On-site Habitat Management and Monitoring Plan

Land off High Street, Great Houghton, Barnsley

Avant Homes Limited

Avant Homes Yorkshire, Unit 2, Mariner Court,
Peel Avenue, Durkar, Wakefield, WF4 3FL

Prepared by:

SLR Consulting Limited

4 Park Square, Thorncliffe Park, Chapeltown, Sheffield, S35 2PH

SLR Project No.: 424.066691.00002

1 December 2025

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Revision Record

Revision	Date	Prepared By	Checked By	Authorised By
1	13 November 2025	Charlotte Baldwin	Vanessa Jackson	Julia Kozlowska
2	1 December 2025	Vanessa Jackson	Vanessa Jackson	Julia Kozlowska

Basis of Report

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Acronyms and Abbreviations

BNG	Biodiversity Net Gain
BPZ	Biodiversity Protection Zone
BoCC	Birds of Conservation Concern
BTO	British Trust for Ornithology
CEMP-B	Construction Environmental Management Plan - Biodiversity
CIEEM	Chartered Institute of Ecology and Environmental Management
EcIA	Ecological Impact Assessment
ECoW	Ecological Clerk of Works
HMMP	Habitat Management and Monitoring Plan
INNS	Invasive Non Native Species
LNR	Local Nature Reserve
NERC Act	Natural Environment and Rural Communities Act 2006
POS	Public Open Space
S41	Section 41 (of the Natural Environment and Rural Communities Act 2006)
SLR	SLR Consulting Limited
SSSI	Site of Special Scientific Interest
UKBAP	UK Biodiversity Action Plan
UKHab	United Kingdom Habitat Classification
WCA	Wildlife & Countryside Act 1981

1.0 Project Background

In December 2025, SLR Consulting Ltd (SLR) completed an Ecological Impact Assessment (EcIA)[1] including a Biodiversity Net Gain (BNG) Assessment of an approximately 3.55 ha site in Great Houghton, South Yorkshire, S72 0AZ (approximate central OS Grid Reference: SE 42947 07037), to inform a planning application for a 104-unit residential development.

This Habitat Management and Monitoring Plan (HMMP) outlines how the on-site land will be managed over the next 30 years for BNG.

Table 1-1: Site Overview – Great Houghton

Site Overview PB-B01	
Project type	On-site
Development Name and Address	Land off High Street Great Houghton Barnsley South Yorkshire S72 0AZ
BNG Project Name and Address	As above
Author Organisation	SLR Consulting Limited
Landowner	Avant Homes Limited
Land Manager	Avant Homes Limited
Responsible person/organisation for creating or enhancing the habitat	Avant Homes Limited
Period covered by this management plan	January 2029 – January 2059. HMMP to be updated five years post-development in January 2034 (*dates to be confirmed when planning conditions are discharged*).
Planning authority	Barnsley Metropolitan Borough Council
Planning reference (if applicable)	2024/0917
BNG register reference (if applicable)	N/A
Central OS grid reference	SE 42947 07037

[1] SLR Consulting (Dec 2025) Ecological Impact Assessment, Great Houghton, v5, report ref 410.066691.00002

Metric revision/title	Statutory Biodiversity Metric v.5, updated in Dec 2025. "251201_Great Houghton BNG Metric_v5_with refs"
Are any Irreplaceable Habitats present onsite	Yes: ☐ No: ☒

1.1 Summary of Management Plan

Table 1-2: Management Plan Summary – Land off High Street, Great Houghton

Habitats to be Retained, Created and Enhanced PB-B02
On-site retained habitats: • 0.08 km – Native hedgerow – associated with bank or ditch along northern boundary to be retained in full (LB2) (moderate condition) • 0.12 km – Native hedgerow located centrally within the site (LB3) (moderate condition) • 0.074 km - Native hedgerow – associated with bank or ditch along northeastern boundary to be retained (LB4) (moderate condition) • 0.16 km – Native hedgerow along eastern boundary (LB5) (moderate condition) **On-site habitat enhancement:** N/A **On-site habitat creation:** • 0.2972 ha – Individual planted trees (73 in moderate condition) • 0.1379 ha – Other neutral grassland, attenuation basin to the northeast with wildflower grassland suitable for damp conditions such as EP1 Pond Edge Mixture (good condition) • 0.3375 ha – Other neutral grassland, N14 Flowering Lawn Mixture, wildflower grassland planting to the north (moderate condition) • 0.0101 ha – Mixed scrub (moderate condition) • 0.1477 ha – Vegetated garden (vegetated private gardens - including front lawns amenity grassland, shrub bed planting, tree and hedgerow planting) • 0.6625 ha – Unvegetated garden (rear gardens not turfed as standard) (condition N/A) • 2.2583 ha – Developed land; sealed surface (condition N/A) • 0.328 km – Species-rich native hedgerow (moderate condition)
Timescales for Actions PB-B03
Construction works within the site will commence from January 2026 for a period of 3 years. Following the completion of the proposed development all habitats will be installed with an end date of January 2029. Following that the habitats will be maintained in their desired condition for 30 years (2059). *Actual dates to be confirmed when planning conditions are discharged*
Monitoring Requirements PB-B04
It is proposed to monitor in Years 1, 2, 3, 4, 5, 10, 15, 20, 25 and 30, up to 2059. *Actual dates to be confirmed when planning conditions are discharged*

Required Consents and Licences PB-B05
The planning application for the site has been granted by Barnsley Metropolitan Borough Council (2024/0917) with planning conditions.
Funding PB-B06
Funding is provided under the development agreement with Avant Homes Limited, which has agreed debt & equity funding in place.
Legal Agreement PB-B07
All land required to facilitate the HMMP is under Avant Homes Limited control. In addition, the measures set out below will be delivered through a condition of the planning permission.

1.2 Site Boundary Plan PB-F01

Figure 1-1: Site Boundary Plan

442800 442900 443000 443100

407200

407100

407000

High Street

High Street

High Street

N

LEGEND

Site Boundary

Mount Pleasant

Great Houghton

0 50 100

Metres

AVANT homes

SLR

GREAT HOUGHTON

HABITAT MANAGEMENT AND MONITORING PLAN

SITE BOUNDARY PLAN

FIGURE 1-1

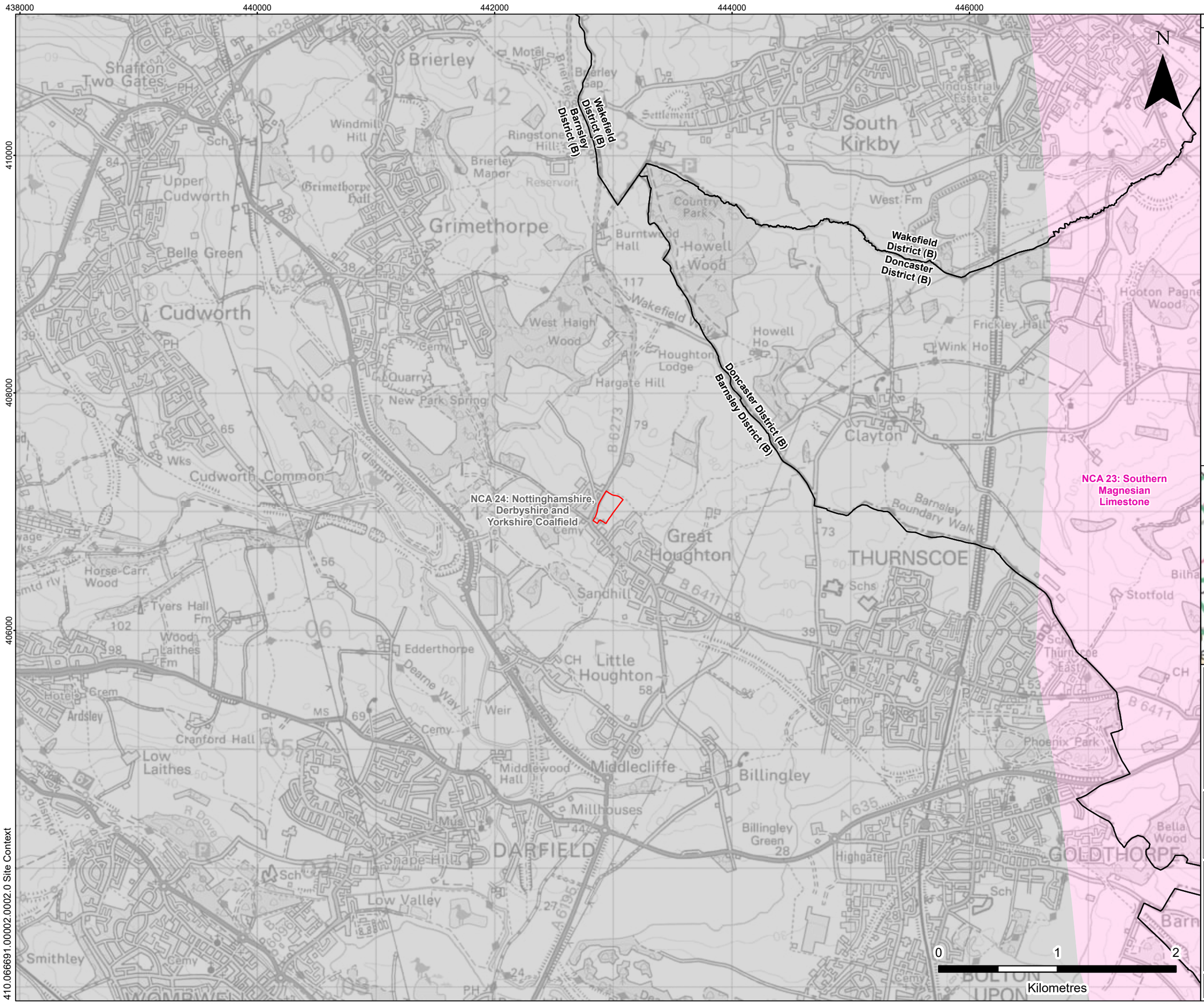
Scale 1:1,250 @ A3

Date OCTOBER 2025

410.066691.00002.0001.0 Site Boundary Plan

1.3 Site Context Plan PB-F02

Figure 1-2: Site Context



LEGEND

- Site Boundary
- Local Planning Authority (LPA) Boundary

National Character Area (NCA)

- Nottinghamshire, Derbyshire and Yorkshire Coalfield
- Southern Magnesian Limestone

AVANT homes

SLR

GREAT HOUGHTON

HABITAT MANAGEMENT AND MONITORING PLAN

SITE CONTEXT

FIGURE 1-2

Scale 1:30,000 @ A3

Date OCTOBER 2025

410.066691.00002.0002.0 Site Context

1.4 Phasing Strategy

Will the proposed work measures be delivered in phases? PB-B08	Yes: ☐ No: ☒
N/A	

1.5 Roles and Responsibilities

Provide details of the responsible persons and organisation(s) for delivering this management plan.

Ecologist or Other Professional Responsible for HMMP PB-B09				
Name or Initials		Vanessa Jackson		
Organisation		SLR Consulting Ltd (SLR)		
Responsibility	Start Date:	January 2029 (to be confirmed when planning conditions are discharged)	End Date:	January 2034
This HMMP was produced by SLR on behalf of Avant Homes. SLR will not be responsible for implementation of this HMMP, however monitoring proposed will be undertaken by SLR and the HMMP will be updated after Year 5.				
Statement of Competency				
Vanessa Jackson is a Senior Ecologist with SLR Consulting Ltd. Vanessa is an Associate Member of the Chartered Institute of Ecology and Environmental Management (ACIEEM), with over eight years' relevant experience within ecological consultancy. Vanessa holds a Class 1 Natural England survey licence for great crested newts (*Triturus cristatus*) and bats, and is a competent botanist. She is experienced in undertaking habitat surveys (Phase 1 and UKHab), BNG Assessments, and the production of Ecological Management Plans.				

Landowner or Land Manager PB-B10				
Name or Initials		N/A		
Organisation		Avant Homes		
Responsibility	Start Date:	January 2026 (to be confirmed when planning conditions are discharged)	End Date:	January 2059

Landowner or Land Manager PB-B10				
Avant Homes will be responsible for overseeing the habitat creation and enhancement within the site during the constriction period (2026-2029), as well as implementing the HMMP post-construction (2029-2059).				
Statement of Competency				
Experience of managing and maintaining habitats across numerous residential developments within the UK since the company founded in 2002. Over 23 years of experience of supporting the management of protected species and habitats through the design, planning, construction and operational phases.				
Management Organisation(s) Responsible for Implementing the HMMP PB-B11				
Name or Initials		N/A		
Organisation		Avant Homes will be responsible, and will appoint an appropriate contractor to carry out the works.		
Responsibility	Start Date:	January 2029 (to be confirmed when planning conditions are discharged)	End Date:	2058
Avant Homes will be responsible for implementing the HMMP, and will appoint an appropriate contractor to carry out the works.				
Statement of Competency				
Experience of managing and maintaining habitats across numerous residential developments within the UK since the company founded in 2002. Over 23 years of experience of supporting the management of protected species and habitats through the design, planning, construction and operational phases.				
LPA or Responsible Body for Reviewing HMMP PB-B12				
Name or Initials		Laura Bennett (Case Officer)		
Organisation		Barnsley Metropolitan Borough Council		
Responsibility	Start Date:	January 2026 (to be confirmed when planning conditions are discharged)	End Date:	2058
Barnsley Metropolitan Borough Council will be responsible for reviewing and auditing the HMMP.				

1.6 Land Use Summary

Overview of Baseline Site Use PB-B13

The application site (hereafter referred to as the 'Site') consists of two small agricultural fields and an associated yard which has four buildings / structures present. The fields are under active agricultural management, although the stack yard appears disused. Five native hedgerows form the boundaries of the arable fields.

The Site is located on the north-western edge of the village of Great Houghton. The Site is bordered to the north and east by further agricultural land, and residential properties are present to the south and west (beyond Main Street). The wider landscape is comprised of predominately agricultural land with some residential areas and pockets of woodland present. West Haigh Wood Local Nature Reserve (LNR) is located approximately 1 km to the north of the Site. Dearne Valley Wetlands Site of Special Scientific Interest (SSSI) lies around 1.2 km to the south-west, while Carlton Main Brickworks SSSI is situated approximately 1.7 km to the north-west.

