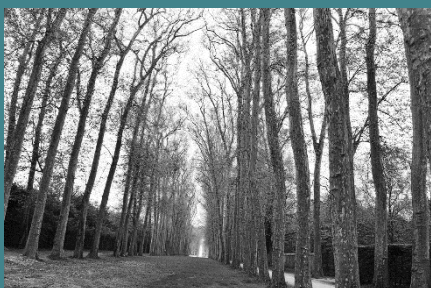


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& design



Biodiversity Impact Assessment

Client

Harworth Group

Project

Gateway 36, Rockingham, Barnsley – Unit 7

Date

November 2024

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Rev	Issue Status	Prepared/Date	Approved/Date
-	Final	JDH / 05.11.24	HEH / 06.11.24
A	Final		JDH / 03.03.25

1.0 INTRODUCTION

- 1.1 This report has been prepared by FPCR Environment and Design Ltd on behalf of the Harworth Group in support of both obligatory requirements under the Section 106 schedule 4 agreement (10th August 2020) and condition 28 discharge for a reserved matters application (Outline [hybrid] planning permission - 2019/1573).

Background

- 1.2 The Site sits to the north of Hoyland, adjacent to Shortwood Business Park in Barnsley, South Yorkshire (central grid ref: SE 35656 00865). The site was cleared following the approved earthworks scheme detailed in the Hybrid planning permission. Surrounding land use is largely arable and pasture with hedgerows providing connectivity to the wider landscape. Areas of broad-leaved semi-natural woodland are located to the north, forming part of the Short Wood and Hay Green LWS and also Dearne Valley Wetlands SSSI.
- 1.3 Unit 7 sits within the Phase 2 site and comprises an area to the south of Dearne Valley Parkway (A6195) which has largely been cleared of vegetation with a small area of retained periphery woodland.

Proposals

- 1.4 The proposed development (Unit 7) comprises one building for industrial and/or storage and distribution use with associated yard and car park, together with formation of landform, landscape planting and features within the Gateway 36 Phase 2 site.
- 1.5 Green infrastructure will connect into the wider Site scheme with woodland and scrub belts along the boundaries.
- 1.6 Access to the site will be provided from the service road running off Dearne Valley Parkway and through the previously approved Phase 2a.1 (2021/1007; December 2022).

Aims and Objectives

- 1.7 This BNG Report is broadly based on the Chartered Institute of Ecology and Environmental Management (CIEEM) guidance¹. The scope and objectives of this report are to:
- Summarise the results of the baseline habitat survey and habitat condition assessment survey following the Defra Biodiversity Metric 2.0 (hereafter referred to as 'the Metric').
 - Provide an overview of the proposed habitats following completion of the scheme.
 - Present the results of the Metric assessment completed for the proposals.
 - Assess the feasibility of the proposals to achieve a net gain in biodiversity through the Metric.
 - Recommendations for the proposals to maximise their biodiversity potential.
- 1.8 This report provides an update to the biodiversity impact assessment submitted as part of the outline (hybrid) planning application and has been informed by the following documents:

¹ CIEEM (2021) Biodiversity Net Gain Report and Audit Templates Chartered institute of Ecology and Environmental Management, Winchester, UK.

- Landscape Masterplan [Phase 2], drawing number 12006-5; 0004, Rev P04, The Harris Partnership, 2024.
- Unit 7 – Landscape Planting Plan, drawing number 334-UW-P-081, Rev B, Urban Wilderness, 2025.

- 1.9 This report provides only a summary description of the habitat baseline and should be read in conjunction with the Ecological Appraisal (FPCR, 2019).
- 1.10 A Landscape and Ecological Management Plan (LEMP) (Urban Wilderness 2024) has been prepared for the proposals, which details how the retained and proposed habitats will be created and managed. Consequently, this report focuses on elements of creation and management that are relevant to the Biodiversity Metric 2.0 with details of the other practical elements of creation/management reserved for the accompanying LEMP. This report should therefore be read in conjunction with the LEMP.

