees, Technical advice note on Biodiversity Net Gain requirements for developments within Kirklees, June 2021

UPDATED CALCULATION

- 4.7 Since the initial Biodiversity Impact Assessment (Futures Ecology, April 2022, ref: FE30/BIA01) was submitted, there have been some changes to the landscaping. The main change is that the drainage basin and surrounding grassland can now be managed and enhanced for wildlife. Other changes have also been made to the areas of Public Open Space (POS).
- 4.8 The habitat creation and management will now be based on the Detailed Landscaping Proposals (Golby + Luck, GL2067 01C – 06C).
- 4.9 With the BM outlined within Appendix A post development, the habitat enhancements and creation as outlined in this document with long-term management (for a minimum of 30 years) will now achieve **19.98 Biodiversity Habitat Units**, which is a **total net unit change of -2.68 Biodiversity Habitat Units**, equating to a **-11.84% net percentage loss**.
- 4.10 The habitat trading is unacceptable due to the loss of modified grassland.
- 4.11 There will however be a considerable net gain in hedgerow units post development. With the creation outlined in Appendix A and long-term management (for a minimum of 30 years) **4.55 Hedgerow Units** will be achieved, which is a **total net unit change of +2.67 Hedgerow Units**, equating to a **+142.67% net percentage gain**.
- 4.12 The above calculation does not account for the following additional enhancement measures that will be provided within the development as these cannot be quantified using the Natural England BM calculator. The inclusion of the following biodiversity enhancements to what has already been outlined above would be considered a benefit to biodiversity.
- Provision of bat and bird boxes throughout the site;
 - Installation of gaps for hedgehogs within boundary treatments;
 - Amenity grassland lawn areas (within gardens of the residential properties) to be seeded with a flowering lawn mix such as Emorsgate EL1. The species diversity and flowers will improve the value of the habitat to invertebrates.
- 4.13 A Biodiversity Credit has been purchased from Kirklees Council to offset the losses in Habitat Units to achieve a 10% net gain overall. This was based on the previous calculations submitted with the planning application (Futures Ecology, April 2022, ref: FE30/BIA01). The new landscaping proposals, with long-term management for a minimum of 30-years achieves more Habitat and Hedgerow Units than previously agreed. This means the scheme will achieve >10% in Biodiversity Units, providing a significant increase in value for local wildlife.

APPENDIX A: BIODIVERSITY METRIC (BM) 3.0

Bradley Villa Farm		Return to results menu
Headline Results		
On-site baseline	Habitat units	22.66
	Hedgerow units	1.87
	River units	0.00
On-site post-intervention <small>(Including habitat retention, creation & enhancement)</small>	Habitat units	19.98
	Hedgerow units	4.55
	River units	0.00
On-site net % change <small>(Including habitat retention, creation & enhancement)</small>	Habitat units	-11.84%
	Hedgerow units	142.67%
	River units	0.00%
Off-site baseline	Habitat units	0.00
	Hedgerow units	0.00
	River units	0.00
Off-site post-intervention <small>(Including habitat retention, creation & enhancement)</small>	Habitat units	0.00
	Hedgerow units	0.00
	River units	0.00
Total net unit change <small>(including all on-site & off-site habitat retention, creation & enhancement)</small>	Habitat units	-2.68
	Hedgerow units	2.67
	River units	0.00
Total on-site net % change plus off-site surplus <small>(including all on-site & off-site habitat retention, creation & enhancement)</small>	Habitat units	-11.84%
	Hedgerow units	142.67%
	River units	0.00%
Trading rules Satisfied?	No - Check Trading Summary	



