

Habitat Management and Monitoring Plan

Site Name:	Land to the East of Longwater Road, Finchampstead, Wokingham
Date:	19/05/2026
Version:	V1



Contents

1. Project Background..... 3

Summary of Management Plan 3

Site Boundary Plan PB-F01..... 4

Site Context Plan PB-F02..... 5

Roles and Responsibilities 6

Land Use Summary..... 7

Site Context Photos PB-F03..... 7

Land Tenure and Public Access 8

Land Tenure and Public Access Plan (EI-F01)..... 8

Site Baseline, Environmental Information and Associated Impacts Checklist PB-T01 9

Baseline habitat plan 10

Baseline Habitat Descriptions and Condition..... 11

2. Planned Management Activities 15

Principles Informed by Design Stage 16

Habitat and Condition Targets PM-T01 18

Creation, Enhancement and Management Summary (GL-T01) 20

Creation, Enhancement and Management Detailed Methods (GL-T02)..... 22

What Does Success Look Like? (GL-F01) 24

Creation, Enhancement and Management Summary (GH-T01)..... 24

Creation, Enhancement and Management Detailed Methods (GH-T02) 25

What Does Success Look Like? (GH-F01)..... 27

Creation, Enhancement and Management Summary (GH-T01)..... 27

Creation, Enhancement and Management Detailed Methods (GH-T02) 29

What Does Success Look Like? (GH-F01)..... 31

Creation, Enhancement and Management Summary (SC-T01) 32

Creation, Enhancement and Management Detailed Methods (SC-T02) 33

Scrub Species Lists (SC-T03) 34

What Does Success Look Like? (SC-F01) 34

Creation, Enhancement and Management Summary (UT-T01) 35

Creation, Enhancement and Management Detailed Methods (UT-T02)..... 36

Individual Trees Species Lists (UT-T03)..... 36

What Does Success Look Like? (UT-F01) 37

Creation, Enhancement and Management Summary (HD-T01)..... 38

Creation, Enhancement and Management Methods (HD-T02) 40

Hedgerow Species Lists (HD-T03) 41

What Does Success Look Like? (HD-F01)..... 42

Habitat Creation and Management – Risk Register and Remedial Measures PM-T02 43

3. Monitoring Schedule 44

Monitoring Methods and Intervals MS-T01 44

Monitoring Reports 45

Adaptive Management 45

Version Control

Version	Issue Status	Prepared by / Date	Approved by / Date
V1	Final	Josie Lawrence, BNG consultant May 2026	Martin Smith, head of Biodiversity and Green Infrastructure May 2026

Document Details

Authorship Details

This report is produced by Ethos Environmental Planning. There is no specific copyright or licencing information related to this HMMP.

This HMMP has been created to discharge condition 16 of the approved planning permission, which is listed as follows:

16. Habitat Management and Monitoring Plan (HMMP) - A Habitat Management and Monitoring Plan (HMMP) shall be submitted to and be approved in writing by the local planning authority prior to occupation of the development. The content of the HMMP shall include the following:

a) Description and evaluation of features to be managed.

b) Ecological trends and constraints on site that might influence management.

c) Aims and objectives of management.

d) Appropriate management options for achieving aims and objectives.

e) Prescriptions for management actions.

f) Preparation of a work schedule (including an annual work plan capable of being rolled forward over a five-year period).

g) Details of the body or organization responsible for implementation of the plan.

h) Ongoing monitoring and reporting.

i) Sensitive management of the aged trees on site.

j) maintenance requirements for the attenuation basin.

k) long term design objectives, management responsibilities, timescales and maintenance schedules for all landscape areas, other than privately owned, domestic gardens.

The HMMP shall also include details of the legal and funding mechanism(s) by which the long-term implementation of the plan will be secured by the developer with the management body(ies) responsible for its delivery. The plan shall also set out (where the results from monitoring show that conservation aims and objectives of the HMMP are not being met) how contingencies and/or remedial action will be identified, agreed and implemented so that the development still delivers the fully functioning biodiversity objectives of the originally approved scheme. The approved plan will be implemented in accordance with the approved details.