Biodiversity Impact Assessment Strategy

- 1.11 The Lawton Review² summarises that that improvements for biodiversity in the UK need to be *"more, bigger, better and joined up"*.
- Specifically, with regards to biodiversity offsetting for developments it recommends that *"Opportunities should be taken to pool habitat compensation from different developments so that larger habitat blocks can be created"*.
- 1.12 Following this guidance, a coherent, cumulative strategy is proposed to provide quality habitats which connect into existing ecological networks.
- 1.13 Through utilising a biodiversity metric, conservation activities can be designed to deliver biodiversity benefits in compensation for losses, with a measurable outcome. This provides a traceable record to track cumulative impacts and delivered biodiversity benefits.
- 1.14 Using the biodiversity metric means that a developer employs a standardised formula to calculate the number of biodiversity 'units' to be lost as a result of their development, based on the habitat(s) affected, their condition and extent. The developer then provides an 'offset' (where necessary) to deliver an equivalent number of biodiversity units.
- 1.15 Biodiversity offsetting is used only to compensate for adverse impacts on biodiversity identified after appropriate avoidance, minimisation and on-site rehabilitation measures have been undertaken, according to the mitigation hierarchy as required by National Planning Policy Framework (NPPF, 2023)³.

² Lawton, J.H et al., (2010) Making Space for Nature: a review of England's wildlife sites and ecological network. Report to Defra. <http://archive.defra.gov.uk/environment/biodiversity/documents/201009space-for-nature.pdf>

³ Department for Levelling Up, Housing & Communities, National Planning Policy Framework (2023) available at: <https://www.gov.uk/government/publications/national-planning-policy-framework--2>

Legislation and Policy Context

Local Policy

- 1.16 The Barnsley local plan supplementary planning document: Biodiversity and Geodiversity states:

"The LPA will not support applications that would damage the ecological network and cause a net-loss in biodiversity in line with the NPPF."

- 1.17 With specific reference to sites located within the Nature Improvement Area (see 3.4) the above document states:

"Within the NIA (Nature Improvement Area) we require specific biodiversity enhancements with developments over and above the minimum mitigation/ compensation measures.....

.....Such quantifiable, significant benefits could include:

New woodland;

New wetland;

Enhancing areas of poor environmental quality;

Improving public access, or

Improving the management of existing habitats."

The Environment Act

- 1.18 In England, biodiversity net gain is now required under statutory frameworks introduced by Schedule 7A of the Town and Country Planning Act 1990⁴ (inserted by the Environment Act 2021⁵). Under this framework, every grant of planning permission will be deemed to have been granted subject to a general biodiversity gain condition. This requires an objective for developments to deliver at least a 10% increase in biodiversity value relative to the pre-development biodiversity value of all on-site habitats.
- 1.19 If a planning application for a development was made before day one of mandatory BNG on 12th February 2024, the development is exempt from mandatory BNG.

National Planning Policy Framework (2023)

- 1.20 The NPPF (2023) in particular seeks to ensure that the planning system contributes to and enhances the natural and local environment, protect and enhance biodiversity and geodiversity by:

"180. d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;

185. b) promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity."

⁴ Town and Country Planning Act 1990, c.8 available at: <https://www.legislation.gov.uk/ukpga/1990/8/contents>

⁵ Environment Act 2021 c. 30 available at: <https://www.legislation.gov.uk/ukpga/2021/30/contents>

Measurable net gain

- 1.21 The outline planning application for this development was submitted in May 2016, prior to the secondary legislation coming into force. However, the section 106 agreement for the Site as a whole, stipulates that the development will deliver a 10% net gain in biodiversity units. This is expected to include additional offsite provision to compensate for on-site deficits.
- 1.22 The biodiversity units created and lost for each phase of the development has been tracked utilising the Biodiversity Metric 2.0, with updates submitted at each stage of reserved matters. Surplus units from previous phases have been 'banked' and carried forward to future phases. Any residual deficits will be accounted for through offsite provision.

2.0 METHODOLOGY

Baseline Habitat Assessment

2.1 The following documents were used to inform this assessment:

- Ecological Appraisal. Rev A. (FPCR 2019)
- Biodiversity Impact Assessment. Rev B. (FPCR 2020)
- Landscape Masterplan [Phase 2], drawing number 12006-5; 0004, Rev P04, The Harris Partnership, 2024.
- Unit 7 – Landscape Planting Plan, drawing number 334-UW-P-081, Rev B, Urban Wilderness, 2025.

Natural England's The Biodiversity Metric 2.0

2.2 The Statutory Biodiversity Metric was first published in November 2023. This new version utilises new habitat condition assessments, revised modifiers, and updated habitat options. Prior to the publication of the Statutory Biodiversity Metric, Natural England guidance stated that:

"it is important that the same metric is used consistently throughout all elements and stages of a project, including for calculating any off-site habitat provision, to ensure consistency and comparability. You cannot sum across or between, nor can you compare the outputs from, different biodiversity metrics".

2.3 The Biodiversity Metric version 2.0 was utilised to undertake the initial assessment, with the relevant condition assessment used to guide habitat creation and management objectives for the site. For continuity the Biodiversity Metric 2.0 will be used to track all phases of the development.