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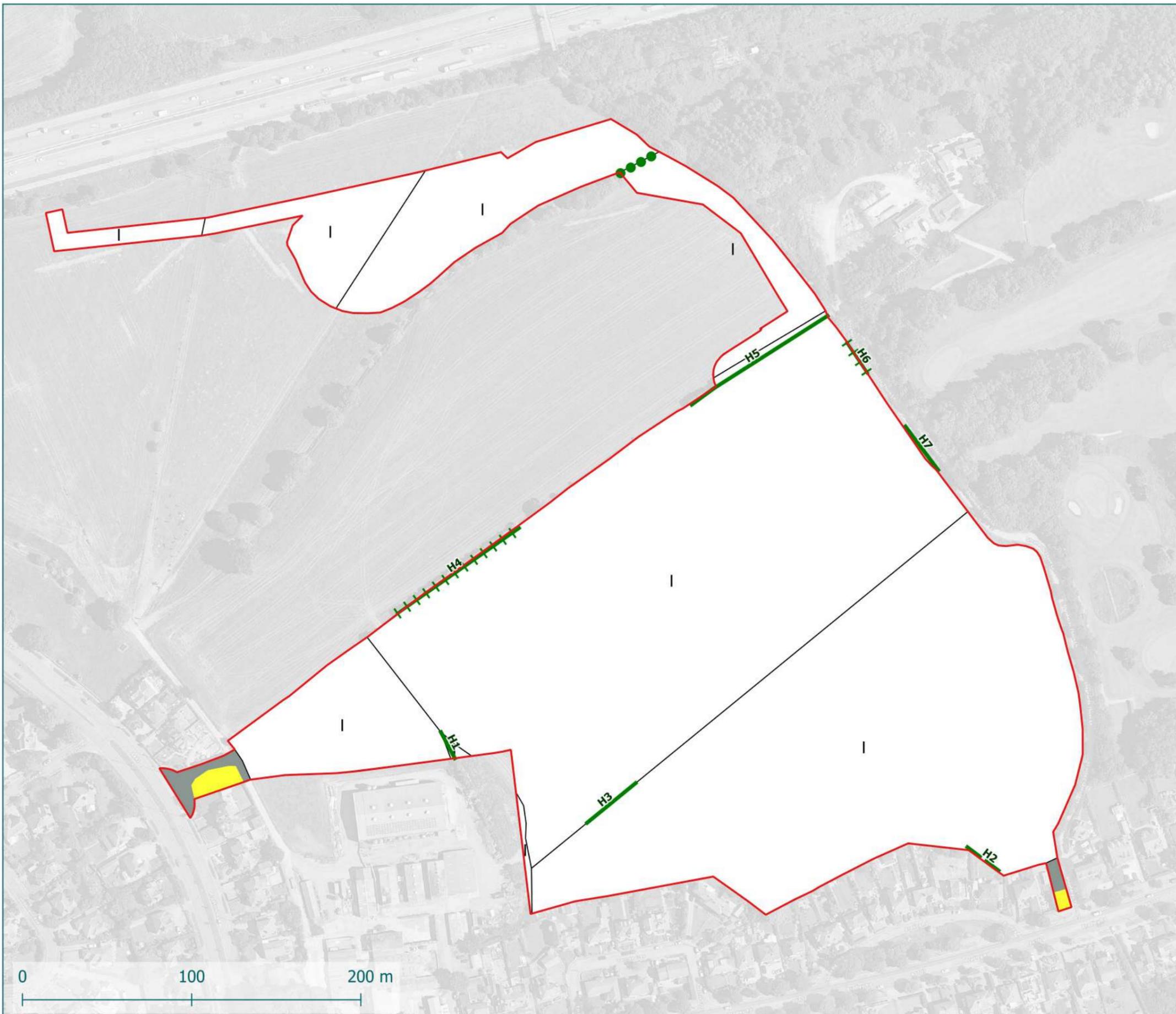
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Key

-  Site Boundary
-  Developed land; sealed surface
-  Modified grassland (amenity)
-  Modified grassland (improved)
-  Native hedgerow
-  Hedge ornamental non native
-  Native hedgerow with trees
-  Line of Trees associated with bank



Client: Redrow Homes (Yorkshire) Ltd, R. Kershaw and S. Gill

Project: Bradley Villa Farm, Kirklees

Title: Figure 1 - Baseline Habitat Plan

Plan Reference: FE30_01

Project Reference: FE30

Report Reference: FE30/BIA02

Author: KEH

Date: 2/1/2024

Scale: NTS@A3

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Key

- Site Boundary
- Developed land; sealed surface
- Vegetated garden
- Introduced shrub
- Modified grassland (amenity)
- Other neutral grassland (wildflower meadow)
- Artificial unvegetated, unsealed surface
- Other neutral grassland (wetland meadow)
- Mixed native scrub
- Retained hedgerow
- Retained broadleaved trees
- Native Species Rich Hedgerow with trees
- Native Species Rich Hedgerow
- Hedges: Introduced shrub
- Retained tree
- Urban tree small

Client: Redrow Homes (Yorkshire) Ltd, R. Kershaw and S. Gill

Project: Bradley Villa Farm, Kirklees

Title: Figure 2 - Post Development Habitat Plan

Plan Reference: FE30_02

Project Reference: FE30

Report Reference: FE30/BIA02

Author: KEH

Date: 2/1/2024

Scale: NTS@A3

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