



FUTURESECOLOGY

Newett Homes

Land off Northorpe Lane, Mirfield

BIODIVERSITY IMPACT ASSESSMENT (BIA)

Report Reference Number: FE90/BIA02

April 2022

Futures Ecology Ltd

Carrwood Park, Swillington Common Farm, Selby Rd, Leeds LS15 4LG

Company Number: 12125083

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REV	Issue Status	Author or Reviewer	Name & Qualifications	Position	Date
-	Draft 1	Author	K. Haymes BSc (Hons), ACIEEM	Senior Ecologist	13.04.21
		Reviewer	R.Hill-Harmsworth BSc (Hons), ACIEEM	Director	13.04.21
-	Final	Author	K. Haymes BSc (Hons), ACIEEM	Senior Ecologist	15.12.21
		Reviewer	M. Baker MSc, BSc (Hons), ACIEEM	Ecologist	16.12.21
A	-	Author	J. Harries BSc (Hons)	Assistant Ecologist	29.03.22
		Reviewer	K. Haymes BSc (Hons), ACIEEM	Senior Ecologist	29.03.22
B		Author	K. Haymes BSc (Hons), ACIEEM	Senior Ecologist	05.04.22

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INTRODUCTION

- 1.1 The following report has been prepared by Futures Ecology Ltd. on behalf of Newett Homes. 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 proposals for a residential development on land located off Northorpe Lane, Mirfield, Kirklees (central grid reference: SE 21490 21076).

DEVELOPMENT PROPOSALS

- 1.2 The site is the subject of an outline planning application for the development of 39 residential dwellings, with associated infrastructure and green space.

METHODOLOGY

- 1.3 A detailed habitat survey, previously undertaken by Brindle & Green in September 2019¹, and an updated walkover by ecologists from Futures Ecology Limited on 18th March 2021, were used to fully inform the Biodiversity Impact Assessment (BIA) using the DEFRA 3.0 metric. This information was used to:
- Adequately map the onsite habitats to inform the BIA; and
 - Undertake a habitat condition assessment as per those outlined within The Biodiversity Metric 3.0 Technical Supplement².
- 1.4 Survey methodology followed guidance from Joint Nature Conservation Committee (JNCC) 2016³ comprising a walkover of the survey area mapping (using JNCC standard habitat codes) and broadly describing and classifying the principal habitat types and identifying the dominant plant species present within each habitat type, noting any features of interest. Whilst the plant species lists obtained should not be regarded as exhaustive, sufficient information was obtained to determine broad habitat types.

BASELINE ECOLOGY

- 1.5 A Phase 1 Habitat plan is provided in Figure 1, which is an updated version of the Phase 1 Habitat Plan in the PEA, using updated GPS and aerial mapping. A summary of the habitats present on site 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 Table)	Brief Description
Hardstanding / Buildings	Urban – Developed land; sealed surface	Existing residential building, areas of hardstanding and empty water tanks at the north of site

¹ Preliminary Ecological Appraisal (PEA), Brindle & Green (September 2019)

² Stephen Panks A, et al. 2021. Biodiversity metric 3.0: Auditing and accounting for biodiversity –User Guide. Natural England.

³ JNCC (2016) Handbook for Phase1 Habitat Survey – a technique for environmental audit. ISBN 0 86139 636 7

Phase 1 Habitat Type	UK Hab (using Biodiversity Metric 3.0 Table)	Brief Description
Gardens	Urban – Vegetated garden	Gardens of residential property
Introduced Shrub	Urban – Introduced shrub	Flower beds containing ornamental shrubs
Amenity Grassland	Grassland – Modified grassland	Amenity grassland strip along Northorpe Lane, parcel to the north-west. Land outside applicant's control, owned by Kirklees Highways so not included in the net gain calculation
Tall ruderal vegetation	Sparsely vegetated land – Ruderal / Ephemeral	Tall ruderal vegetation associated with grassland fields. Condition Assessment - from the grassland assessment table the habitat is of poor condition due to the high occurrence of undesirable species.
Poor semi-improved (SI) grassland	Grassland -Other neutral grassland	Poor SI grassland, covers the majority of the site. Condition assessment- Poor- Fails criteria 1 (doesn't closely match UKHab specific grassland type), 2 (sward closely mown) and 3 (No bare ground).
Marshy grassland	Grassland -Other neutral grassland	An area of inundation vegetation, situated within the much larger poor semi-improved grassland. Other neutral grassland in poor condition. Condition assessment- Poor- Fails criteria 1 (doesn't closely match UKHab specific grassland type), 2 (sward closely mown) and 3 (No bare ground).
Continuous Scrub	Heathland and shrub –Bramble scrub	Patches of dense bramble scrub recorded across the application site. Condition assessment - fails criteria 2, 3, 5 and 6. The single woody species cover is greater than 75%. Single-age scrub present. Poor.
Scattered Scrub	Heathland and shrub – Bramble scrub	Scattered bramble scrub to the north of site. Condition assessment - fails criteria 2, 3, 5 and 6. The single woody species cover is greater than 75%. Single-age scrub present. Poor.
Dry ditch	River- Ditches	A dry ditch ran west to east in the north of the site. Condition assessment - Poor (water body dries out).
Native species hedgerow	Native hedgerow	Hedgerow H1. Habitat condition: Meets A1, A2, B1, B2, D1 and D2

Phase 1 Habitat Type	UK Hab (using Biodiversity Metric 3.0 Table)	Brief Description
		but fails both C1 and C2, so in moderate condition.