2.4 The Metric is an MS Excel spreadsheet that is used to quantify the predicted net-change in biodiversity value ("biodiversity units") of a proposed development site before and after development. It treats the flat "habitats" and linear features "hedgerows" separately, and is based on pre-determined values, along with published written guidance, set by a Natural England-led team of experts.

2.5 To facilitate this, the Site has been mapped and digitised using QGIS, with the baseline habitats plotted and measured. In accordance with the 2.0 Metric User Guide, habitats have been defined under UK Habitat Classification. The detailed landscaping proposals for the Site were then uploaded into the QGIS, and the proposed habitats mapped and digitised to generate areas for each of the habitats proposed for creation.

2.6 These pre- and post-development habitat areas were then inputted into the 2.0 Metric Calculation tool. Pre-development habitats were grouped into their habitat type and condition based on the results of the UKHab and condition assessment surveys, while post-developments were classified into their UKHab type as identified through the classification of proposed habitats within landscaping plans into appropriate UKHab types and their target condition scores. The metric then provides a habitat distinctiveness score for each of the baseline and proposed habitats which are pre-assigned scores based on the habitat type.

- 2.7 The strategic significance of the habitats was also assessed for both the pre- and post-development habitats based on the location of the site, its proximity to existing areas of biodiversity interest and its setting within wider habitat corridors.
- 2.8 With regards connectivity, Natural England's Biodiversity Metric 2.0 – Beta Test Version Consultation Response⁶ has updated this guidance and states that connectivity is now to be fixed at Low for all habitats until the metric is next reviewed.
- 2.9 The metric then assigns a range of pre-assigned factors to each of the proposed habitats. These have been advised by subject knowledge experts and are universal multipliers generated by the metric itself for the following variables relevant to habitat creation, enhancement or restoration proposals.
- 2.10 Difficulty of creating or restoring/enhancing a habitat: This pre-assigned score is based on how difficult a particular habitat type is to create or restore/enhance.
- 2.11 Temporal risk: This is the 'time to target condition' for any particular habitat and determines how long a particular habitat type is likely to take to reach the condition score that the desired condition score assigned to it.
- 2.12 Spatial Risk: This score is based on the distance between the site of habitat loss and any habitats creation or enhancement proposals at any offsite offsetting solutions.
- 2.13 Full details of the calculation methodology used is provided in the Biodiversity Metric 2.0 – User Guide⁷.

Limitations

- 2.14 Data provided by third party sources collated during the desktop study is generally made up from a wide range of sources including (but not limited to) those submitted by ecological consultancies, wildlife conservation organisations and volunteers. As such, this data is typically focused on areas of known nature conservation, is reliant upon formal surveys having been undertaken within an area or the presence of an expert within the locality and as such this data can never be fully relied upon as a complete ecological dataset for any given area. Rather, this data is used as a guide to likely presence of notable ecological features and can never be relied upon for likely absence.
- 2.15 The UKHab habitat map has been reproduced from detailed field notes and informed by aerial imagery, OS mapping and site maps provided by the client. The accuracy of this figure is therefore ultimately guided by the accuracy of these sources and can only be relied upon to a certain degree of resolution.
- 2.16 The aim of biodiversity offsetting is to compensate for significant adverse impacts on biodiversity identified after appropriate avoidance, minimisation and on-site rehabilitation measures have been taken, according to the mitigation hierarchy as required by the NPPF.
- 2.17 No other limitations specific to this report influenced this assessment.

⁶ Natural England, 2020, The Biodiversity Metric 2.0 – Beta Test Version Consultation Response

⁷ Natural England, 2019, The biodiversity metric 2.0, Available at:

<http://publications.naturalengland.org.uk/publication/5850908674228224>

3.0 BASELINE CONDITIONS

- 3.1 The baseline conditions are taken from the Biodiversity Impact Assessment (FPCR 2020) submitted in support of the site wide outline (hybrid) planning application which covered both phases 2 and 3.
- 3.2 The existing spine road has been included within the redline for this phase as the designated access route. The road was delivered as part of an earlier phase 2a.1 with the impacts of its creation assessed under that application (2021/1007; December 2022).

Desktop Study

Internationally Designated Sites of Nature Conservation Importance

- 3.3 No international sites of nature conservation importance are present within a 5km radius of the subject site.