Current management

A cropland field located to the west of the Site was previously managed for barley (*Hordeum vulgare*) but had become overgrown with arable weeds following a period of limited management. Species recorded include willowherbs (*Epilobium* sp.), teasel (*Dipsacus fullonum*), creeping thistle (*Cirsium arvense*), nettle (*Urtica dioica*), and scattered grasses such as false oat-grass (*Arrhenatherum elatius*).

To the east of the Site, a field of modified grassland is present, dominated by common agricultural grass species including Italian rye-grass (*Lolium multiflorum*), bents (*Agrostis* sp.), cock's-foot (*Dactylis glomerata*), and Yorkshire fog (*Holcus lanatus*), with occasional herbs such as dandelion (*Taraxacum officinale*), chickweed (*Stellaria media*), broad-leaved dock (*Rumex obtusifolius*), and common sorrel (*Rumex acetosa*). The grassland is managed for agricultural purposes and had been recently mown at the time of survey (September 2023).

Overview of Proposed Site Use PB-B14

Site

The proposed development involves the construction of a residential area with 104 dwellings, associated gardens and roads. The development also includes an attenuation basin within a Public Open Space (POS) in the north-east of the Site.

This will necessitate the removal of the following habitats; native hedgerow (h2a) (loss of the 190 m western boundary hedgerow LB1, 100 m of central hedgerow LB3, 6 m of north-eastern hedgerow LB4 and 10 m of eastern hedgerow LB5, all other hedgerows to be retained), cereal crops (c1c), modified grassland (g4), and mixed scrub (h3h).

The development will be compensated by:

- Planting of 73 individual trees across the Site within the public realm;
- Creation of 0.1379 ha other neutral grassland within the attenuation basin (seeding of Emorsgate EP1 Pond Edge Mixture[2]);

[2] Emorsgare Seeds. (2025) - EP1 Pond Edge Mixture. Available at: https://wildseed.co.uk/product/mixtures/complete-mixtures/special-habitat-mixtures/pond-edge-mixture/

Overview of Baseline Site Use PB-B13
• Creation of 0.3375 ha other neutral grassland (seeding of Naturescape N14 Flowering Lawn Mixture[3]); • Creation of 0.1477 ha of vegetated gardens; • Creation of 0.0101 ha of mixed scrub; and • Creation of 0.328 km of species-rich native hedgerow. **Proposed management:** • The Emorsgate EP1 Pond Edge Mixture management to be managed by rotational mowing, with half mown annually to maintain a varied sward structure, and the basin will be fenced off to allow the grassland to attain and remain in good condition; • The Naturescape N14 Flowering Lawn Mixture will be managed as amenity grassland with regular cutting to 25 – 40 mm. Cutting should not be more frequent than every 3 weeks. Cutting will stop and the area will be left to flower for a period of 4-8 weeks between May – July. Heavy quantities of arisings will be collected and removed from the Site. • Native hedgerows will be trimmed annually in January – February. They will be maintained at a minimum height of 1.5 m; • Planted trees will be inspected annually to monitor the health, and failed planting replaced where necessary. Regular watering may be necessary. • Native mixed scrub planting will be subject to minimal intervention, limited to watering during establishment, replacement of failed plants as required, and periodic maintenance to restrict height to below 5 m. With the above habitat creation and management, 5.38 habitat units will be delivered. However, there is still an on-Site 29.01% net loss in habitat units overall. This loss in habitat units will be addressed via purchase of offsetting credits, e.g. via Barnsley Metropolitan Borough Council. Discussions are ongoing with Barnsley Metropolitan Borough Council to finalise an offsetting arrangement. This will ensure that the proposed development achieves a 10% net gain overall. The details of offsetting arrangements will be finalised at a later date and will be subject to a planning condition/ Section 106. The scheme is predicted to deliver a 14.27% gain in hedgerow units.

[3] Naturescape. (2025). N14 Flowering Lawn Mixture. Available at: https://www.naturescape.co.uk/product/n14-flowering-lawn-mixture/

1.7 Site Context Photos PB-F03

Please include two overview photographs of the Site in its current form here. Include additional photographs in an appendix if needed. Tick if additional photographs are provided in the Appendices ☒ Reference: Appendix 1: Site Context Photos PB-F03.

Plate 1-1: View looking north across the field of modified grassland (g4) on Site

Plate 1-2: View looking northeast across the cropland (c1c)

1.8 Site Baseline, Environmental Information and Associated Impacts Checklist PB-T01

The table below provides a summary of the Site's baseline in relation to the environmental information and associated impacts checklist.

Table 1-3: Site Baseline Environmental Information and Associated Impacts Checklist PB-T01

Baseline and Environmental Information	Prompts for when these may be relevant. This is not an exhaustive list. Use your professional judgement to determine which are required for your HMMP	Check box if included	Document Reference or Reason if not included
Statutory / Non-statutory Designated Sites	Will your proposals lead to direct or indirect effects on designated sites?	☐	No impact. Statutory designated sites and non-statutory designated sites do not have scope to be impacted by the development due to distance and lack of connectivity. See Section 4.1 of EclA Report - SLR Consulting (Dec 2025) Ecological Impact Assessment, Great Houghton, v5, report ref 410.066691.00002
Protected and Notable Species	Does the presence or proximity of specific species on or near your Site present any constraints or opportunities to project design or management?	☒	SLR Consulting (Dec 2025) Ecological Impact Assessment, Great Houghton, v5, report ref 410.066691.00002
Invasive Non-Native Species (INNS)	Are any INNS present on-Site that could affect the proposals?	☐	No invasive, non-native species identified within the Site.

Baseline and Environmental Information	Prompts for when these may be relevant. This is not an exhaustive list. Use your professional judgement to determine which are required for your HMMP	Check box if included	Document Reference or Reason if not included
			However, a large area of rockspray cotoneaster (*Cotoneaster horizontalis*) was identified directly adjacent to the south-western potion of the Site. Standard biosecurity measures shall be implemented - refer to SLR Consulting (October 2025) Construction Environmental Management Plan - Biodiversity (CEMP-B) Addressing Condition 24. Land off High Street, Great Houghton. report ref 410.066691.00003
Biological Records Plan - Sites and Species	Does the presence of designated sites or specific species on or near the Site present any constraints or opportunities to proposals?	☒	SLR Consulting (Dec 2025) Ecological Impact Assessment, Great Houghton, v5, report ref 410.066691.00002
Baseline Habitats Survey	Is this current and important HMMP information located in a separate document? If so, provide details on where it is located.	☒	SLR Consulting (Dec 2025) Ecological Impact Assessment, Great Houghton, v5, report ref 410.066691.00002

Baseline and Environmental Information	Prompts for when these may be relevant. This is not an exhaustive list. Use your professional judgement to determine which are required for your HMMP	Check box if included	Document Reference or Reason if not included
Public Access	Has public access, or proposals to allow public access, influenced your management prescriptions? If so, how?	☐	No – the Site will be publicly accessible; however, this is not considered to impact upon management prescriptions.
Climate	Are local climate conditions and, or, climate change likely to impact the target habitat retention, creation or enhancement?	☐	No constraints to local climate conditions are present. The predicted climate change over the next 30 years is unlikely to impact the proposed habitat types or enhanced habitat that would prevent them meeting the proposed conditions.
Geology and Topography	Any geological or topographical constraints or opportunities?	☐	None – the Site is primarily flat.
Agricultural Land Status	Does the Site support any land favourable for agricultural management? Could this affect the proposals?	☐	No – the land has been used for agricultural purposes for growing cereal crops, however only low to medium distinctiveness habitats are proposed, which are unlikely to be affected by the previous agricultural management.

Baseline and Environmental Information	Prompts for when these may be relevant. This is not an exhaustive list. Use your professional judgement to determine which are required for your HMMP	Check box if included	Document Reference or Reason if not included
Soils and Substrates	Do soils and substrates present any constraints or opportunities?	☐	No specific soil sampling has been undertaken. No constraints or opportunities identified.
Contaminated Land	If there is any contaminated land, will this present any constraints?	☐	None identified.
Hydrology and Drainage	Will the Site hydrology present any constraints or opportunities?	☐	Drainage primarily dealt with via attenuation basin in south-east of the Site.
Flood Risk Zones	Is the Site within a flood risk zone? Will that present any Site management risks?	☐	N/A Flood Zone 1.
Landscape Character and Designations	Does the landscape character of the Site present any constraints or opportunities?	☐	None identified.
Historic Land Use	Does the historic land use present any constraints or opportunities?	☐	None identified.
Historic Environment and Earth Heritage	Are there any historic environment designations? What are the implications for your plan?	☐	No designated heritage assets within the Site or within 1 km.
Other – please specify	Any other details - for example underground services or overhead powerlines, which may impact habitat management.	☐	None identified.

1.9 Baseline and Environmental Information

Further details on the Baseline and Environmental Information as summarised in Table 1-3 are presented below for:

- Protected and Notable Species;
- Biological Records Plan – Species and Designated Sites; and
- Baseline Habitats Survey.

1.10 Protected and Notable Species (BI-T02)

Table 1-4 below summarises the potential for protected species to be impacted by the proposed development. Only species that are potentially present within development Site have been considered.

Table 1-4: Protected and Notable Species

SPECIES (TAXON GROUP)	DATES	CONSERVATION STATUS	DISTANCE OF CLOSEST DESK STUDY RECORD	POTENTIAL IMPACT FROM PROJECT
Breeding Birds Including Barn Owl (*Tyto alba*)	Desk Study Records 1990 – 2021 September 2023 records during UK Habitat Survey	Wildlife & Countryside Act (1981) (WCA) (as amended) Conservation of Habitats and Species Regulations (2017). Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006: habitats and species of principal importance in England (NERC-S41).	Desk study: A total of 208 bird records were returned within 1.5 km of the Site (1990–2021), comprising 38 species including skylark (*Alauda arvensis*), linnet (*Linaria cannabina*), yellowhammer (*Emberiza citrinella*), song thrush (*Turdus philomelos*), and dunnock (*Prunella modularis*). Eleven records relate to the Site itself, with breeding or probably breeding pairs of several farmland species recorded. Field surveys: Evidence of barn owl roosting was identified within on-Site barns, though no nesting evidence was recorded. The Site is therefore considered of local importance for barn owl. The remaining habitats (hedgerows, trees, mixed	Negligible, non-significant

SPECIES (TAXON GROUP)	DATES	CONSERVATION STATUS	DISTANCE OF CLOSEST DESK STUDY RECORD	POTENTIAL IMPACT FROM PROJECT
		British Trust for Ornithology (BTO) red-list/amber-list.	scrub, and arable fields) offer limited nesting and foraging opportunities for common farmland and urban-fringe species. Overall, the Site (excluding the barns) is of less than local importance for birds.	
Bats	Desk Study Records 1989 – 2021 Spring, Summer, Autumn 2021 Bat Activity Surveys (Brooks Ecological Ltd (2021). Bat Activity Survey Report Land off Main Street, Great Houghton. Report Reference: ER-5492-02.)	Wildlife & Countryside Act (1981) (as amended) Conservation of Habitats and Species Regulations (2017).	Desk study: Twelve bat records were returned within 1.5 km of the Site (1989–2021), including common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle (*Pipistrellus pygmaeus*), noctule (*Nyctalus noctula*), brown long-eared bat (*Plecotus auritus*), and *Myotis* sp. The nearest record is of a common pipistrelle approximately 200 m west of the Site. Bat activity surveys (2021): Low levels of activity were recorded, primarily common pipistrelle, with additional records of soprano pipistrelle, noctule, *Myotis* sp., and brown long-eared bat. Activity was concentrated around the yard and along boundary hedgerows, which provide suitable commuting and foraging habitat. On-Site buildings and trees were assessed as having negligible roost potential.	Negligible, non-significant.

SPECIES (TAXON GROUP)	DATES	CONSERVATION STATUS	DISTANCE OF CLOSEST DESK STUDY RECORD	POTENTIAL IMPACT FROM PROJECT
Hedgehog (*Erinaceus europaeus)*	Desk Study Records 2014 – 2016	Wild Mammals Protection Act (1996). Section 41 of the NERC Act 2006 (as amended). UK BAP Priority Species with a national and local Biodiversity Action Plan (BAP).	1.1 km southwest.	Negligible, non-significant.
Badger (*Meles meles)*	No desk study records or evidence of presence on Site	Protection of Badgers Act 1992 Wildlife and Countryside Act 1981 (as amended)	Nearest sett over 1.2 km from Site.	Negligible, non-significant.
Invasive Non-Native Species	No desk study records or evidence of presence on Site	Wildlife and Countryside Act 1981 (as amended)	No evidence of invasive species was identified on Site during the field survey, however, a large area of rockspray cotoneaster (was identified directly adjacent to the south-western potion of the Site.	Negligible, non-significant.

Summary of Protected and Notable Species (BI-B03)

The EcIA[4] and Construction Environmental Management Plan - Biodiversity (CEMP-B)[5] describe the proposed avoidance, mitigation and compensation measures for each protected and notable species. A summary is provided below for each species.

Birds

The majority of records returned by the desk study relate to birds, including several Birds of Conservation Concern (BoCC) and UK Biodiversity Action Plan (UKBAP) species such as skylark, linnet, yellowhammer, and song thrush. Eleven records relate to the Site itself, comprising breeding or probably breeding pairs of common farmland and scrub-associated species recorded within overgrown hedgerows. Evidence of barn owl roosting has been recorded within the Site during surveys. The hedgerow habitats on Site have the potential to support a range of nesting farmland and urban-fringe species, and the arable fields could also support small numbers of ground-nesting birds, such as skylark during the breeding season (March to August inclusive).

Proposed Avoidance, Mitigation and Compensation

To avoid the killing/injury of birds and damage/destruction of active nests during vegetation clearance and construction, Site clearance and further vegetation removal will ideally take place outside of the main bird breeding season (which for most species extends from March to August inclusive). If this is not feasible, a search for active nests would first be undertaken by a suitably qualified ecologist within the 48 hours prior to vegetation clearance. If an active nest was identified, it would be left in situ until the breeding attempt was concluded and the young had fledged. (The optimum time of year for hedgerow removal would be September or October to also avoid impacts upon hibernating hedgehogs, as described below).