- 1.6 From the completed Natural England Biodiversity Metric, the value of the existing site habitats are **4.49 Biodiversity Habitat Units**, **0.1 Hedgerow Units** and **0.2 River Units**.

BIODIVERSITY IMPACT ASSESSMENT

- 1.7 In accordance with National Planning Policy Framework (NPPF, 2021)⁴, the Environment Bill (2021⁵) which was enacted in November 2021, and the Kirklees Biodiversity Net Gain Technical Advice Note⁶ the aim is to generate a minimum of 10% net gain in biodiversity units.
- 1.8 The masterplan has sought to retain existing boundary habitats (native species hedgerow H1) and buffer valuable offsite habitats (broadleaved woodland mapped within Kirklees Wildlife Habitat Network) with habitat creation. New habitats to be created include species-rich meadow grassland, mixed native scrub planting, native trees and a native species-rich hedgerow (H2) along the northern boundary. These new habitats will be managed for their value for wildlife.
- 1.9 Post development the habitat enhancements and creation, as outlined in this document with long-term management (for a minimum of 30 years), will achieve a net gain of +1.42 Hedgerow Units (total net change of +1,423.31%). However, a net gain in Biodiversity Habitat Units will not be achieved with the current proposed development resulting in a total net unit change of -1.55 Habitat Units (total net change of -34.52%). In addition, the loss of the dry ditch within the site will lead to a total net unit change of -0.2 River Units (a total net change of -100%).
- 1.10 The Habitat Trading for the site is currently unacceptable given the assumed habitat creation and enhancements. This is due to the loss of the poor semi-improved grassland and bramble scrub, which were both in poor condition but are of medium distinctiveness within the metric. However, a surplus of units within the low distinctiveness band is sufficient to offset the loss of the tall ruderal vegetation in the low distinctiveness band.
- 1.11 Figure 2 outlines the habitat areas post development across the site.

DISCUSSION & CONCLUSION

- 1.12 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.

⁴ Ministry of Housing, Communities and Local Government (July 2021). National Planning Policy Framework. London

⁵ <https://www.gov.uk/government/publications/environment-bill-2020> accessed 15.12.2021

⁶ <https://www.kirklees.gov.uk/beta/planning-applications/pdf/biodiversity-net-gain-technical-advice-note.pdf> accessed 05.04.2022

- Provision of bat and bird boxes throughout the site;
- Installation of gaps for hedgehogs within boundary treatments;
- Creation of log piles for hedgehogs and other species;
- Amenity grassland lawn areas, within the public open space and within the gardens of the residential properties, can 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.

1.13 As the development proposals cannot deliver a 10% net gain on-site there is a requirement to secure a net gain via an alternative mechanism. This could include a combination of the following:

- Utilising off-site land under the control of the applicant to deliver the off-site requirement. The land should ideally be located in a strategic ecologically beneficial location.
- A Biodiversity Credit is calculated based on the Biodiversity Units required for the LPA or another third-party Habitat Bank (to be approved by the LPA) to take on responsibility to deliver the Net gain for biodiversity.⁷

⁷ <https://www.kirklees.gov.uk/beta/planning-applications/pdf/biodiversity-net-gain-technical-advice-note.pdf> accessed 05.04.2022



Telephone: 01132 878580

Telephone: 01623 749709

- Site Boundary
- Developed land; sealed surface (buildings)
- Developed land; sealed surface (hardstanding)
- Vegetated garden
- Introduced shrub
- Modified grassland (amenity)
- Other neutral grassland (poor semi-improved)
- Ruderal/Ephemeral
- Bramble scrub (dense / continuous)
- Bramble scrub (scattered)
- Other neutral grassland (marshy)
- Native species hedgerow
- Dry ditch
- Broadleaved tree



Author: KH
Date: 16/12/2021
Scale: NTS@A3

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28, Northorpe Lane, Mirfield, WF14 QQN\QGIS - NEW\1 Plans\FE90 Biodiversity Net
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FUTURESECOLOGY

Carrwood Park, Swillington Common Farm, Selby Road, Leeds, LS15 4LG

Telephone: 01132 878580

Unit 9, The Tangent Business Hub, Weighbridge Road, Shirebrook, Mansfield, Derbyshire, NG20 8RX

Telephone: 01623 749709

Key

- Site Boundary
- Developed land; sealed surface
- Developed land; sealed surface
- Vegetated garden
- Introduced shrub
- Modified grassland (amenity)
- Other neutral grassland (meadow mix)
- Mixed scrub
- Land Outside Applicant's Control
- Native Species Rich Hedgerow
- Native Hedgerow (beech hedge)
- Retained hedgerow H1
- Hedge Ornamental Non Native
- Wall
- Fence
- Urban tree - large
- Urban tree - medium
- Urban tree - small



Client: Newett Homes

Project: Land off Northorpe Lane, Mirfield, Kirklees

Title: Figure 2 - Proposed Habitat Plan

Plan Reference: FE90_02

Project Reference: FE90

Report Reference: BIA02

Author: JH / KEH

Date: 5/4/2022

Scale: NTS@A3

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