Nationally Designated Sites of Nature Conservation Importance

- 3.4 The site is located within the Dearne Valley Green Heart Nature Improvement Area (NIA) which is a national, landscape-scale nature conservation designation and is subject to requirements set out within the Barnsley Local Plan Supplementary Planning Document: Biodiversity and Geodiversity.
- 3.5 Subsequent to outline (hybrid) planning permission being granted, Dearne Valley Wetlands was notified by Natural England as a Site of Special Scientific Interest (SSSI) on 13th May 2021. Natural England confirmed Dearne Valley Wetlands SSSI under section 28 of the Wildlife and Countryside Act 1981 on 4th February 2022. The notified SSSI consists of 22 site units, with differing interest features⁸. Site unit 21 is made up of Barrow Hill Colliery and a section of Short Wood. The Short Wood section of the SSSI is located adjacent to the northern boundary of the wider application site, but is removed from the Unit 7 redline by approximately 400m. The notification for this site unit reports the features of interest to be breeding willow tit and breeding bird assemblage of lowland scrub. Both features of interest in this unit are reported in the notification documentation to be in favourable condition as of March 2020.
- 3.6 No other nationally designated statutory sites of nature conservation importance were located within the 2km search area.

Non-Statutory Sites

- 3.7 Two Local Wildlife Sites (LWS) are located within 1km of the site as detailed within **Table 1** below.

Table 1: Designated Sites within Zones of Influence

Site Name/Ref	Designation	Designation Feature	Approximate Distance and Orientation from Unit 7
Short Wood and Hay Green/637	LWS	Ancient woodland	600m north

⁸ Dearne Valley Wetlands SSSI South Yorkshire – Supporting Information. 2021. Natural England

Site Name/Ref	Designation	Designation Feature	Approximate Distance and Orientation from Unit 7
Barrow Colliery Site –/1158	LWS	Ancient woodland and semi-improved neutral grassland	900m north-east

Strategic Significance

- 3.8 The site is set within the Dearne Valley Green Heart NIA and as such all habitats meet the criteria for inclusion within the maximum valued strategic significance category - *"Within area formally identified in local strategy"*.

Biodiversity Units

Habitats

- 3.9 Before clearance works the site was utilised for livestock grazing on pasture. Native hedgerows bounded the majority of field compartments. Woodland was present within and surrounding the Site. Other habitats on-site included areas of scrub and neutral grassland in association with woodland edges.
- 3.10 The baseline habitats and their conditions are detailed in **Table 2** below and illustrated in **Figure 1**.

Table 2: Biodiversity Units: Baseline On-Site Habitats

Label	Habitat and Description	Area (ha)	Condition	Biodiversity Units
4e	Other neutral grassland Woodland ride.	0.12	Moderate	1.1
5 & 13	Other woodland; broadleaved Plantation woodland	1.51	Poor	6.95
11	Wet woodland Plantation woodland	0.13	Poor	0.9
14	Modified grassland Field compartments	5.18	Poor	11.91
15	Bramble scrub Woodland edge	0.01	Poor	0.05
n/a	Access road (delivered under phase 2a.1)	0.45	n/a	0
n/a	Track on southern boundary	0.01	n/a	0
	Total	7.41		20.91

Please note there may be minor discrepancies (rounding errors) between the columns and the totals, however, the numbers duplicate those presented within the matrix calculator.

Hedgerows

- 3.11 The biodiversity units for each hedgerow on the site have been calculated and are presented in **Table 3**.

Table 3: Biodiversity Units: Baseline On-Site Hedgerows

Habitat	Length (km)	Condition	Biodiversity Units
H3 Hedges: Native species rich hedge	0.007	Moderate	0.0644
H4 Hedges: Native species rich hedge	0.035	Moderate	0.322
H11 Hedges: Native species rich hedge	0.083	Moderate	0.7636
H12 Hedges: Native species rich hedge	0.243	Moderate	2.2356
Total	0.37		3.39

Please note there may be minor discrepancies (rounding errors) between the columns and the totals, however, the numbers duplicate those presented within the matrix calculator.

4.0 PROPOSED DESIGN

Retained/Enhanced

- 4.1 Habitat retention is illustrated in **Figure 2**.
- 4.2 The proposals include the retention of a small area of woodland and boundary hedgerow. The retained woodland will be adopted into the wider woodland management plan in order to improve its condition in the long term.

Habitat Creation

- 4.3 Habitat creation is shown in **Figure 3**.
- 4.4 Green infrastructure proposals include the creation of a range of habitats throughout the Site that will be managed for their biodiversity value; including woodland, scrub and species-rich grassland. The new scrub and woodland planting will link into the wider site provision and existing habitats to provide connectivity and buffering to offsite habitats.
- 4.5 Habitat creation on the development plot will include ornamental planting and amenity grassland, as well as several specimen street trees. Planting a diverse range of plants will provide some interest for wildlife, particularly pollinators that can take advantage of flowering species. Grassland will be seeded with a diverse flowering lawn mix and, while management will prioritise their amenity character, it will ensure these areas provide some botanical interest, particularly during the spring/summer months.
- 4.6 The management targets for habitat creation on the Site are presented in **Appendix A**. Management prescriptions for the green infrastructure are detailed within the LEMP (Urban Wilderness 2024). On plot management will be focused on amenity value for low distinctiveness habitats, with biodiversity benefits bolstered through diverse planting/seeding mixes.