Approximately 0.434 km of native hedgerow will be retained, and a new native hedgerow will be planted (0.328 km). Additionally, 73 new native trees are to be planted around the Site within the public realm, which will provide further habitat for breeding birds.

In order to provide enhanced nesting opportunities for birds, a total of 104 bird boxes, shall be incorporated into the fabric of 26 new dwellings (four boxes per dwelling) as they are constructed, equating to 100% of properties. The boxes shall specifically be for swifts (*Apus apus*), however are also suitable for other species such as house sparrow (*Passer domesticus*) and starling (*Sturnus vulgaris*). In addition, a single pole-mounted barn owl nest box will be positioned within the Public Open Space (POS) in the north-eastern corner of the Site. The box shall face eastwards towards the neighbouring cropland

[4] SLR Consulting (Dec 2025) Ecological Impact Assessment, Great Houghton, v5, report ref 410.066691.00002

[5] SLR (October 2025) Construction Environmental Management Plan - Biodiversity (CEMP-B) Addressing Condition 24. Land off High Street, Great Houghton. report ref 410.066691.00003

Summary of Protected and Notable Species (BI-B03)
fields, and shall be separated from the rest of the Site by hedgerow planting to ensure the box is not disturbed by residents. This will allow barn owls to enter the box from the adjacent field and be sufficiently buffered from the development. **Bats** The Site does not contain bat roosting habitat and represents low quality habitat for foraging and commuting bats which may be impacted by directional lighting. However, there is scope to enhance the Site for roosting, foraging and commuting bats. *Proposed Avoidance, Mitigation and Compensation* During construction, works will minimise the need for Site lighting as they shall be undertaken in daylight hours unless otherwise agreed in writing by the planning authority. Any lighting required during construction shall avoid directly illuminating the retained hedgerows LB2, LB3 (120 m only), LB4 and LB5, and western hedgerow LB1 and 100 m of LB3, until removed. In addition, indirect illumination of these features should be kept below an increase of 1 lux. This will be achieved using methods outlined in the Institute of Lighting Professionals (ILP) Guidance[6], which includes but is not limited to: • hoods and cowls as a 'last resort' to direct light away from this bat habitat. The full hedgerow on the western boundary (LB1, see Figure 1-4), 100 m of the central hedgerow (LB3), 6 m of the north-eastern hedgerow (LB4) and 10 m of the eastern hedgerow (LB5) would be lost, however the remaining hedgerows shall be retained (LB2, LB4, LB5). A total of 0.328 km of new native hedgerow will also be planted. Once the new planting matures, these hedgerows would provide a foraging resource for local bats. Additionally, 73 new native trees are to be planted around the Site within the public realm. An attenuation basin is also being created at the northeastern edge of the Site, which will be sown with a Emorsgate EP1 Pond Edge Mixture[7]. POS across Site will also be sown with Naturescape N14 Flowering Lawn Mixture[8]. These new landscaping features will provide enhanced foraging opportunities for bats and better connect fragmented linear habitats. A total of 104 bat boxes shall be incorporated into the fabric of 104 new dwellings as they are constructed, equating to 100% of properties. Bat boxes shall be suitable for a range of locally occurring bat species, such as common pipistrelle. The bat boxes shall face either south, southwest or southeast and will be positioned in properties across the development Site which are close to existing and proposed good bat foraging habitat and commuting routes, thereby increasing the likelihood of them being occupied.

[6] Institute of Lighting Professionals (ILP) (2023) *Guidance Note 08/23: Bats and Artificial Lighting at Night*.

[7] Emorsgate Seeds. (2025). EP1 Pond Edge Mixture. Available at: https://wildseed.co.uk/product/mixtures/complete-mixtures/special-habitat-mixtures/pond-edge-mixture/

[8] Naturescape. (2025). N14 Flowering Lawn Mixture. Available at: https://www.naturescape.co.uk/product/n14-flowering-lawn-mixture/

Summary of Protected and Notable Species (BI-B03)

Hedgehog

The native hedgerows (h2a) have the potential to support hedgehogs, which would be particularly susceptible to harm when hibernating between November and mid-March.

Proposed Avoidance, Mitigation and Compensation

The hedgerows on Site have potential to support hedgehogs, which would be particularly susceptible to harm when hibernating between November and mid-March. Impacts on hedgehog utilising the retained hedgerows LB2, LB4, LB5 and part of LB3 shall be avoided through the establishment of the Biodiversity Protection Zone (BPZ).

The removal of the total length of LB1, 100 metres of hedgerow LB3, 6 m of hedgerow LB4 and 10 m of hedgerow LB5 will be timed to be undertaken in daylight hours in September or October, to avoid impacts on hedgehogs and breeding birds. Vegetation clearance undertaken within these timescales can therefore be completed without a prior check by the Ecological Clerk of Works (ECoW). Should this not be feasible (i.e. hedgerow removal is undertaken in November – August inclusive) a check of the hedgerows by the ECoW shall be undertaken prior to removal. If a hedgehog is discovered, it will be left *in situ* until the hedgehog awakens from hibernation and becomes active in spring. A 5 m BPZ will be established to protect against harm during hibernation. Should the hedgehog become noticeably active then the ECoW will be contacted for further advice, which may require the hedgehog to be transported to a local wildlife hospital or rescue centre.

Any vegetation from clearance works (removal of the hedgerows and general Site clearance) will be removed from Site immediately as piles of cut vegetation could be utilised by hedgehogs. Should this not be feasible, cut vegetation will be fenced off to prevent hedgehog from coming into contact with them or cut / cleared vegetation will not be stored in piles and instead stored evenly and flat (either as cut material or chipped) so as to not provide sufficient cover for hedgehogs.

There is also a risk of harm to hedgehog (and other nocturnal animals) during construction, should animals become trapped in footing or other Site hazards. Where possible, all trenches, pits and other diggings at the Site will be closed before nightfall. Where this is not possible, an escape ramp shall be installed, using wood planking or suitably compacted earth, and excavations should be checked by the Site manager or foreman prior to works re-commencing each day. Should an animal be present, this should be allowed to escape of its own accord, or an ecologist contacted for advice. All pipework and ironworks shall be sealed or covered overnight. Alternatively, such trenches, pipes or other workings may be fenced off to prevent hedgehog coming into contact with them.

In order to ensure that the Site can continue to be used by, and be crossed by hedgehog, post-development, 15 cm x 15 cm gaps ('hedgehog highways') shall be left at the base of garden fences.

In addition, two hedgehog nest boxes shall be positioned underneath the northern boundary hedgerow (LB2).

Badger

An active rabbit warren was identified along LB2. Badger setts can be dug at any time of year, and it is possible badgers could enlarge the entrances already made by rabbits.

Summary of Protected and Notable Species (BI-B03)

Badgers are a highly mobile species, and there is some potential that badgers may enter the Site when foraging as part of a wider territory.

Proposed Avoidance, Mitigation and Compensation

During construction, precautionary measures will be implemented to protect badgers and other wildlife. Open excavations will be covered or fitted with escape ramps and checked daily, with any trapped animals allowed to exit naturally or with advice from an ecologist. Open pipework over 120 mm in diameter will be capped when not in use, and chemicals will be securely stored to prevent access. Stockpiled topsoil or other soft materials will be inspected daily or fenced off to deter sett excavation. All litter, tools, and hazardous materials will be cleared at the end of each working day to minimise the risk of injury to wildlife.

Invasive Non-Native Species

A large stand of rockspray cotoneaster, an invasive non-native species, was recorded directly adjacent to the south-western boundary of the Site (approx. grid ref. SE 42830 06905). Although located off-Site and likely to be retained, precautions must be taken during construction to prevent its spread. Standard biosecurity measures should be implemented, including staff briefings, containment of contaminated material, cleaning of machinery and footwear, and adherence to Site biosecurity protocols.

Constraints and Opportunities for Project (BI-B04)

The presence or potential presence of the protected species as outlined above pose a constraint to construction activities which will be mitigated for as outlined above. New opportunities for these species will be created within the Site, through hedgerow and tree planting, creation of wildflower grassland and attenuation basin, and species-specific enhancements (bird and bat boxes and hedgehog highways).

1.10.1.1 Biological Records Plan – Sites and Species (BI-F01)

Figure 1-3: Biological Records

440000 442000 444000 446000

408000 406000

N

Howell Wood

Dearne Valley Green Heart LWS

West haigh Wood LNR

West Haigh Wood

Dearne Valley Green Heart LWS

Carlton Main Brickworks SSSI

Dearne Valley Green Heart LWS

Dearne Valley Wetlands SSSI

Little Park

Dearne Valley Wetlands SSSI

Dearne Valley Wetlands SSSI

Dearne Valley Wetlands SSSI

0 1 2

Kilometres

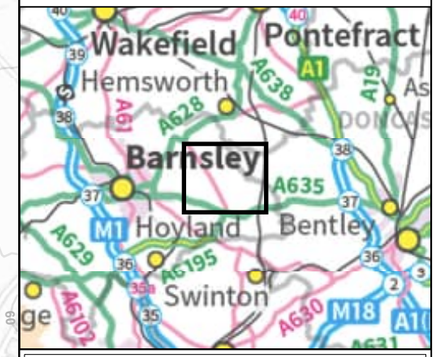
LEGEND

- Site Boundary
- Site Boundary 2 km Buffer
- Site of Special Scientific Interrest (SSSI)
- Local Nature Reserve (LNR)
- Local Wildlife Site (LWS)
- Ancint Woodland Inventory

Granted European Protected Species Applications (England)

- Amphibian
- Bird
- Plant
- Invertebrate
- Reptile
- Other Mammal

Note:
All environmental designations selected to those which intersect the 2 km buffer surrounding the area of interest. This ensures that only features within close proximity are included in the analysis.



AVANT homes

SLR

GREAT HOUGHTON

HABITAT MANAGEMENT AND MONITORING PLAN

BIOLOGICAL RECORDS

FIGURE 1-3

Scale 1:20,000 @ A3

Date OCTOBER 2025

410.066691.00002.0003.0 Biological Records Plan

1.11 Baseline Habitat Survey

Details on the baseline habitat surveys undertaken at the Site are presented below in Table 1-5.

Table 1-5: Baseline Habitat Survey

Ecologist responsible for baseline surveys (BI-T03)	
Name or Initials	UK Habitat Survey: Helen Chambers
Organisation	SLR Consulting Ltd
Survey Date	UK Habitat Survey: 07/09/2023
Statement of Competency	
Helen Chambers was an Ecologist with SLR Consulting Ltd at the time of survey. Helen is a Qualifying Member of the Chartered Institute of Ecology and Environmental Management (CIEEM) with experience of ecological impact assessments, BNG assessments, and UKHab habitat survey.	
Survey conditions and limitations	
UK Habitat Classification (UKHab) Survey The UKHab surveys recorded (mapped) the habitats present and followed the UKHab methodology. The UKHab Classification is a comprehensive classification system for the UK that has been developed to benefit from changes in habitat categorisation and recording analysis in recent decades. The system comprises a principal hierarchy (the Primary Habitats) which include broad habitats and priority habitats and non-hierarchical Secondary codes. Habitat nomenclature and definitions have been designed to remain as close to existing systems as possible in order that data can be collected, analysed, and translated without ambiguity. **Condition Assessment for Biodiversity Net Gain** While undertaking the habitat surveys, the condition of each habitat parcel was recorded, using the criteria produced by Natural England for later use in a BNG assessment. The condition assessment included collecting information on the physical characteristics of the habitat, the presence of positive indicator species and the presence of invasive non-native species. Each habitat parcel, that requires it, was then assigned condition score of 'poor', 'moderate' or 'good'. **Limitations** The Site, and immediately surrounding areas, were fully accessible, and as such no access restrictions apply. Furthermore, the UK Habitat survey was undertaken at an optimal time of year, by an appropriately experienced surveyor, and as such, no significant limitations apply.	

1.11.1 Habitat Degradation

No evidence of purposeful habitat degradation was observed, see Table 1-6.

Table 1-6: Habitat Degradation

Are there any signs or evidence that the baseline habitats have been purposefully degraded since 30th January 2020? (BI-B05)
No
If habitats have been purposefully degraded, provide details of how this has been accounted for (BI-B06)
N/A

1.11.2 Baseline Habitat Descriptions and Condition

Table 1-7 presents the baseline habitats and conditions recorded on Site.