Reason: To secure significant on-site biodiversity net gain as per regulations and integrate with measures to protect and enhance relevant habitats and species as appropriate, and to ensure that provision is made to allow satisfactory maintenance of the landscaping hereby approved in accordance. Relevant policy: Core Strategy policies CP7 and TB23, and policy CC03 of the MDD.

1. Project Background

Site Overview PB-B01	
Project type	Mixed on-site and off-site
Development Name and Address	Land East of Longwater Road, Longwater Road, Finchampstead, Wokingham, RG40 3TS
BNG Project Name and Address	N/A
Author Organisation	Ethos Environmental Planning
Landowner	Aster Homes Limited
Land Manager	N/A
Responsible person/organisation for creating or enhancing the habitat	Stonebond Properties (Guildford) Ltd is responsible for habitat creation. Ongoing management and monitoring will be the responsibility of Aster Homes Limited.
Period covered by this management plan	2026-2056
Planning authority	Wokingham Borough Council
Planning reference (if applicable)	241567
BNG register reference (if applicable)	N/A
Central OS grid reference	SU 796 627
Metric revision/title	Biodiversity Metric spreadsheet (report ref: edp4070_r011)
Are any Irreplaceable Habitats present onsite	Yes: ☐ No: ☒

Summary of Management Plan

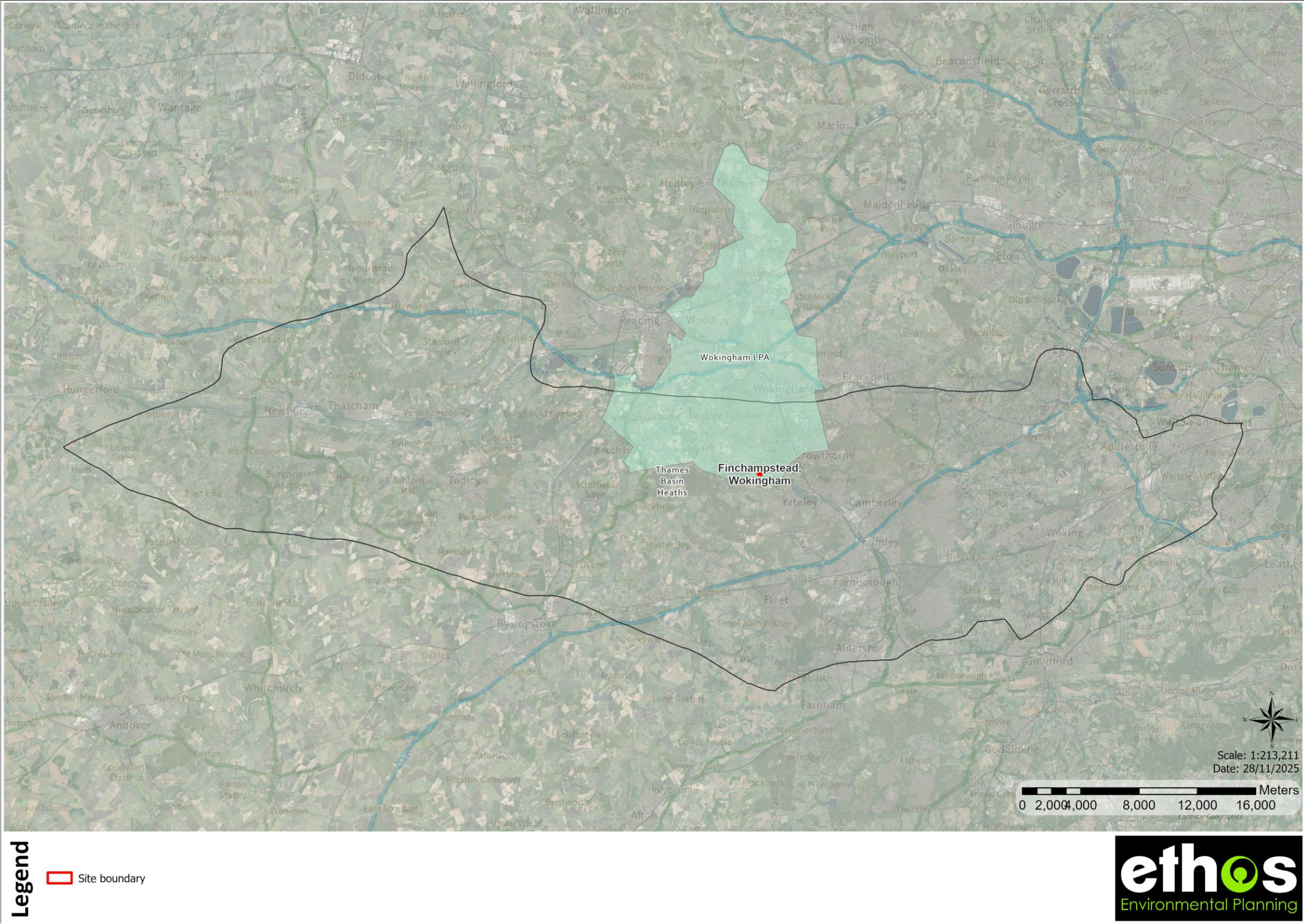
Habitats to be Retained, Created and Enhanced PB-B02
Onsite habitats include an other neutral grassland field with individual trees, areas of bramble scrub, a bare ground PRow in the north, and two hedgerows. Three very large individual trees, the bare ground PRow, the bramble scrub, and the entirety of one hedgerow will be retained by the project. Additional small areas of ONG and some of the other hedgerow will also be retained. There will be no onsite habitat enhancement. The development is for the construction of residential properties and associated infrastructure and landscaping. Therefore, created habitats include; urban including SuDS, a mix of grasslands, mixed scrub, individual tree planting and hedgerows. This HMMP provides information in relation to the creation and management of retained and created onsite habitats only. An offsite ditch is referenced throughout as necessary as the riparian zone of the watercourse falls within the site boundary and therefore it was included in the BNG metric. Some offsite units provided by a registered habitat bank provider have been utilised to deliver a net gain for this project, but these are not referenced within this report. For more information, please refer to the metric and BNG gain plan associated with this project.
Timescales for Actions PB-B03
The development must commence before September 2028 in accordance with the planning permission, and works are expected to start in June 2026. Therefore, the period of this management plan is likely to be 2026 – 2056, provided that habitat creation begins in 2026.
Monitoring Requirements PB-B04
Habitats must be managed in line with this report and the condition of these formally monitored with reports submitted to the LPA in years 2, 5, 15 and 30.
Required Consents and Licences PB-B05
Funding PB-B06
The funding to deliver the HMMP will include implementation costs covered by Stonebond Properties (Guildford) Ltd. Thereafter, management organisation costs will be the legal site owner, Aster Homes Limited.
Legal Agreement PB-B07
The delivery of the HMMP has been secured by a S106.