Hedgerow Creation

- 4.7 In line with the accompanying LEMP (Urban Wilderness 2024) and detailed planting plans, the proposals include the creation of native hedgerows, and a length of native hedgerow with trees.
- 4.8 Additional gapping up and management will connect southern boundary hedgerows to provide a continuous linear feature.
- 4.9 Hedgerows and lines of trees will be managed to target moderate condition by implementing the following measures:
- Failed specimens will be replaced during establishment on a like-for-like basis.
 - Hedgerows will be managed to encourage tall, wide and bushy features.
 - Gaps will be closed up with additional planting.
 - Fertiliser use will be prohibited adjacent to hedgerows to reduce nutrient enrichment,
 - Management of grasslands within 1m of hedgerow bases will be in line with the management of meadow grasslands.

Additional Enhancements

4.10 Additional mitigation measures will be implemented to contribute to a biodiversity net gain across the Site. This will focus on the provision of faunal enhancements that are not captured within the Natural England Biodiversity Metric 2.0 calculations. Full details of these measures are set out in the Habitat Creation, Biodiversity Mitigation and Enhancement Scheme (FPCR 2024). In brief:

- Inclusion of a sensitive lighting scheme to minimise spill onto sensitive habitats.
- Provision of a range of pole mounted bat boxes.
- Provision of a range of bird nesting boxes.
- Creation of log piles within the woodland.

5.0 BNG METRIC

- 5.1 The habitat retention, enhancement and creation proposals highlighted within this report have all been inputted into the Biodiversity Metric 2.0. **Table 4** provides a summary of the headline results of the biodiversity metric 2.0 assessment completed for the proposals. The full metric has been provided in **Appendix B**.

Table 4: Biodiversity Metric 2.0 Headline Results

Baseline	Habitat Units	20.91
	Hedgerow Units	3.39
Post-Intervention	Habitat Units	9.35
	Hedgerow Units	1.21
Total Net Unit Change	Habitat Units	-11.56
	Hedgerow Units	-2.17
Total Net Percentage Change	Habitat Units	-55.3%
	Hedgerow Units	-64.2%

- 5.2 The assessment has demonstrated that this phase of the proposals will lead to a loss in both area habitat units and hedgerow units.
- 5.3 A summary of post-intervention biodiversity units is provided in **Tables 5 and 6** below.

Table 5: Biodiversity Units: Post-intervention On-Site Habitats (combined retained, created and enhanced)

Habitat and Description	Area (ha)	Condition	Biodiversity Units
Heathland and shrub - Mixed scrub Structurally diverse native scrub.	0.44	Good	4.73
Other woodland; broadleaved Woodland providing connectivity across site.	1.1	Good	3.25
Wet woodland Enhanced retained woodland.	0.06	Good	0.59
Other Neutral grassland Informal areas of grassland managed for biodiversity	0.06	Moderate	0.39
Urban- Street Trees 7 x Medium	0.0285 (excluded from area total)	Moderate	0.05
Urban – Amenity grassland Formal areas of species poor grassland.	0.12	Poor	0.27
Urban - Introduced Shrub Formal planting	0.03	Poor	0.07
Urban – Developed Land	4.9	N/A	0
Urban – Artificial unvegetated, unsealed surface	0.68	N/A	0
Total	7.4		9.35

Please note there may be minor discrepancies (rounding errors) between the columns and the totals, however, the numbers duplicate those presented within the matrix calculator. Street tree areas are a proxy overlay and do not count towards the total site area.

Table 6: Biodiversity Units: Post-intervention On-Site Hedgerows (combined retained and created)

Habitat	Length (km)	Condition	Biodiversity Units
Native Hedgerow with Trees	0.171	Moderate	0.55
Native Species Rich Hedgerow	0.060	Moderate	0.35
Native Hedgerow	0.084	Moderate	0.32
Total	0.315		1.21

Please note there may be minor discrepancies (rounding errors) between the columns and the totals, however, the numbers duplicate those presented within the matrix calculator.