Table 1-7: Baseline Habitats (BI-T04)

Parcel/Feature Refs (see Figure 1-4)	Habitat Type and Code	Irreplaceable	Priority	Description and Condition Justification	Condition	Area (ha)
B2 (g4)	Modified grassland (g4)	No	No	A field of modified grassland is present at the east of the Site. The grassland is dominated by common grasses, including Italian rye grass, bents, cock's foot and Yorkshire fog. Very few herbs are present, however, dandelion, chickweed, broad-leaved dock and common sorrel are occasional throughout the grassland. Failed on condition assessment criteria A and B; as there are fewer than six species per m² and no variation in sward height. Condition assessment criteria scores: Criteria A – N Criteria B – N Criteria C - Y Criteria D - Y Criteria E – Y Criteria F – Y Criteria G – Y	Poor	1.65
B7	Mixed scrub (h3h)	No	No	Dominated by bramble (*Rubus fruticosus* agg.), however hawthorn (*Crataegus monogyna*), elder (*Sambucus nigra*) and dog rose (*Rosa canina*) are present. Herbs such as nettle, willowherbs and creeping thistle are also present. Failed on condition assessment criteria D and E; as the habitat lacks a well-developed edge and there are no sheltered edges within the scrub.	Moderate	0.01

Parcel/Feature Refs (see Figure 1-4)	Habitat Type and Code	Irreplaceable	Priority	Description and Condition Justification	Condition	Area (ha)
				Condition assessment criteria scores: Criteria A – Y Criteria B – Y Criteria C – Y Criteria D – N Criteria E – N		
B10	Mixed scrub (h3h)	No	No	Similar composition to B7, but with elements of the grown-out hedges and trees which have been planted in this area, including scattered trees such as cherry (*Prunus avium*), rowan (*Sorbus aucuparia*), willow (*Salix* sp.) and sycamore (*Acer pseudoplatanus*) trees, and has a more significant grass presence around the edges which include false oat-grass, Yorkshire fog and cocksfoot. Failed on condition assessment criteria B, D and E; as there are not shrubs present from a variation of age-classes, the habitat lacks a well-developed edge and there are no sheltered edges within the scrub. Condition assessment criteria scores: Criteria A – Y Criteria B – N Criteria C – Y Criteria D – N Criteria E – N	Poor	0.03
B1 (c1c)	Cereal crops (c1c)	No	No	A cropland field is present towards the west of the Site. Initially surveyed by Brooks Ecological, this was occupied by a barley crop and subject to herbicide application. However, at the time of re-survey, this had become	N/A	1.47

Parcel/Feature Refs (see Figure 1-4)	Habitat Type and Code	Irreplaceable	Priority	Description and Condition Justification	Condition	Area (ha)
				overgrown with arable weeds, likely due to a lack of management in recent months. Weeds present include willowherbs, teasel , creeping thistle and nettle with some grasses present including false oat-grass. The habitat/ land present was still indicative of a cropland/ an agriculturally managed field albeit lacking active management. Condition assessment N/A.		
Individual tree within B10	Urban tree (SC:200)	No	No	Small sized sycamore tree in mixed scrub habitat. Fails on condition A and E, as it is not a native species and no natural ecological niches are present. Condition assessment criteria scores: Criteria A – N Criteria B – Y Criteria C - Y Criteria D - Y Criteria E – N Criteria F – Y	Moderate	0.004
B3, B4, B5, B6	Developed land; sealed surface (u1b), including buildings (u1b5)	No	No	A small strip of concrete hard standing is present to the south of the Site, used for storing agricultural machinery. Four structures/ buildings, including two barns, are present within the yard at the south-west corner of the Site. Condition assessment N/A.	N/A	0.06
B9	Artificial unvegetated, unsealed surface (u1c)	No	No	At the south-western edge of the Site a small yard is present, which is comprised primarily of gravel/ unsealed surface, which appears mostly disused. Condition assessment N/A.	N/A	0.27

Parcel/Feature Refs (see Figure 1-4)	Habitat Type and Code	Irreplaceable	Priority	Description and Condition Justification	Condition	Area (ha)
B8	Artificial unvegetated, unsealed surface, vacant or derelict land (u1c 82)	No	No	Successional vegetation is present on the edge of the mixed scrub habitat and bordering the cropland habitat. Competitive and ephemeral species present include Yorkshire fog, pineapple weed (*Matricaria discoidea*), buddleia (*Buddleja davidii*), shepherds' purse (*Capsella bursa-pastoris*), groundsel (*Senecio vulgaris*), cleavers, spear thistle (*Cirsium vulgare*) and willowherbs. Condition assessment criteria scores: Criteria A – N Criteria B – N Criteria C - Y	Poor	0.06

Hedgerows (BI-T05)

Table 1.8 presents the baseline hedgerows and conditions recorded on Site.

Table 1-8: Baseline Hedgerows (BI-T04)

Parcel/Feature Refs (see drawing BI-F02)	Hedgerow Type and Code	Irreplaceable	Priority	Description and Condition Justification	Condition	Length (km)
LB1 (h2a6)	Native hedgerow (h2a6)	No	Yes (over 80% native species)	Native hedgerow present along the western Site boundary, *circa* 190 m in length, dominated by hawthorn, with the occasional blackthorn (*Prunus spinosa*), holly (*Ilex aquifolium*), elder and dog rose. Ground flora indicative of arable field margin with species including nettle, cleavers (*Galium aparine*), bramble, broad-leaved dock, cow parsley (*Anthriscus sylvestris*), hogweed (*Heracleum sphondylium*), ivy (*Hedera helix*), white deadnettle (*Lamium album*), borage (*Borago officinalis*) and common grasses including cocksfoot. Failed on condition assessment criteria C2 and D2; plant species indicative of nutrient enrichment of soils dominate >20% cover of the area of undisturbed ground, and >10% of the hedgerow or undisturbed ground is impacted by damage from human activities. Condition assessment criteria scores: Criteria A1 = Y Criteria A2 = Y Criteria B1 = Y Criteria B2 = Y Criteria C1 = Y Criteria C2 = N Criteria D1 = Y	Good	0.19

Parcel/Feature Refs (see drawing BI-F02)	Hedgerow Type and Code	Irreplaceable	Priority	Description and Condition Justification	Condition	Length (km)
				Criteria D2 = N		
LB2 (h2a6)	Native hedgerow – associated with bank or ditch (h2a6)	No	Yes (over 80% native species)	Native hedgerow present along the northern boundary running along the top of a small bank, *circa* 80 m in length. Mostly comprising hawthorn. On the opposite side of this hedgerow a small channel is present, which at the time of survey, was completely dry, with no aquatic vegetation present. A small rabbit warren was identified along the bank of this hedgerow. Ground flora includes nettle, cleavers, bramble, broad-leaved dock, cow parsley, hogweed, ivy and common grasses including cocksfoot. Failed on condition assessment criteria B1, C1, C2, and D2; gaps between ground and base of canopy exceed 0.5 m for >10% of the hedgerow length, <1 m of undisturbed ground with perennial herbaceous vegetation is present for >90% of the length, nutrient-enriched species dominate >20% cover of the undisturbed ground, and >10% of the hedgerow or base is impacted by human damage. Condition assessment criteria scores: Criteria A1 = Y Criteria A2 = Y Criteria B1 = N Criteria B2 = Y Criteria C1 = N Criteria C2 = N Criteria D1 = Y	Moderate	0.08

Parcel/Feature Refs (see drawing BI-F02)	Hedgerow Type and Code	Irreplaceable	Priority	Description and Condition Justification	Condition	Length (km)
				Criteria D2 = N		
LB3 (h2a6)	Native hedgerow (h2a6)			Native hedgerow present at the centre of the Site, *circa* 220 m, marking the boundary between the modified grassland field and cropland field. Dominated by hawthorn, with the occasional blackthorn, holly, elder and dog rose. Ground flora indicative of arable field margin with species including nettle, cleavers, bramble, broad-leaved dock, cow parsley, hogweed, ivy, white dead-nettle, borage and some common grasses. Failed on condition assessment criteria C1, C2, and D2; <1 m of undisturbed ground with perennial herbaceous vegetation is present for >90% of the length, nutrient-enriched species dominate >20% cover of the area of undisturbed ground, and >10% of the hedgerow or base is impacted by human damage. Condition assessment criteria scores: Criteria A1 = Y Criteria A2 = Y Criteria B1 = Y Criteria B2 = Y Criteria C1 = N Criteria C2 = N Criteria D1 = Y Criteria D2 = N	Moderate	0.22
LB4 (h2a6)	Native hedgerow – associated			Native hedgerow present along the northern boundary running along the top of a small bank, *circa* 80m in length. On the opposite side of this hedgerow a small channel is	Moderate	0.08

Parcel/Feature Refs (see drawing BI-F02)	Hedgerow Type and Code	Irreplaceable	Priority	Description and Condition Justification	Condition	Length (km)
	with bank or ditch (h2a6)			present, which at the time of survey, was completely dry, with no aquatic vegetation present. Ground flora includes nettle, cleavers, bramble, broad-leaved dock, cow parsley, hogweed, ivy and common grasses including cocksfoot. Failed on condition assessment criteria C1, C2, and D2; <1 m of undisturbed ground with perennial herbaceous vegetation is present for >90% of the length, nutrient-enriched species dominate >20% cover of the area of undisturbed ground, and >10% of the hedgerow or base is impacted by human damage. Condition assessment criteria scores: Criteria A1 = Y Criteria A2 = Y Criteria B1 = Y Criteria B2 = Y Criteria C1 = N Criteria C2 = N Criteria D1 = Y Criteria D2 = N		
LB5 (h2a6)	Native hedgerow (h2a6)			Native hedgerow present along the eastern Site boundary, *circa* 170 m in length, dominated by hawthorn, with the occasional blackthorn, holly, elder and dog rose. Ground flora indicative of arable field margin with species including nettle, cleavers, bramble, broad-leaved dock, cow parsley, hogweed, ivy, white deadnettle, borage and common grasses including cocksfoot.	Moderate	0.17

Parcel/Feature Refs (see drawing BI-F02)	Hedgerow Type and Code	Irreplaceable	Priority	Description and Condition Justification	Condition	Length (km)
				Failed on condition assessment criteria C1, C2, and D2; <1 m of undisturbed ground with perennial herbaceous vegetation is present for >90% of the length, nutrient-enriched species dominate >20% cover of the area of undisturbed ground, and >10% of the hedgerow or base is impacted by human damage. Condition assessment criteria scores: Criteria A1 = Y Criteria A2 = Y Criteria B1 = Y Criteria B2 = Y Criteria C1 = N Criteria C2 = N Criteria D1 = Y Criteria D2 = N		

1.11.3 Priority and Irreplaceable Habitats

No irreplaceable habitats were present within the Site boundary.

The native hedgerows on Site boundary are priority habitats.

Table 1-9: Priority and Irreplaceable Habitats

Summary of Priority and Irreplaceable Habitats (BI-B07)
No irreplaceable habitats were present. The 0.74 km of native hedgerow on Site constitute a priority habitat.
Potential Constraints and Opportunities for Project (BI-B08)
The western boundary hedgerow LB1 will be removed, as well as 100 m of the central hedgerow LB3, 6 m of the north-eastern hedgerow LB4 and 10 m of the eastern hedgerow LB5. All other hedgerow will be retained and 0.328 km of species rich native hedgerow will be created.

1.11.4 Baseline Habitat Plan (BI-F02)

Figure 1-4: Baseline Habitat Map

LEGEND

- Site Boundary
- Individual Tree (SC:200)

Primary Habitat Classification

Heathland and Shrub - Hedgerows

- h2a6 - Other Native Hedgerow

Cropland - Arable and Horticulture

- c1c - Cereal Crops

Grassland - Modified Grassland

- g4 - Modified Grassland

Heathland and Shrub - Dense Scrub

- h3h - Mixed Scrub

Urban - Built-up Areas and Gardens

- u1b - Developed Land; Sealed Surface
- u1b5 - Building
- u1c - Artificial Unvegetated, Unsealed Surface

Secondary Code
81 - Ruderal or Ephemeral
82 - Vacant or Derelict Land
200 - Individual Tree
833 - Barn

AVANT homes

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HABITAT MANAGEMENT AND MONITORING PLAN

BASELINE HABITAT PLAN

FIGURE 1-4

Scale 1:1,250 @ A3

Date OCTOBER 2025

1.11.5 Baseline Distinctiveness and Condition Plan (BI-F03)

Figure 1-5: Baseline Distinctiveness and Condition Plan

442800 442900 443000 443100

407200

407100

407000

410.066691.00002.0005.0 Distinctivness and Condition Plan

N

High Street

High Street

High Street

LB2: h2a6

LB4: h2a6

LB3: h2a6

LB5: h2a6

B1: c1c

B2: g4

B7: h3h

B8: u1c 81 82

LB1: h2a6

B9: u1c

B5: u1b5 833

B10: h3h

B4: u1b5 833

B3: u1b

B6: u1b5

0 50 100

Metres

LEGEND

Site Boundary

Medium Distinctiveness, Moderate Condition

Baseline Distinctiveness and Condition

Medium Distinctiveness, Moderate Condition

Low Distinctiveness,Good Condition

Low Distinctiveness, Moderate Condition

Medium Distinctivenes, Moderate Condition

Medium Distinctivenes, Poor Condition

Low Distinctivenes, Poor Condition

Low Distinctiveness, Condition Assessment N/A

Very Low Distinctivenes, Condition Assessment N/A

Mount Pleasant

Great Houghton

AVANT homes

SLR

GREAT HOUGHTON

HABITAT MANAGEMENT AND MONITORING PLAN

BASELINE DISTINCTIVENESS AND CONDITION

FIGURE 1-5

Scale 1:1,250 @ A3

Date OCTOBER 2025

1.11.6 Baseline Habitats Photos (BI-F04)

Table 1-10: Baseline Habitats Photos

Photograph (On Site Habitats)	
	
Native Hedgerow (h2a6) (LB1 on western boundary)	Native Hedgerow (h2a6) (LB2 on northern boundary)
	
Native Hedgerow (h2a6) (LB3 centre of Site)	Native Hedgerow (h2a6) (LB4 on northeastern boundary)
	
Native Hedgerow (h2a6) (LB5 on eastern boundary)	

Photograph (On Site Habitats)	
	
Modified Grassland (g4)	Cereal Crops (c1c)
	
Mixed Scrub (h3h) surrounding a disused shed in the centre of Site.	Mixed Scrub (h3h) on the southwestern boundary.
	
Developed Land, Sealed Surface (u1b) southern area of Site.	Building (u1b5) Dilapidated timber shed built around timber frame. Asbestos panel roof.

Photograph (On Site Habitats)

Artificial Unvegetated, Unsealed Surface, Vacant or Derelict Land (u1c 82), southwestern edge of Site.

2.0 Planned Management Activities

The proposed management activities are presented below in Table 2-1.

Table 2-1: Management Plan Aims and Objectives

Management Plan Aims and Objectives PM-B01

This HMMP has been produced in order to manage the habitat creation and enhancement of on-Site areas for the proposed scheme.
 	
Under the current landscape plan for the Site, 7.58 habitat Biodiversity Units (BU) and 1.88 hedgerow BU will be lost to facilitate the proposed development.
 	
This will be compensated for on-Site through the following habitat retention/creation/enhancement objectives:
 	
Area Habitats
• On-Site habitat creation of:
  • 73 individual trees (within the public realm) (delivering 1.04 BU);
  • 0.1379 ha other neutral grassland within the attenuation basin (seeding of Emorsgate EP1 Pond Edge Mixture[9] (delivering 1.33 BU);
  • 0.3375 ha other neutral grassland (seeding of Naturescape N14 Flowering Lawn Mixture[10]) (delivering 2.60 BU);
  • 0.1477 ha of vegetated gardens (delivering 0.33 BU); and
  • Creation of 0.0101 ha of mixed scrub (delivering 0.08 BU).
 	