Legend

Site boundary





Roles and Responsibilities

Ecologist or Other Professional Responsible for HMMP PB-B09

Name or Initials		Martin Smith		
Organisation		Ethos Environmental Planning		
Responsibility	Start Date:	2026	End Date:	2056

Ethos Environmental Planning are responsible for the production of the HMMP for this project. Martin Smith is the head of BNG at Ethos and the project manager in terms of this project. The BNG team of the Ethos Environmental Planning have written this report to fulfil condition 16 of the associated planning permission and utilised habitat data from the approved ecological appraisal and BNG metric completed by EDP.

Statement of Competency

Martin has worked as the principal BNG consultant for Ethos for over a year and has been working with Ethos for seven years. The BNG team specialises in all phases of biodiversity net gain assessments and consistently produces habitat management and monitoring plans across a range of projects including habitat banks, onsite and offsite delivery, residential schemes, and solar farms. Martin has an in depth understanding of BNG and is up to date with the guidance in terms of BNG and habitat management.

Landowner or Land Manager PB-B10

Name or Initials		Aster Homes Limited.		
Organisation		Aster Homes Limited.		
Responsibility	Start Date:	2026	End Date:	2056

It is the responsibility of Stonebond properties to ensure that the habitats on site are created and enhanced in conjunction with the prescriptions laid out within this HMMP.

It is the responsibility of the landowner, Aster Homes Limited, to ensure that the habitats on site are managed and monitored in conjunction with the prescriptions laid out within this HMMP for the duration of the 30-year term.

Statement of Competency

Stonebond properties have delivered sustainable homes since 1975.