Habitat Trading Summary

- 5.4 There is a net loss of broadleaved woodland. This is a medium distinctiveness habitat and requires compensation to be equivalent or better. This will be compensated for through offsite woodland enhancement.
- 5.5 Medium distinctiveness neutral grassland will be lost, and will require compensation with equivalent or higher distinctiveness habitat.
- 5.6 The loss of hedgerows and low distinctiveness modified grassland fields will be compensated for within the wider scheme.

6.0 BIODIVERSITY NET GAIN PRINCIPLES

- 6.1 The above assessment has been guided by the Biodiversity Good Practice Principles (CIRIA-CIEEM-IEMA, 2016). **Table 7** lists all of the principles along with a description of how the principles has been applied to this assessment.

Table 7: Application of the Biodiversity Net Gain Principles to the Proposals

Principle	Indicators
Principle 1: Apply the Mitigation Hierarchy	High distinctiveness woodland habitats were retained where possible.
Principle 2: Avoid losing biodiversity that cannot be offset by gains elsewhere	The proposals for the wider development have sought to retain specific habitats of interest wherever possible. This included the grassland habitat surrounding pond P1 within previous phases.
Principle 3: Be inclusive and equitable	Preliminary biodiversity net gain calculations were provided during the design stage to inform the proposals. These were completed using the 2.0 metric prior to the release of the Statutory Metric.
Principle 4: Address risks	The habitats recommended for creation include those that would be suitable for establishment in line with the accompanying LEMP. The condition scores have been set at achievable levels, though management will ultimately strive to improve the condition scores above those stated above where possible.
Principle 5: Make a measurable Net Gain contribution	While this assessment has demonstrated an onsite loss in habitat biodiversity in unit 7, this has guided offsite habitat creation proposals. Further to this a range of other biodiversity enhancements are incorporated in the scheme including faunal features such as bird boxes, bat boxes and log piles to provide a range of features for faunal species to bring these species into the heart of the built environment as well as just on the peripheries.
Principle 6: Achieve the best outcomes for biodiversity	
Principle 7: Be additional	
Principle 8: Create a Net Gain legacy	The LEMP produced for the proposals will ensure that the management is secured in the long-term to ensure that the target conditions can be achieved.
Principle 9: Optimise sustainability	The Site-wide drainage proposals have been designed to provide additional opportunities for habitat creation. The network of footpaths throughout the site wide green infrastructure will provide opportunities for employees and local residents cross though the site and to take advantage of less formally managed habitats.
Principle 10: Be transparent	All assumptions have been set out within this report and its appendices to ensure that the information used to inform the biodiversity metric 2.0 calculations can be reviewed

7.0 CONCLUSION

Impacts

- 7.1 The impacts of habitat loss and site clearance works were assessed as part of the initial planning submission. Hybrid planning permission was granted which included full permission for earthworks. Under this approved permission site clearance works were undertaken prior to the notification of the Dearne Valley Wetlands SSSI.
- 7.2 A Construction and Environmental Management Plan (FPCR 2020), and a Tree Removal and Protection Plan (TEP 2020) were submitted and approved by Barnsley Metropolitan Borough Council (BMBC). These documents detailed measures to minimise any potential risks to the ecological interest features of the Site and adjoining habitats including Short Wood and Hay Green LWS.
- 7.3 Site designs have buffered sensitive receptors with green infrastructure, and management prescriptions set out in the LEMP (Urban Wilderness 2024) seek to minimise longer term impacts from the development on surrounding habitats, including the Dearne Valley Wetlands SSSI.

Habitat Provision

- 7.4 The approach to habitat creation has aimed to create a sensitive scheme which provides biodiversity value across the space available within the proposals for green infrastructure. Biodiversity Net Gain has been used to inform the habitat creation and enhancement proposals for the scheme and to guide decisions around additional habitat provision.
- 7.5 The results of the assessment demonstrate that the Unit 7 proposals will result in an overall loss of biodiversity units associated with the area habitats and a loss in hedgerow units when compared with the baseline values.
- 7.6 The overall tracked scheme for earlier phases (which includes Phase 2a.1, Unit 4 and Phase 3, in combination with additional offsite provision) provided an overall gain of biodiversity units in respect to the combined phases of development (Biodiversity Offsetting Scheme Rev A. FPCR 2023). The biodiversity offsetting scheme for Unit 7 will combine assessments of previous phases and further offsite habitat provision to compensate for the losses detailed within this assessment.
- 7.7 In order to comply with the Section 106 agreement (schedule 4), calculations for the remainder of the development should utilise the data provided within this report to track the site wide net gain and inform offsite habitat creation requirements.