Hedgerows
• On-Site hedgerow creation of;
  • 0.328 km of species-rich native hedgerow (delivering 2.53 BU).
 	
The above habitats will be managed for a minimum of 30 years. With appropriate management described below, and any adaptive management identified during monitoring, it is anticipated that the above BU values shall be achieved.

[9] Emorsgate Seeds. (2025). EP1 Pond Edge Mixture. Available at: https://wildseed.co.uk/product/mixtures/complete-mixtures/special-habitat-mixtures/pond-edge-mixture/

[10] Naturescape. (2025). N14 Flowering Lawn Mixture. Available at: https://www.naturescape.co.uk/product/n14-flowering-lawn-mixture/

2.1 Principles Informed by Design Stage

Principles of development in relationship to habitat present are presented below in Table 2-2.

Table 2-2: Principles of Design

Design Principles Informed by Baseline Information PM-B02
The aim of the Site design was to maximise the biodiversity value of the Site whilst delivering the new housing development required by the client. Given the size of the Site and the required number of houses (104), scope for achieving biodiversity units was limited. The Site achieves a 29.01% net loss in habitat units. This loss in habitat units will be addressed via purchase of offsetting credits, e.g. via Barnsley Metropolitan Borough Council. Discussions are ongoing with Barnsley Metropolitan Borough Council to finalise an offsetting arrangement with them. This will ensure that the proposed development achieves a 10% net gain. The details of such will be finalised at a later date and will be subject to a planning condition/ Section 106.

2.2 Habitat and Condition Targets PM-T01

This table presents a summary record of what you have agreed to deliver based on the biodiversity metric. These habitat condition targets form the basis of what the management plan is setting out to achieve. The table includes the relevant 'Area', 'Hedgerow', and 'Watercourse' types to be implemented and managed throughout the period of 30 years or more.

Table 2-3: Proposed On-Site Habitat Condition Targets

Baseline Habitat Type	Target Habitat Type	Parcel / Feature Refs	Baseline Condition	Targeted Condition	Years to Targeted Condition	Condition Assessment Targets	Comments
Modified grassland (g4)	Other neutral grassland (g3c) (EP1 Pond Edge Mixture)	PM209	Poor	Good	10	Good condition will be targeted by achieving at least five criteria, including essential criteria A and F. The following criteria are expected to be passed: Criteria A **- Y** Criteria B **- Y** Criteria C **- N** Criteria D **- Y** Criteria E **- Y** Criteria F **- Y**	Habitat will be consistent with UKHab type. Maintain a varied sward height to provide microclimates for insects, birds, and small mammals. Maintain cover of bracken (*Pteridium aquilinum*) <20% and scrub <5%. Prevent INNS and damage to condition, e.g., from machinery or excessive access. Ensure 10 or more vascular plant species per m², including characteristic forbs. Remove litter and debris regularly.
Cereal crops (c1c), Modified grassland (g4) and Artificial unvegetated, unsealed surface (u1c)	Other neutral grassland (g3c) (N14 Flowering Lawn Mixture)	PM201-208, PM210, PM211 and PM231.	Cereal crops: N/A Modified grassland: Poor Artificial unvegetated, unsealed	Moderate	5	Moderate condition will be targeted by achieving at least three criteria. The following criteria are expected to be passed: Criteria A **- Y** Criteria B **- Y** Criteria C **- N** Criteria D **- Y**	Habitat will be consistent with UKHab type. Maintain a varied sward height to provide microclimates for insects, birds, and small mammals. Maintain cover of bracken <20% and scrub <5%.

Baseline Habitat Type	Target Habitat Type	Parcel / Feature Refs	Baseline Condition	Targeted Condition	Years to Targeted Condition	Condition Assessment Targets	Comments
			surface (u1c): N/A			Criteria E **- N** Criteria F **– N**	
Mixed scrub (h3h) and Artificial unvegetated, unsealed surface, vacant or derelict land (u1c 28)	Mixed scrub (h3h)	PM212, PM228 & PM229	Mixed scrub: Poor Artificial unvegetated, unsealed surface, vacant or derelict land (u1c 28): Poor	Moderate	5	Moderate condition will be targeted, by passing three or more criteria. The following criteria are expected to be passed: Criteria A **- Y** Criteria B **- N** Criteria C **- Y** Criteria D **- Y** Criteria E **- N**	Maintain at least 80% native scrub cover and ensure no single species exceeds 75% cover. Maintain a well-developed edge with scattered scrub and tall grassland or forbs between the scrub and adjacent habitat. Prevent INNS and species indicative of suboptimal condition.
Native hedgerow (h2a6)	Native hedgerow (h2a6) (Retained)	LPM4, LPM5, LPM8, LPM9, LPM10, LPM11	Moderate (LB2/LPM9, LB3/LPM10, LB4/LPM8, LB5/LPM5).	Moderate	0	Hedgerow is due to be retained, and moderate condition will be targeted. The following criteria are expected to be passed: Criteria A1 = **Y** Criteria A2 = **Y** Criteria B1 = **Y** Criteria B2 = **Y** Criteria C1 = **N** Criteria C2 = **N** Criteria D1 = **Y** Criteria D2 = **N**	Maintain average woody growth height >1.5 m along the length. Maintain average woody growth width >1.5 m along the length. Ensure gaps between ground and base of canopy remain <0.5 m for >90% of length. Reduce horizontal gaps so that gaps make up <10% of total length and no canopy gaps exceed 5 m. Ensure >90% of the hedgerow and base is free of invasive non-native plant species.

Baseline Habitat Type	Target Habitat Type	Parcel / Feature Refs	Baseline Condition	Targeted Condition	Years to Targeted Condition	Condition Assessment Targets	Comments
Native hedgerow (h2a6)	Species rich native hedgerow (h2a5)	LPM1, LPM2, LPM3, LPM4, LPM6, LPM7	N/A	Moderate	5	Moderate condition will be targeted. The following criteria are expected to be passed: Criteria A1 = **Y** Criteria A2 = **N** Criteria B1 = **Y** Criteria B2 = **N** Criteria C1 = **N** Criteria C2 = **Y** Criteria D1 = **Y** Criteria D2 = **Y**	Maintain average woody growth height >1.5 m along the length. Ensure gaps between ground and base of canopy remain <0.5 m for >90% of length. Maintain plant species indicative of nutrient enrichment at <20% cover of the undisturbed ground. Ensure >90% of the hedgerow and base is free of invasive non-native plant species. Ensure >90% of the hedgerow and base is free from damage caused by human activities.
N/A	Urban Trees	N/A	N/A	Moderate	27	Moderate condition will be targeted by achieving at least three criteria. The following criteria are expected to be passed: Criteria A **- Y** Criteria B **- Y** Criteria C **- N** Criteria D **- Y** Criteria E **- N** Criteria F **- Y**	Planting of native species and/or more than 20% of the canopy oversailing vegetation. Maintain tree health by preventing human activities such as vandalism or use of herbicides.

Habitat and Condition Targets Further Comments
In addition to the biodiversity metric net gain measures the following enhancements shall be provided: • Provision of bird boxes on 100% of dwellings (swift boxes which can also accommodate house sparrow and starling); • Provision of bat boxes on 100% of dwellings; • Two hedgehog nest boxes within the retained northern hedgerow LB2; and • 'Hedgehog highways' – minimum 15 cm x 15 cm gaps at bases of garden fences.

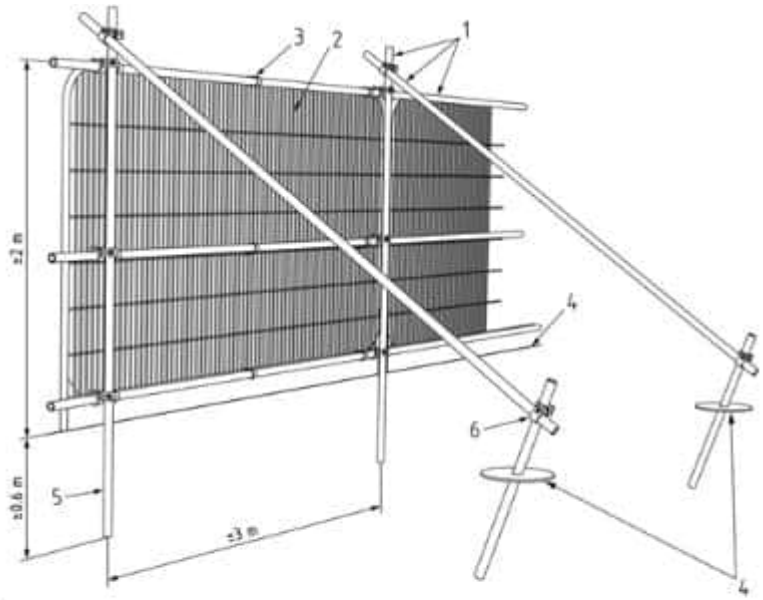
2.3 Habitat Retention

Provide a concise description of the habitats that are to be retained in their baseline condition. Habitats being retained may still require ongoing measures to maintain their baseline condition.

Table 2-4: Habitat Retention Protection Measures

Measures to be Implemented to Protect Retained Habitats PM-03
Due to the Site design and size of the Site, the existing Site habitats cannot be retained in their current state, with the exception of the Native Hedgerow (h2a6) on the northern, northeastern and eastern boundaries which will be retained (LB2, LB4, LB5, Figure 1-4) as well as a section of the central hedgerow (LPM10, LPM11, Figure 2-1).
Specification of Protective Measures to be Used PM-04
Protective Fencing The purpose of this fencing is to provide protection to the RPAs to the retained Native Hedgerows The type of fencing used shall be appropriate to the level of adjacent construction activity and shall be agreed with the Local Authority tree officer. The default specification for Tree Protection Fencing (extract from BS 5837:2012) is illustrated below. Weather-proof notices shall be attached to any protective fencing located adjacent to retained trees displaying the words “Construction Exclusion Zone” and listing restrictions which apply. All personnel must be made aware of these restrictions. Example of Protective Fencing Signs    **Extracts taken from B.S. 5837: (2012), “Trees in relation to design, demolition and construction – Recommendation**”.

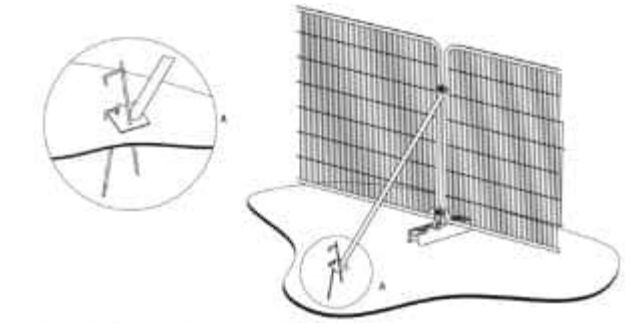
Measures to be Implemented to Protect Retained Habitats PM-03



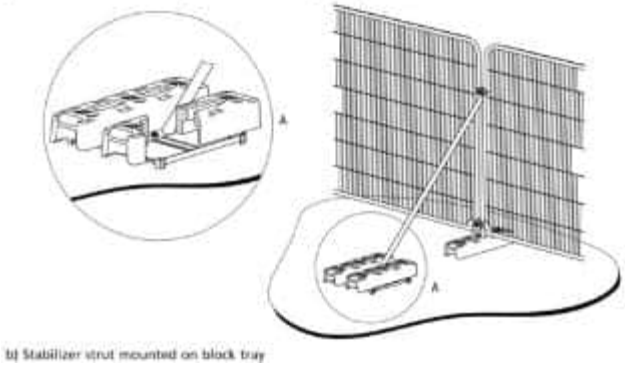
Key

1 Standard scaffold poles
2 Heavy gauge 2 m tall galvanized tube and welded mesh infill panels
3 Panels secured to uprights and cross-members with wire ties
4 Ground level
5 Uprights driven into the ground until secure (minimum depth 0.6 m)
6 Standard scaffold clamps

Default specifications for protective barrier



a) Stabilizer strut with base plate secured with ground pins



b) Stabilizer strut mounted on block tray

Example of above ground stabilising systems

Construction Exclusion Zones

The Construction Exclusion Zone (CEZ) is the area identified by a suitably qualified arboriculturist as the area to be protected during development, from Site clearance and construction work through the use of barriers and/or ground protection to ensure the successful long-term retention of trees /

Measures to be Implemented to Protect Retained Habitats PM-03
hedgerows. Fencing or ground protection shall not be taken down or relocated at any time without prior agreement and/or Site supervision as recommended by the arboriculturist. All areas protected by Tree Protection Fencing shall be treated as CEZs, and the following restrictions shall apply: • No construction activity must occur within these areas; • No works on trees / hedgerows unless agreed by a suitably qualified arboriculturist; • No alterations of ground levels or conditions; • No chemicals or cement washings; • No excavation; • No temporary structures*; • No storage of soil, rubble or other materials; • No vehicles or machinery to be used or parked without appropriate ground protection measures as per BS5837:2012. This will require the use of a proprietary system of reinforced concrete slabs/steel road plates on a compressible layer, or side butting scaffold boards/ 18mm plywood sheets on a compressible layer. The type of ground protection used shall be appropriate for the likely loading applied; • No fixtures (lighting, signs etc.) to be attached to trees; and • No fires within 10 metres of the canopies of any tree. *Site huts, provided they are of the “Jack Leg” type, can be sited Fencing or ground protection shall not be taken down or relocated at any time without prior consultation with an arboriculturist.

2.4 Habitat Creation Plan PM-F01

The figure below illustrates the habitat creation at the Site.