Aster Homes Limited has demonstrable experience in management through the delivery of numerous residential developments that incorporate green infrastructure and long-term landscape

stewardship across the UK. The company routinely works with landscape architects, ecological consultants, and contractors, to design, implement, and manage habitats including species-rich grasslands, native planting, hedgerows, and sustainable drainage features, ensuring they are established and maintained in line with approved Habitat Management and Monitoring Plans.

Management Organisation(s) Responsible for Implementing the HMMP PB-B11

Name or Initials		Aster Homes Limited.		
Organisation		Aster Homes Limited.		
Responsibility	Start Date:	2026	End Date:	2056

It is the responsibility of the Management Organisation, Aster Homes Limited, to ensure that this HMMP is fully implemented and creation, management, and monitoring is in conjunction with the prescriptions laid out within this HMMP for the duration of the 30-year term.

Statement of Competency

The aforementioned experience will enable Aster Homes to successfully manage habitats in a way that supports and sustains Biodiversity Net Gain objectives over the long term. All monitoring visits will feed back on appropriate and detailed changes to the management plan.

LPA or Responsible Body for Reviewing HMMP PB-B12

Name or Initials		Wokingham Borough Council		
Organisation		Wokingham Borough Council		
Responsibility	Start Date:	2026	End Date:	2056

The Local Planning Authority Wokingham Borough Council will be involved throughout the project and has the responsibilities of the initial approval of this HMMP and all associated relevant BNG documentation, ensuring correct implementation of this HMMP, and the review and auditing of subsequent HMMP updates, monitoring reports and other relevant documents or changes.

FINCHAMPSTEAD

PAGE | 6

BIODIVERSITY NET GAIN - HABITAT MANAGEMENT AND MONITORING PLAN

Contents

Project Background

Planned Management Activities

Monitoring Schedule

Land Use Summary

Overview of Baseline Site Use PB-B13

The site primarily consists of an other neutral grassland field which is currently managed through regular cutting and removal of the vegetation. For the last several years the field has undergone two hay cuts per summer season. At the time of the site visit the field was observed to have specifically mown footpaths crossing the site, where the sward height is managed at an amenity length.

There is an established PRow in the north of site which constitutes a bare ground habitat due to sustained usage. Bramble scrub is present along the northern boundary adjacent to the PRow.

There are individual trees present on site including 3 mature oak trees within the field and associated with hedgerows. There is a native hedgerow with trees along the western boundary and within the south east corner.

Directly adjacent to site there is a wet ditch which has been included within the BNG assessment as the riparian zone of this watercourse is present on site.

At present, the site falls within the northern extent of the Blackwater Valley BOA, however the loss of less than c.1.9ha of poor-quality grassland habitat has been agreed to not impact the BOA and planning permission has been granted.

Overview of Proposed Site Use PB-B14

The site has been granted permission for the proposed erection of 38no.dwellings (Use Class C3), together with associated outdoor space and landscaping, drainage infrastructure, hard and soft landscaping, parking, access, and associated works.

The existing PRow will be retained and public access will be permitted across the site.

The project is a residential development, and habitats onsite will be used for amenity purposes and are likely to be managed by a management company. Habitat creation will occur in one phase, and this HMMP is a site wide management plan. Alongside this HMMP, Biodiversity Enhancement and Permeability plan and the CEMP, best practise methods will be utilised to create and manage the habitats across site. This will be tracked with ongoing casual monitoring by the management company and reports as detailed in the relevant sections to achieve the BNG targets on the ground.

The proposed site use includes in the design the retention/buffering of valuable habitats including mature trees and hedgerows where possible grassland surrounding the badger sett and within a 5m buffer of the offsite ditch and offsite woodland. Habitat creation consists of residential urban development similar to adjacent areas within the local area, a mix of grasslands in keeping with existing habitat types on site, tree planting, and the inclusion of a sustainable drainage feature to maintain run-off rates with the increased urban coverage and to maintain or improve the quality of surface water discharging into nearby watercourses.

Site Context Photos PB-F03



Land Tenure and Public Access

Relevant Land Tenure Information (EI-B01)

The land is owned by Aster Homes Limited. With the construction of houses, areas of residential development of property lots including developed land; sealed surface houses and vegetative gardens, will become owned by additional parties.

Potential Impact to Scheme (EI-B02)

Land tenure is not predicted to influence the prescriptions contained within this HMMP.