APPENDIX A: PROPOSED HABITAT CREATION

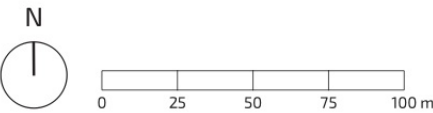
Soft Landscaping Typology	Habitat (UKHab)	Targets for Creation/Management	Target Condition
Ornamental Planting	Introduced shrub	These areas will be managed primarily for their ornamental value. A diverse range of species will provide benefits for insects.	Poor
Mown grass	Modified Grassland	The flowering grassland areas will in part be managed as amenity grasslands, but this should include addition management measures: • Using Emorsgate Flowering Lawn mix or equivalent containing 12 species to encourage at least 6 species per m2. • Regular management to prevent scrub/bracken encroachment. • Reseeding any areas of failed establishment.	Poor
Trees	Street Trees	Managed to reach a minimum of 30cm stem diameter at breast height.	Moderate
Native Woodland	Other woodland; broadleaved / Wet Woodland	1. This should be an area of trees with complete canopy cover. 2. Native species are dominant. Non-native and invasive species account for less than 10% of the vegetation cover. 3. A diverse age and height structure of the trees. 4. Free from damage [Bark stripping; Browse line; Damage shoot tips] (in the last five years) from stock or wild mammals with less than 20% of vegetation being browsed. 5. There should be evidence of successful (i.e. not browsed off before it gets well established) tree regeneration such as seedlings, saplings and young trees. 6. Standing and fallen dead wood of over 20 cm diameter are present including fallen large dead branches/stems and stumps. 7. Wetland habitat if they exist within the wood has little sign of drainage or channel straightening. 8. The area is protected from damage by agricultural and other adjacent operations. 9. There should be no evidence of inappropriate management (e.g. deep ruts, animal poaching or compaction). 10. Invasive non-native plants are below 5%. 11. No signs of significant nutrient enrichment present. 12. More than 3 different native trees and 3 shrub species in an average 10 m radius.	Good

Soft Landscaping Typology	Habitat (UKHab)	Targets for Creation/Management	Target Condition
Scrub	Mixed scrub	1. There are at least three woody species, with no one species comprising more than 75% of the cover (except common juniper, sea buckthorn or box, which can be 100% cover). 2. There is a good age range – a mixture of seedlings, saplings, young shrubs and mature shrubs. 3. Pernicious weeds and invasive species make up less than 5% of the ground cover. 4. The scrub has a well-developed edge with un-grazed tall herbs. 5. There are many clearings and glades within the scrub.	Good
Meadow	Other Neutral Grassland	1. The area is clearly and easily recognisable as a good example of this type of habitat and there is little difference between what is described in the relevant habitat classifications and what is visible on site. 2. Undesirable species and physical damage is below 5% cover. 3. Cover of bare ground no greater than 10% (including localised areas, for example, rabbit warrens). 4. Cover of bracken less than 20% and cover of scrub and bramble less than 5%.	Moderate
Hedgerows	Native Hedgerows	1. The hedge has an average height of at least 1.5 m along its length. 2. The hedge has an average width of at least 1.5 m along its length. 3. The vertical gap between ground and base of canopy is less than 0.5 m. 4. The hedgerow is continuous with no horizontal gaps along the length of hedgerow. 5. The hedgerow and undisturbed ground is free of invasive non-native and neophyte species.	Moderate



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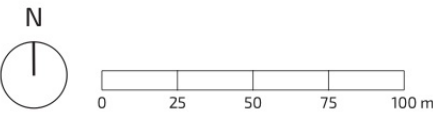
- Key**
- Dry ditch
 - Native Species-rich Hedgerow
 - Other Neutral Grassland
 - Modified Grassland
 - Wet Woodland
 - Broadleaved Woodland
 - Bramble Scrub
 - Artificial Unvegetated Unsealed Surface
 - Built Environment: Buildings/hardstanding

date	03/03/25	drwn/chkd	JDH
client	Harworth Group PLC		
project	Unit 7 Gateway 36		
title	Habitat Baseline	scale	1:2,500 @ A3
number	FIGURE 1	rev	-