Figure 2-1: Habitat Creation Plan

442800 442900 443000 443100

407200

407100

407000

Note
Urban habitats have not been labelled to aid readability. All g3c Other Neutral Grassland areas may be established using one of the following seed mixes:

- Naturescape N14 Flowering Lawn Mixture

- Emorsgate EL1 Pond Edge Mix

The g3c parcels have been subdivided into two components:

EP1 corresponds to PM209

N14 includes PM201–208, 210, 211, and 231

Secondary Code
200 - Individual Tree

High Street

High Street

High Street

PM210: g3c
PM208: g3c
PM209: g3c
PM207: g3c
PM211: g3c
PM212: h3h
PM200: g3c
PM201: g3c
PM231: g3c
PM230: h3h
PM202: g3c
PM205: g3c
PM228: h3h
PM206: g3c
PM229: h3h
PM204: g3c
PM203: g3c
PM226: h3h

N

0 50 100
Metres

LEGEND

Site Boundary

Proposed Individual Tree (SC:200)

Primary Habitat Classsification

Heathland and Shrub - Hedgerows

h2a5 - Species-rich Native Hedgerow

h2a6 - Other Native Hedgerow (Retained)

Grassland - Neutral Grassland

g3c - Other Neutral Grassland

Heathland and Shrub - Dense Scrub

h3h - Mixed Scrub

Urban - Built-up Areas and Gardens

u1 - Built-up Area and Garden

u1b - Developed Land; Sealed Surface

u1b5 - Building

Mount Pleasant

Great Houghton

AVANT homes

SLR

GREAT HOUGHTON

HABITAT MANAGEMENT AND MONITORING PLAN

HABITAT CREATION PLAN

FIGURE 2-1

Scale 1:1,250 @ A3

Date DECEMBER 2025

410.066691.00002.0006.0 Post-Development Plan

2.5 Creation, Enhancement and Management Targets and Perceptions

2.5.1 Other Neutral Grassland

Table 2-5: Creation, Enhancement and Management Summary – Other Neutral Grassland (GH-T01)

Target Habitat: Other Neutral Grassland					
Condition Assessment Criteria		**Targeted**	**Relevant Parcels**	**Creation Approach**	**Management Approach**
A	The parcel represents a good example of its habitat type, with a consistently high proportion of characteristic indicator species present relevant to the specific habitat type. **Note – this criterion is essential for achieving Moderate or Good condition for non-acid grassland types only.**	Yes	PM209	Seeding of 0.1379 ha Emorsgate EP1 Pond Edge Mixture[11] within attenuation basin.	Limited management and area to be fenced off from public access. Removal of litter and debris.
			PM201-208, PM210, PM211 and PM231.	Seeding of 0.3375 ha Naturescape N14 Flowering Lawn Mixture[12] surrounding the attenuation basin and on northern boundary.	Managed as amenity grassland with regular cutting to 25 – 40mm. Cutting should not be more frequent than every 3 weeks. Cutting will stop and the area will be left to flower for a period of 4-8 weeks between May – July. Heavy quantities of arisings will be collected and removed from the Site.

[11] Emorsgate Seeds. (2025). EP1 Pond Edge Mixture. Available at: https://wildseed.co.uk/product/mixtures/complete-mixtures/special-habitat-mixtures/pond-edge-mixture/
[12] Naturescape. (2025). N14 Flowering Lawn Mixture. Available at: https://www.naturescape.co.uk/product/n14-flowering-lawn-mixture/

Target Habitat: Other Neutral Grassland					
Condition Assessment Criteria		**Targeted**	**Relevant Parcels**	**Creation Approach**	**Management Approach**
B	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20 per cent is more than 7 cm) creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.	Yes – EP1 Pond Edge Mix	PM209	Seeding of 0.1379 ha Emorsgate EP1 Pond Edge Mixture[13] within attenuation basin.	Through a rotational cutting regime applied to the EP1 Pond Edge Mix, with approximately one-half of the area cut at any one time, leaving uncut refuge areas to ensure structural diversity. Cutting will take place once in August/September, and if a second cut is necessary, this should be in April. Arisings will be removed to prevent nutrient enrichment.
		No – N14 Wildflower Lawn Mix	PM201-PM208 PM210, PM211 and PM231.	N/A	N/A
C	Cover of bare ground between 1% and 5%, including localised areas, for example, rabbit warrens.	Yes	PM209	Design for micro-variation: When sowing seed mixes, lightly harrow or rake certain small patches (about	Maintain small-scale disturbance: Every 2–3 years, create or refresh small bare patches (<1

[13] Emorsgate Seeds. (2025). EP1 Pond Edge Mixture. Available at: https://wildseed.co.uk/product/mixtures/complete-mixtures/special-habitat-mixtures/pond-edge-mixture/

Target Habitat: Other Neutral Grassland					
Condition Assessment Criteria		**Targeted**	**Relevant Parcels**	**Creation Approach**	**Management Approach**
				0.25–1 m² each) to expose soil between seed zones, this encourages some open areas to remain bare during establishment. Reduce seed density locally: Sow seed mix at a slightly lower rate (e.g. 70–80% of standard) in selected patches near pond margins, paths, or south-facing slopes where natural disturbance may occur.	m²) by scraping or light scarification during autumn or early spring, ensuring total bare ground remains between 1–5% of the area. Encourage natural processes: Retain bare soil created by animal activity (e.g. rabbit warrens, molehills, or waterfowl paths), provided erosion risk is minimal. Avoid over-management: Prevent large-scale soil disturbance, machinery tracking, or poaching that would exceed 5% bare cover or introduce invasive weeds.
		No – N14 Wildflower Lawn Mix	PM201-PM208 PM210, PM211 and PM231.	N/A	N/A
D	Cover of bracken less than 20% and cover of scrub (including bramble) less than 5%.	Yes	PM201-209, PM210, PM211 and PM231.	Prevent bracken and scrub encroachment.	Prevent bracken and scrub encroachment.

Target Habitat: Other Neutral Grassland					
Condition Assessment Criteria		**Targeted**	**Relevant Parcels**	**Creation Approach**	**Management Approach**
E	Combined cover of species indicative of suboptimal condition and physical damage (such as excessive poaching, damage from machinery use or storage, damaging levels of access, or any other damaging activities) accounts for less than 5% of total area. If any invasive non-native species (as listed on Schedule 9 of WCA) are present, this criterion is automatically failed.	Yes – EP1 Pond Edge Mix	PM209	INNS and undesirable species to be removed. Prevent physical damage from machinery use or storage.	Maintain removal of INNS and undesirable species.
		No – N14 Wildflower Lawn Mix	PM201-PM208 PM210, PM211 and PM231.	N/A	N/A
F	There are 10 or more vascular plant species per m^2 present, including forbs that are characteristic of the habitat type. **Note – this criterion is essential for achieving Good condition for non-acid grassland types only.**	Yes – EP1 Pond Edge Mix	PM209	Seeding of 0.1379 ha Emorsgate EP1 Pond Edge Mixture[14] within attenuation basin.	Once established, the grassland should be managed through an annual hay cut in late July to August, after most forbs have set seed, with all cuttings removed to maintain low soil fertility and promote plant diversity. A secondary cut in autumn can be used to control coarse grasses and maintain structural variation.

[14] Emorsgate Seeds. (2025). EP1 Pond Edge Mixture. Available at: https://wildseed.co.uk/product/mixtures/complete-mixtures/special-habitat-mixtures/pond-edge-mixture/

Target Habitat: Other Neutral Grassland					
Condition Assessment Criteria		**Targeted**	**Relevant Parcels**	**Creation Approach**	**Management Approach**
					No fertiliser or nutrient inputs should be applied at any stage, as this would encourage competitive grasses and reduce forb diversity. Invasive and nutrient-enrichment indicator species such as *Urtica dioica*, *Rumex spp.*, and *Galium aparine* should be manually removed or spot-treated to maintain a balanced sward. Where diversity declines or gaps appear, overseeding with appropriate native forbs following light scarification may be carried out to restore species richness.
		No – N14 Wildflower Lawn Mix	PM201-PM208 PM210, PM211 and PM231.	N/A	N/A

Additional Management Prescriptions (GH-B01)
N/A

Table 2-6: Creation, Enhancement and Management Detailed Methods (GH-T02)

Action	Timing	Prescriptions
Ground preparation, sowing methods.	Y0 Autumn or Spring	For areas of newly created grassland, ground preparation is essential to success, so the aim is to control weeds and produce a good quality seed bed before sowing. To prepare areas of newly created grassland, works to the seed bed must first remove undesirable species using repeated cultivation or a herbicide. The required mix should be sown in the spring or early autumn (dependent on construction programme) onto bare ground after harrowing/raking the surface and should not be sown on compacted ground. Bulking up the seed with an inert carrier such as sand can make distribution easier. The seed must be surface sown and can be applied by machine or broadcast by hand. After sowing, the surface should be lightly harrowed or raked to settle the seed in. Care must be taken not to bury the seed at depth. To give good soil/seed contact the ground may be firmed with a roller. The newly seeded areas should be fenced off until the grass is well established. In the event of poor establishment in year 1, then reseeding may be required following further investigation. The seed must be surface sown and can be applied by machine or broadcast by hand. To get an even distribution and avoid running out divide the seed into two or more parts and sow in overlapping sections. Do not incorporate or cover the seed, but firm in with a roll, or by treading, to give good soil/seed contact.
Seed selection	Y0	**Naturescape N14 Flowering Lawn Mixture:** (or similar approved) to be seeded in areas surrounding the attenuation basin, at a rate of 4g/sqm. The grassland will support a mix of flowers and grasses including the vibrant colours of knapweed (*Centaurea nigra*), ox-eye daisy (*Leucanthemum vulgare*), and other pollinator-friendly wildflowers that are frequently visited by bees, butterflies and hoverflies,

Action	Timing	Prescriptions
		thus increasing biodiversity. The dried seed heads of the wildflowers will also provide an important seed resource for birds during the winter months. Note: If an autumn (September) seeding during Year 1 is not appropriate (i.e. due to unfavourable ground conditions) and instead a spring seeding is required, then Yellow Rattle will instead be sown separately during autumn/winter due to its requirement to experience periods of colder weather prior to germination.
		Emorsgate EP1 Pond Edge Mixture: (or similar approved) to be seeded within the attenuation basin, at a rate of 4g/sqm. EP1 contains wildflowers and grasses suitable for sowing at the wet margins of ponds, streams and ditches.
Re-seeding	Y0	Re-seed any areas that do not establish.
Mowing	Y1 – September to March Y2	The sward can then be kept short by mowing through to the end of March of the following year. Dig out any residual perennial weeds such as docks and thistles over winter.
Mowing	Annually Y2-Y30	**Flowering Lawn mixture (N14)** Following establishment, the N14 Flowering Lawn Mix will be managed as an amenity grassland with regular mowing to a height of 25–40 mm. Cutting should not occur more frequently than every two weeks to maintain a healthy sward and allow flowering plants to develop. During the period May to July, mowing will be temporarily paused for 4–8 weeks to allow flowers to bloom, set seed, and support pollinators. After this flowering period, cutting will resume at the specified height. Heavy quantities of arisings will be collected and removed from the Site to prevent nutrient enrichment and maintain a species-rich sward. Small patches of bare ground may be allowed, providing important opportunities for solitary invertebrates. Should additional management be required to control undesirable vegetation, this will be undertaken manually or mechanically. Herbicide use (e.g., glyphosate) will only be applied as a last resort, and only where necessary to maintain the desired composition of the flowering lawn. **Pond Edge Mixture (EP1)**

Action	Timing	Prescriptions
		The pond edge mixture within the attenuation basin will be subject to minimal management, and will be fenced off from public access. Litter and debris will be removed at regular intervals, minimum once per month. To achieve and maintain good condition, the pond edge grassland will be managed through a rotational mowing regime carried out in two halves. Each half of the area will be cut in alternate years, ensuring structural diversity and allowing plant species to complete their flowering and seeding cycles. Cutting will take place in August/September, with an additional cut in April if necessary, to a height of approximately 50 mm. This will promote a varied sward structure, with at least 20% of vegetation under 7 cm and 20% over 7 cm, creating microclimates for invertebrates, birds, and small mammals. Following each cut, arisings will be left in situ for around five days to allow seed dispersal and invertebrate escape before being removed from Site to prevent nutrient enrichment. This two-part rotational mowing regime will sustain sward diversity, encourage at least 10 vascular plant species per m², and support the habitat's progression towards and maintenance of Good condition under the Biodiversity Metric.
Prevention of bracken	Annually – Y2 – Y30	Check grassland for presence of bracken. If present, treat using a bracken specific herbicide such as Asulox. The active ingredient, asulam, is translocated through the plant providing effective control of bracken.
INNS and undesirable species to be removed	Annually – Y2 – Y30 June to August	Remove species indicative of suboptimal condition such as creeping thistle, spear thistle, curled dock (*Rumex crispus*), broad-leaved dock, common nettle, creeping buttercup (*Ranunculus repens*), greater plantain, white clover (*Trifolium repens*) and cow parsley. These can be hand pulled or dug out or by use of a suitable spot herbicide applied by a competent professional in accordance with all relevant legislation and guidance, where pernicious or invasive weeds occur.
Monitoring and maintenance	Annually Y1-Y30	Grasslands would be monitored by an ecologist to assess the success of establishment. Areas will be re-sown following implementation of any other remedial works, as necessary. Removal of litter and debris at regular intervals and prior to mowing.

Table 2-7: Naturescape N14 Flowering Lawn Mixture Composition

%	Species	Common Name
20%	**Wildflowers**	
0.80	*Achillea millefolium*	Yarrow
0.80	*Anthyllis vulneraria*	Kidney vetch
2.40	*Galium verum*	Lady's bedstraw
0.60	*Hypochaeris radicata*	Common cat's-ear
0.80	*Leontodon hispidus*	Rough hawkbit
1.60	*Leucanthemum vulgare*	Oxeye daisy
2.00	*Lotus corniculatus*	Bird's-foot trefoil
1.60	*Plantago lanceolata*	Ribwort plantain
1.40	*Primula veris*	Cowslip
2.40	*Prunella vulgaris*	Selfheal
2.40	*Ranunculus acris*	Meadow buttercup
2.40	*Rumex acetosa*	Common sorrel
0.80	*Trifolium pratense*	Red clover
80%	**Grasses**	
4.00	*Alopecurus pratensis*	Common bent

%	Species	Common Name
12.00	*Cynosurus cristatus*	Crested dog's-tail
16.00	*Festuca trachyphylla*	Hard fescue
16.00	*Festuca rubra ssp litoralis*	Slender-creeping red fescue
16.00	*Festuca rubra ssp rubra*	Strong-creeping red fescue
16.00	*Poa pratensis*	Smooth-stalked meadow-grass

Table 2-8: Emorsgate EP1 Pond edge species list (GH-T03)

%	Species	Common name
20%	**Wildflowers**	
1.00	*Angelica sylvestris*	Wild angelica
1.00	*Carex divulsa ssp divulsa*	Grey sedge
2.40	*Centaurea nigra*	Common knapweed
0.80	*Cruciata nigra*	Crosswort
0.60	*Dipsacus fullonum*	Wild teasel
0.10	*Eupatorium cannabinum*	Hemp agrimony
1.70	*Filipendula ulmaria*	Meadowsweet
1.00	*Galium album*	Hedge bedstraw
0.60	*Geum rivale*	Water avens
0.20	*Geranium pyrenaicum*	Hedgerow crane's-bill
4.00	*Iris pseudacorus*	Yellow iris

%	Species	Common name
0.80	*Lathyrus pratensis*	Meadow vetchling
0.50	*Lythrum salicaria*	Purple loosestrife
0.20	*Lycopus europeaus*	Gypsywort
0.20	*Oenanthe pimpinelloides*	Corky-fruited water-dropwort
0.60	*Plantago lanceolata*	Ribwort plantain
0.20	*Prunella vulgaris*	Selfheal
1.00	*Ranunculus acris*	Meadow buttercup
2.80	*Silene dioica*	Red campion
0.70	*Silene flos-cuculi*	Ragged robin
80%	**Grasses**	
4.00	*Agrostis capillaris*	Common bent
4.00	*Anthoxanthum odoratum*	Sweet vernal-grass
1.60	*Carex divulsa subsp. divulsa*	Grey sedge
34.40	*Cynosurus cristatus*	Crested dogstail
1.60	*Deschampsia cespitosa*	Tufted hairgrass
20.00	*Festuca rubra*	Red fescue
4.00	*Hordeum secalinum*	Meadow barley
8.00	*Poa trivialis*	Rough-stalked meadow-grass
2.40	*Schedonorus arundinaceus*	Tall fescue

Figure 2-2: What Does Success Look Like? (GH-F01)

Table 2-9: Other Supporting Information

Supporting Information (GH-B02)
It is recommended that the other neutral grassland habitat sown within POS areas adjacent to the attenuation basin and on the northern boundary is a suitable mix, such as Naturescape N14 Flowering Lawn Mixture or similar. This mix comprises 20% native wildflowers and 80% slow growing grasses. **N14 Flowering Lawn Mixture - Naturescape**

It is recommended that the attenuation basin is sown with a suitable mix, such as Emorsgate EP1 Pond Edge Mixture or similar. This mix comprises 20% native wildflowers and 80% slow growing grasses.

EP1 Pond Edge Mixture - Emorsgate Seeds

2.5.2 Native hedgerow

Table 2-10: Creation, Enhancement and Management Summary (HD-T01)

Target Hedgerow Type: Native Hedgerow, and Species Rich Native Hedgerow						
Condition Assessment Criteria		**Targeted?**	**Relevant Features**	**Creation Approach**	**Enhancement Approach**	**Management Approach**
A1	Height >1.5 m average along length.	Yes	LPM1-3 LPM6, LPM7. LPM4, LPM5, LPM8-11	Allow hedges to grow to above 1.5 m in height.	N/A	Cutting regime. Allow hedges to grow to above 1.5 m in height.
A2	Width >1.5 m average along length.	No	LPM1-3 LPM6, LPM7	N/A	N/A	N/A
		Yes	LPM4, LPM5, LPM8-11	N/A	N/A	Cutting regime. Allow hedges to grow to a width of at least 1.5 m.
B1	Gap – hedge base Gap between ground and base of canopy <0.5 m for >90% of length.	Yes	LPM1-3 LPM6, LPM7. LPM4, LPM5, LPM8-11	Prevent hedge from getting too outgrown creating gaps at the base.	N/A	Management regime. Prevent hedge from getting too outgrown creating gaps at the base.

Target Hedgerow Type: Native Hedgerow, and Species Rich Native Hedgerow						
Condition Assessment Criteria		**Targeted?**	**Relevant Features**	**Creation Approach**	**Enhancement Approach**	**Management Approach**
B2	Gap – hedgerow canopy continuity. Gaps make up <10% of total length; and no canopy gaps >5 m.	No	LPM1-3 LPM6, LPM7	N/A	N/A	N/A
		Yes	LPM4, LPM5, LPM8-11	Replant dead plants and allow existing plants to fill any gaps.	N/A	Management regime. Replant dead plants and allow existing plants to fill any gaps.
C1	Undisturbed ground and perennial vegetation >1 m width of undisturbed ground with perennial herbaceous vegetation for >90% of length: • measured from outer edge of hedgerow, and • is present on one side of the hedge (at least)	No	N/A	N/A	N/A	N/A
C2	Nutrient-enriched perennial vegetation Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground.	Yes	LPM1-3 LPM6, LPM7	High nutrient indicator species monitored and appropriate land treatment investigative work completed if they persist.	N/A	High nutrient indicator species monitored and appropriate land treatment investigative work completed if they persist.
		No	LPM4, LPM5, LPM8-11	N/A	N/A	N/A
D1	Invasive and neophyte species >90% of the hedgerow and undisturbed ground is free of invasive non-native plant	Yes	LPM1-3 LPM6, LPM7.	INNS and undesirable species to be removed.	N/A	INNS and undesirable species to be removed.

Target Hedgerow Type: Native Hedgerow, and Species Rich Native Hedgerow						
Condition Assessment Criteria		**Targeted?**	**Relevant Features**	**Creation Approach**	**Enhancement Approach**	**Management Approach**
	species (including those listed on Schedule 9 of WCA) and recently introduced species.		LPM4, LPM5, LPM8-11			
D2	Current damage >90% of the hedgerow or undisturbed ground is free of damage caused by human activities.	Yes	LPM1-3 LPM6, LPM7	Reinforcement planting of native species where damage is identified.	N/A	Cutting regime.
		No	LPM4, LPM5, LPM8-11	N/A	N/A	N/A
E1	Tree class (applicable to hedgerows with trees only) There is more than one age-class (or morphology) of tree present (for example: young, mature, veteran and or ancient), and there is on average at least one mature, ancient or veteran tree present per 20 – 50m of hedgerow.	No	N/A	N/A	N/A	N/A
E2	Tree health (applicable to hedgerows with trees only) At least 95% of hedgerow trees are in a healthy condition (excluding veteran features valuable for wildlife). There is little or no evidence of an adverse impact on tree health by damage from livestock or wild animals, pests or diseases, or human activity.	No	N/A	N/A	N/A	N/A

Table 2-11: Creation, Enhancement and Management Methods (HD-T02)

Action	Timing	Prescriptions
Planting	Y0 November to March	All plants will be planted in the first available planting season (November – March) where possible, in accordance with the construction programme. Plants will be sourced as locally as possible, and all effort will be made to source stock of native genetic origin. All plant handling and planting operations will comply with relevant clauses of CPSE 'Handling and Establishing of Landscape Plants' (obtainable from the Horticultural Trades Association). All proposed hedgerow plants (transplants) will be individually protected by biodegradable spiral shelters. The native hedgerows will comprise of a double staggered row. All species to be planted randomly throughout the rows in groups of three or five, ensuring at least four woody species are present in each 30m stretch, to meet the criteria for species rich native hedgerows. Native planting groups will be planted as transplant sized shrubs, 60-80 cm high from 'day 1' implementation. Native hedgerow to be planted through 800 g of flax fibre mulch roll.
Watering	Y0 – Y2 November to March	Water all recently planted hedgerows as necessary to ensure establishment for the first three years. Sufficient water will be applied to thoroughly wet the top 150 mm of soil around the tree roots. This should be sufficient to ensure they resist any drought conditions but may need to be extended subject to climatic conditions over the initial three-year period.
Cutting regime	Jan/Feb Y5 - 30,	At the appropriate season for the species, pruning to be carried out to remove all damaged, diseased, or dead wood. To be commenced from Y5. The hedgerows will be managed to promote the structural diversity and the fruiting of flowers and berries. Hedgerows will be trimmed annually January – February using a flail trimmer, to allow fruit and berries to persist and provide foraging opportunities to wildlife. They will be maintained at a minimum height of 1.5 m. Trimming in winter will also avoid disturbing nesting birds, which potentially use the Site. If an additional cut is required where the hedgerow overhangs footpaths, the cut would be carried out in June.

Action	Timing	Prescriptions
Pest and disease control	As required	To be carried out if necessary and in accordance with best practice.
INNS, undesirable species and litter to be removed	February; April; May; July; September Annually Y1-Y30	Hand weed a minimum of four times per year. Apply a herbicide to kill re-growth as a last resort when required. Remove litter from the vicinity of hedgerows annually.
Fertiliser	Annually - April	Applications of fertiliser to be carried out early in the growing season.

Table 2-12: Native Hedgerow Species List (HD-T03)

Hedgerow Species	Quantity	Percentage (%)
Guelder-rose – *Viburnum opulus*	92	5
Goat willow – *Salix caprea*	175	10
Blackthorn – *Prunus spinosa*	344	20
Holly – *Ilex aquifolium*	175	10
Hawthorn – *Crataegus monogyna*	512	30
Hazel – *Corylus avellana*	344	20
Field maple – *Acer campestre*	92	5

Figure 2-3: What Does Success Look Like? (HD-F01)

2.5.3 Individual Trees

Table 2-13: Creation, Enhancement and Management Summary (HD-T01)

Target Habitat Type: Individual Urban Trees				
Condition Assessment Criteria		**Targeted?**	**Creation Approach**	**Management Approach**
A	Tree is a native species (or at least 70% of the block).	Yes	Planting of native species as specified in Table 2-15 (86.3% of total number will be native species).	N/A
B	Continuous tree canopy. Gaps in canopy cover <10% of total area & no individual gaps >5 m wide (Individual trees automatically pass this criterion).	Yes	These will be individual trees and as such they	N/A

Target Habitat Type: Individual Urban Trees				
Condition Assessment Criteria		**Targeted?**	**Creation Approach**	**Management Approach**
			automatically pass this criterion.	
C	The tree is mature (or at least 50% of the block are mature).	No	N/A	N/A
D	Little or no evidence of adverse impact on tree health from human activities. No current regular pruning regime so trees retain >75% of expected canopy for their age range and height.	Yes	N/A	The individual trees would not require regular management, except for monitoring their condition and replacing failed planting if necessary.
E	Natural ecological niches for vertebrates and invertebrates are present, such as deadwood, cavities, ivy or loose bark.	No	N/A	N/A
F	More than 20% of the tree canopy is oversailing vegetation beneath.	Yes	Trees shall be planted within grassland areas.	N/A

Table 2-14: Creation, Enhancement and Management Methods (HD-T02)

Action	Timing	Prescriptions
Planting	Y0 November to March	All trees will be planted in the first available planting season (November – March) where possible, in accordance with the construction programme. Plants will be sourced as locally as possible, and all effort will be made to source stock of native genetic origin. All plant handling and planting operations will comply with relevant clauses of CPSE 'Handling and Establishing of Landscape Plants' (obtainable from the Horticultural Trades Association). All newly planted trees will be maintained weed-free within a one-metre diameter circle, topped up with mulch, and spot-treated as necessary. Trees within planted beds will be maintained as part of the

Action	Timing	Prescriptions
		general area maintenance. Any dead, missing, or poorly performing trees during the first growing season will be replaced with stock matching the original specification. Trees will be watered weekly during periods of four or more weeks without significant rainfall (less than 5mm) from April to September, applying 10 litres for seedlings/whips and 20 litres for standard trees to thoroughly wet the top 150mm of soil. Stakes and ties will be checked every three months and adjusted or replaced as needed. Soil around roots will be firmed to ensure trees are stable and upright. Formative pruning will be carried out to remove dead, diseased, or damaged shoots and encourage a balanced structure for future growth.
Watering	Y0 – Y2 April to September	All trees will receive a minimum of 10 litres of watering per week (April – September) for the first three years. Sufficient water will be applied to thoroughly wet the top 150 mm of soil around the tree roots. This should be sufficient to ensure they resist any drought conditions but may need to be extended subject to climatic conditions over the initial three-year period.
Pest and disease control	As required	To be carried out if necessary and in accordance with best practice.
Fertiliser	Annually - April	Applications of fertiliser to be carried out early in the growing season, at a rate of 30 litres per tree.
Replacing Failed Planting	Y1 – Y30	Failed individual trees would be replaced once annually in planting season

Table 2-15: Individual Tree Species List (HD-T03)

Tree Species	Quantity[15]	Girth (cm)	Height (cm)
63 native individual trees and 10 non-native individual trees			
Small-leaved lime - *Tilia cordata*	7	12-14	350-400
Rowan - *Sorbus aucuparia*	4	10-12	300-350
Silver birch - *Betula pendula*	11	10-12	300-350
Hornbeam - *Carpinus betulus*	4	12-14	350-425
Common hawthorn – *Crataegus monogyna*	8	10-12	300-350
Sweet cherry - *Prunus avium*	12	10-12	300-350
English oak - *Quercus robur*	5	12-14	350-425
European beech - *Fagus sylvatica*	6	12-14	350-425
Bird cherry - *Prunus padus*	6	10-12	300-350
Field maple - *Acer campestre*	10	12-14	350-425
Total	**73**		

[15] A total of 110 trees will be planted across the Site, however only 73 trees within the public realm have been included within this table.