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Key

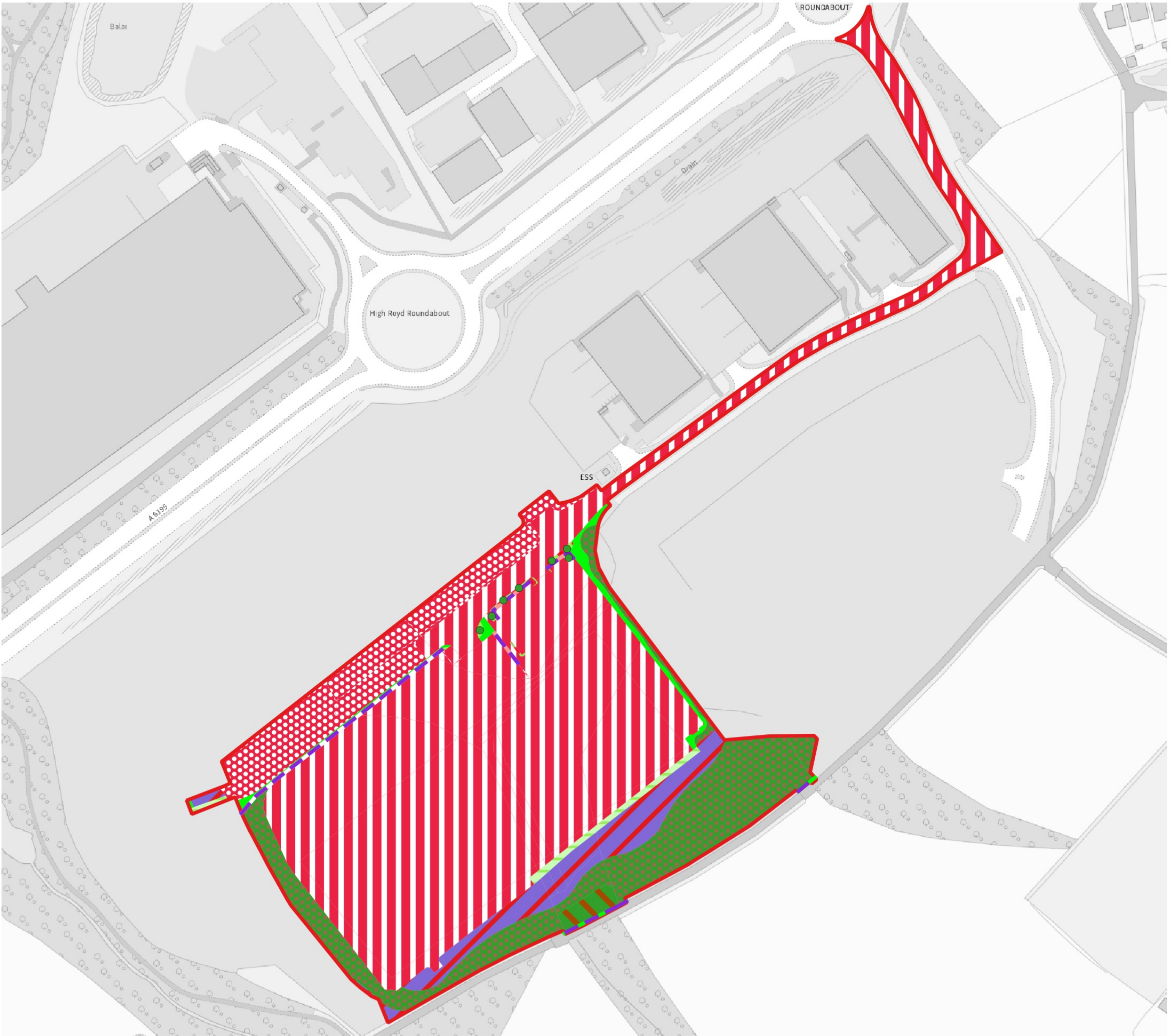
Linear habitat retention

- Lost
- Retained
- Lost Dry Ditch

Area Habitat Retention

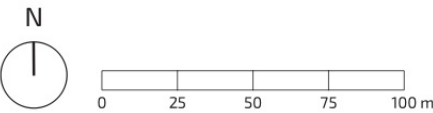
- Lost
- Retained

date	03/03/25	drwn/chkd	JDH
client	Harworth Group PLC		
project	Unit 7 Gateway 36		
title	Habitat Retention	scale	1:2,500 @ A3
number	FIGURE 2	rev	—



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Key

- Individual trees
- Native Species-poor Hedgerow
- Native Species-poor Hedgerow with Trees
- Native Species Rich
- Artificial unvegetated unsealed surface
- Built Environment: Buildings/hardstanding
- Ornamental Planting
- Amenity Grassland
- Other Neutral Grassland
- Mixed Scrub
- Broadleaved Woodland
- Wet Woodland

date
03/03/25

drwn/chkd
JDH

client
Harworth Group PLC

project

Unit 7
Gateway 36

title
Habitat Proposals

scale
1:2,500 @ A3

number
FIGURE 3

rev
-

FPCR Environment and Design Ltd

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