Figure 2-4: What Does Success Look Like? (HD-F01)

2.5.4 Mixed Scrub

Table 2-16: Creation, Enhancement and Management Summary – Mixed Scrub (GH-T01)

Target Habitat: Other Neutral Grassland					
Condition Assessment Criteria		**Targeted**	**Relevant Parcels**	**Creation Approach**	**Management Approach**
A	The parcel represents a good example of its habitat type - the appearance and composition of the vegetation closely matches its UKHab description (where in its natural range). At least 80% of scrub is native, There are at least three native woody species, No single species comprises more than 75% of the cover (except hazel *Corylus avellana*, common juniper *Juniperus communis*, sea buckthorn *Hippophae rhamnoides* (only in its restricted native range), or box *Buxus sempervirens*, which can be up to 100% cover).	Yes	PM212, PM229, PM228	The mixed scrub habitat will be established using a native shrub mix planted at a density of 0.5/m². The mix comprises a range of native woody species to ensure structural diversity and a species-rich composition typical of moderate-to-high-quality UK mixed scrub. Key species and target cover include: hazel (*Corylus avellana*, 30%), blackthorn (*Prunus spinosa*, 20%), hawthorn (*Crataegus monogyna*, 20%), guelder rose (*Viburnum opulus*, 10%), holly (*Ilex aquifolium*, 10%), and goat willow (*Salix caprea*, 10%). Planting will be arranged to create a varied structure with no single species dominating more than 75% of cover, aligning with the UKHab definition for high-quality mixed scrub.	Post-establishment, the scrub will be subject to minimal management, focused on supporting natural growth, structural diversity, and species composition. Key management measures include: Watering and replacement of failed plants during the establishment phase. Periodic monitoring to ensure no single species exceeds 75% cover and that at least three native woody species remain dominant. Height control, where necessary, to maintain the scrub at an appropriate range for wildlife and to prevent encroachment on adjacent habitats.
B	Seedlings, saplings, young shrubs and mature (or ancient or veteran) shrubs are all present.	No	PM212, PM229, PM228	N/A	N/A

Target Habitat: Other Neutral Grassland					
C	There is an absence of invasive non-native plant species[4] (as listed on Schedule 9 of WCA) and species indicative of suboptimal condition make up less than 5% of ground cover.	Yes	PM212, PM229, PM228	The mixed scrub will be established using a native shrub mix, ensuring high-quality composition with at least three native woody species and no single species dominating more than 75% cover. Planting will be arranged to minimise suboptimal species, and INNS will be excluded.	Post-establishment management will be minimal, limited to watering, replacement of failed plants, and occasional height control. The scrub will be monitored to maintain native species diversity, prevent dominance by any single species, and ensure invasive or suboptimal species remain absent or below 5% cover.
D	The scrub has a well-developed edge with scattered scrub and tall grassland and or forbs present between the scrub and adjacent habitat.	Yes	PM212, PM229, PM228	The mixed scrub will be planted to include a well-developed edge that transitions into surrounding habitats. This edge will incorporate scattered scrub plants interspersed with tall grasses and forbs, creating a gradual structural gradient between the core scrub and adjacent habitats.	Post-establishment management will focus on maintaining the structural complexity of the scrub edge. This will include: Allowing natural growth and regeneration of native scrub species; Retaining tall grasses and forbs to provide shelter and foraging resources; Periodic monitoring to prevent encroachment into adjacent habitats; Removing invasive or undesirable species if they appear along the edge.
E	There are clearings, glades or rides present within the scrub, providing sheltered edges.	No	PM212, PM229, PM228	N/A	N/A

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Table 2-17: Creation, Enhancement and Management Methods (HD-T02)

Action	Timing	Prescriptions
Planting	Y0 November to March	All shrub plants will be planted in the first available planting season (November – March) where possible, in accordance with the construction programme. Plants will be sourced as locally as possible. All plant handling and planting operations will comply with relevant clauses of CPSE 'Handling and Establishing of Landscape Plants' (obtainable from the Horticultural Trades Association).
Watering	Y0 – Y2	Water all recently planted shrubs as necessary to ensure establishment for the first three years. This should be done weekly in April – September during dry periods.
Pruning regime	Y1	Hard prune in in March – April (where species flowers on current year's wood) Remove flower wood after flowering (where species flowers on last year's wood) Clip or trim to maintain shape, removing arisings from the Site.
Pruning regime	Y2 – Y30 As Necessary October to February	Prune the shrubs as much as necessary to achieve their desired features between October to February, outside of the bird nesting season, following horticultural practices and to prevent them overhanging footpaths or blocking light to windows. Arisings to be removed from the Site.
Pest and disease control	As required	To be carried out if necessary and in accordance with best practice.
INNS and undesirable species to be removed	February; April; May; July; September Annually Y1-Y30	Hand weed a minimum of four times per year. Apply a herbicide to kill re-growth as a last resort when required.
Fertiliser	Y2 – Y4 - April	Applications of fertilizer to be carried out early in the growing season.
Replacing Failed Planting	Y1 – Y30	Replace failed planting if necessary.

Table 2-18: Native Shrub Mix Species List (HD-T03)

Species	Quantity	Percentage
Guelder rose – *Viburnum opulus*	18	10%
Goat willow – *Salix caprea*	18	10%
Blackthorn – *Prunus spinosa*	35	20%
Holly – *Ilex aquifolium*	18	10%
Hawthorn – *Crataegus monogyna*	35	20%
Hazel – *Corylus avellana*	51	30%

Figure 2-5: What Does Success Look Like? (HD-F01)

3.0 Habitat Creation and Management – Risk Register and Remedial Measures PM-T02

A Site-wide risk register associated with creating, enhancing and, or managing each habitat type.

Table 3-1: Risk Register and Remedial Measures

Risk Identification Date	Habitat Type	Risk Factor	Trigger for Action	Remedial Measure
Y5	Other neutral grassland	Species diversity not created	4-5 species (or less) per 1 m^2 in Year 5.	Plug plant species within grassland mix and over-sow additional yellow rattle seeds.
Y10	Other neutral grassland	N14 - Species diversity not created.	<8 species per 1 m^2 in Y10.	Consider scarifying existing grassland and over-sowing with wildflower only seed mix, with additional yellow rattle. In areas where scarifying is not feasible, plug plant wildflowers and yellow rattle. Select species suitable for local conditions e.g. shade.
		EP1 - Species diversity not created.	<10 species per 1 m^2 in Y10.	
Y5 and ongoing	Other neutral grassland	Grass does not establish well or dies due to physical damage or extreme weather events (drought or flooding).	If >10% of the grassland is found to be dead or significantly damaged at the 5-year monitoring check.	These areas of bare ground will be reseeded with an appropriate amenity grassland mix and temporarily fenced off from public while establishing.
Y5 and ongoing	Native hedgerow	Management regime unsuccessful in creating desired conditions (height, width, gaps at base)	Hedge below 1.5 m in height after year five, hedgerow width less than 1.5 m, gap too large at base (above 0.5 m).	Re-assess and amend management regime and implement for five years, then reassess condition of hedgerow.
Y2, Y3, Y5, Y10	Native hedgerow	Newly planted hedgerow failing to establish.	20% of targeted number of newly planted hedgerow plants found to be dead during monitoring between Y2-10.	Undertake a second round of planting, replacing failed specimens on a like-for-like basis.

Risk Identification Date	Habitat Type	Risk Factor	Trigger for Action	Remedial Measure
Ongoing	Native hedgerow	Damage from human activities evident.	Damage of human actives present across >10% of the hedgerow length identified during any of the monitoring visits in Years 1-5, 10, 15, 20, 25, 30.	Remove damage causing factor (such as litter, fly tipping) and replace any damaged or dead hedgerow plants.
Y2, Y3, Y5, Y10	Individual trees	Newly planted trees failing to establish.	10% of targeted number of newly planted trees found to be dead during monitoring between Y2-10.	Undertake a second round of planting, replacing failed specimens on a like-for-like basis.
Y2, Y3, Y5, Y10	Mixed scrub	Newly planted shrubs failing to establish.	10% of targeted number of newly planted shrubs found to be dead during monitoring between Y2-10.	Undertake a second round of planting, replacing failed specimens on a like-for-like basis.

4.0 Monitoring Schedule

To deliver BNG, a robust strategy is critical to monitor successes and challenges. Routine monitoring informs progress and facilitates the required management plan updates at set intervals.

4.1 Monitoring Strategy

Table 4-1: Monitoring Strategy

Provide details of the monitoring strategy to encourage successful implementation of the management plan (MS-B01)
All on-Site habitat areas had a UKHab survey with condition assessment undertaken to inform the baseline. In order to collect comparable data, the same survey methods will be deployed during the monitoring activities. The following methods are proposed: **UKHab Survey** A UKHab survey will be undertaken by a suitably qualified and experienced ecologist. The land within the Site boundary will be surveyed. Habitats will be mapped following the UKHab methodology[16]. A botanical species list will be recorded for all habitat types. Searches will also made for INNS listed on Schedule 9 of the WCA, such as rockspray cotoneaster, Japanese knotweed (*Reynoutria japonica*) and Himalayan balsam (*Impatiens glandulifera*). **Condition Assessment** While undertaking the habitat survey, the condition of each habitat parcel will be assessed, using the criteria produced by Natural England[17] for comparison within the baseline BNG assessment. The condition assessment will include, for example, collecting information on the physical characteristics of the habitat, the presence of positive indicator species and the presence of invasive non-native species. Each habitat parcel, that requires it, will be assigned condition score of 'poor', 'moderate' or 'good'. Photographs will be taken of each habitat type.

4.2 Monitoring Methods and Intervals MS-T01

Provide details of the methods you will use to adequately monitor the progress towards the targets stated in the management plan and as agreed with the Local Planning Authority.

[16] The UK Habitat Classification Working Group. (May 2023). The UK Habitat Classification User Manual Version 2.0.

[17] Defra. (2025). The Statutory Biodiversity Metric -Technical Annex 1: Condition Assessment Sheets and Methodology

Table 4-2: Monitoring Methods

Habitat Type	Monitoring Methods	Monitoring Interval and Timing
Other neutral grassland	Undertake quadrat sampling to identify the habitat type that is establishing and the number of species per m^2. Estimate percentage of bare ground, bramble and bracken cover. Collect a botanical species list across grassland to check against target species list. Check for presence of INNS.	Years 1, 2, 3, 4, 5, 10, 15, 20, 25 and 30. Surveys to be completed between May and August.
Hedgerow	To be undertaken on all planted and retained hedgerows. Undertake a condition assessment for hedgerows. Record failed planting. Collect a botanical species list. Check for presence of INNS.	Years 1, 2, 3, 4, 5, 10, 15, 20, 25 and 30. Surveys to be completed between May and August.
Individual trees	To be undertaken on all 73 individual planted trees within public realm. Undertake a condition assessment for individual trees. Record failed planting.	Years 1, 2, 3, 4, 5, 10, 15, 20, 25 and 30. Surveys to be completed between May and August.
Mixed scrub	To be undertaken on all introduced shrub within the public realm. Record failed planting.	Years 1, 2, 3, 4, 5, 10, 15, 20, 25 and 30. Surveys to be completed between May and August.

4.3 Monitoring Reports

Following completion of habitat creation and initial enhancement works, prepare for your monitoring report for the Local Planning Authority or Responsible Body. You should monitor each habitat type comprising the BNG project. Provide sufficient detail for the reviewing authority to assess the progress. The 'Monitoring Report Template' can help you do this. The requirements and regularity with which the monitoring reports are required are at the discretion of the LPA or Responsible Body. Prepare the monitoring requirements below.

4.4 Monitoring Report Schedule MS-T02

Details of the person or organisation that will be responsible for submitting the monitoring reports are provided below. The responsible organisation for receiving and reviewing the reports is also provided.

Organisation Responsible for Submitting the Monitoring Reports	Organisation Receiving and Responsible for Reviewing Reports
Avant Homes or their appointed Ecological Consultant completing the monitoring report.	Barnsley Metropolitan Borough Council

Details of when the monitoring surveys and reports will be undertaken and submitted are provided below. *Actual dates to be confirmed following discharge of planning conditions.*

Project Year	Month Report to be Submitted	Month Management Plan to be reviewed	Comments
Y1 (2029)	December	January - March	All monitoring surveys
Y2 (2030)	December	January - March	All monitoring surveys
Y3 (2031)	December	January - March	All monitoring surveys
Y4 (2032)	December	January - March	All monitoring surveys
Y5 (2033)	December	January - March	All monitoring surveys
Y10 (2038)	December	January - March	All monitoring surveys
Y15 (2043)	December	January - March	All monitoring surveys
Y20 (2048)	December	January - March	All monitoring surveys
Y25 (2053)	December	January - March	All monitoring surveys
Y30 (2058)	December	January - March	All monitoring surveys

4.5 Adaptive Management

Summary of Adaptive Management Approaches (MS-B02)

The proposed habitat creation within the Site will be monitored as outlined in MS-T01 to inform the requirement of any 'adaptive management' requirement. If habitats are not meeting the criteria for the habitat types proposed within the BNG assessment (for example – habitat created is modified grassland rather than other neutral grassland), or if habitats created are not meeting the specified condition (for example poor rather than moderate) then the proposed management of these habitats will be amended and this HMMP will be updated.

This will be an iterative process in which management actions are followed by targeted monitoring outcomes. These, in turn, inform the ongoing management.

The monitoring will also pick up any unexpected, external influences (for example dealing with a new plant disease, an invasive species that is thriving due to climate change, or changes to Site access due to Site flooding etc).

During the monitoring surveys and reporting process, information on the day-to-day management for that period (In Years 1, 2, 3, 4, 5, 10, 15, 20, 35 and 30 as outlined in MS-T01) from Avant Homes (persons responsible for the land management) will be obtained to ensure management prescriptions as outlined within the document are being followed and divergence from the prescription's methods from extenuating circumstances. This information will be captured in the subsequent monitoring reports.

The regular robust monitoring set out in this HMMP and production of monitoring reports which will be supplied to Barnsley Metropolitan Borough Council, should identify issues early on. This will enable conscious decisions in relation to the changes in implementation of management strategies on the habitat types.

Appendix A Additional Site Photographs

On-site Habitat Management and Monitoring Plan

Avant Homes Limited

SLR Project No.: 424.066691.00002

1 December 2025

Additional Site Photographs PB-03

Plate A-1 – View looking east at the first metal barn. Combination of metal and wooded frame, clad with corrugated metal sheeting with an asbestos roof.

Plate A-2 – South view of another barn, timber frame, with breeze block base curtain walls, corrugated metal to upper walls and roof.

Additional Site Photographs PB-03

Plate A-3 – Two corrugated metal silos present at the southwestern aspect of the Site. A collection of two corrugated metal silos. One silo removed/ no longer present.

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