Public Access Information (EI-B03)

There is a public right of way (PRoW) in the form of a bare ground footpath along the northern boundary of site which extends for approx. 200m onsite and 100m offsite to east. This will be retained.

Potential Impact to Scheme (EI-B04)

Public access has been a consideration of habitat suitability and predicted conditions within this HMMP. All retained habitats have been retained in their current condition to reflect the existing condition due to public access and many of the created habitats have been predicted to achieve a maximum of moderate condition due to public access and management for amenity purposes for the public usage. The existing PRoW is not assessed to have an effect on the levels of proposed public access.

Land Tenure and Public Access Plan (EI-F01)



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?	☐	Refer to 'The Environmental Dimension Partnership Ltd (2024) Land to the East of Longwater Road, Finchampstead Ecological Appraisal. Report Reference: edp4070_r009a'.
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?	☐	Refer to 'The Environmental Dimension Partnership Ltd (2024) Land to the East of Longwater Road, Finchampstead Ecological Appraisal. Report Reference: edp4070_r009a'.
Invasive Non-Native Species (INNS)	Are any INNS present onsite that could affect the proposals?	☐	None found on site according to 'The Environmental Dimension Partnership Ltd (2024) Land to the East of Longwater Road, Finchampstead Ecological Appraisal. Report Reference: edp4070_r009a'.
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?	☐	Refer to 'The Environmental Dimension Partnership Ltd (2024) Land to the East of Longwater Road, Finchampstead Ecological Appraisal. Report Reference: edp4070_r009a'.
Baseline Habitats Survey	Is this current and important HMMP information located in a separate document? If so, provide details on where it is located.	☒	Summary included within this HMMP. Refer to 'The Environmental Dimension Partnership Ltd (2024) Land to the East of Longwater Road, Finchampstead Ecological Appraisal. Report Reference: edp4070_r009a', and associated BNG metric.
Public Access	Has public access, or proposals to allow public access, influenced your management prescriptions? If so, how?	☒	Yes, site is bordered to the north by public footpath. See section above.
Climate	Are local climate conditions and, or, climate change likely to impact the target habitat retention, creation or enhancement?	☐	Climate change is unlikely to impact the target habitat retention and creation due to the creation of common habitat types.
Geology and Topography	Any geological or topographical constraints or opportunities?	☐	The site lies flat and is completely atop a typical siliciclastic sedimentary rock found within the local area. This presents no constraints or opportunities for the project scheme.
Agricultural Land Status	Does the site support any land favourable for agricultural management? Could this affect the proposals?	☐	The site does not support any land favourable for agricultural management.
Soils and Substrates	Do soils and substrates present any constraints or opportunities?	☐	The entire site is recorded on soilscales as 'loamy soils with naturally high groundwater' which present no constraints or opportunities for the project scheme.
Contaminated Land	If there is any contaminated land, will this present any constraints?	☐	There is no contaminated land on site.
Hydrology and Drainage	Will the site hydrology present any constraints or opportunities?	☐	The site is adjacent to many ponds and water retaining features meaning directly adjacent land is flood zone 2. Hydrology does not impact the project.
Flood Risk Zones	Is the site within a flood risk zone? Will that present any site management risks?	☐	The site is not within a flood risk zone.
Landscape Character and Designations	Does the landscape character of the site present any constraints or opportunities?	☐	Enhancements on site shall be in keeping with the local character and will focus on the creation of improved condition grassland with additional tree, scrub and hedgerow planting to create a mosaic of habitat types.
Historic Land Use	Does the historic land use present any constraints or opportunities?	☐	The historic land use does not present any constraints or opportunities
Historic Environment and Earth Heritage	Are there any historic environment designations? What are the implications for your plan?	☐	There are no historic environment designations on or adjacent to the site
Other – please specify	Any other details - for example underground services or overhead powerlines, which may impact habitat management.	☐	n/a

Baseline habitat plan



Baseline Habitat Descriptions and Condition

Habitats (BI-T04)

Parcel Refs	Habitat Type and Code	Irreplaceable	Priority	Description and Condition Justification	Condition	Area (ha)
See baseline habitat plan	Other neutral grassland – G3C	No	No	The site is predominantly an ONG field which is managed though hay cuts and contains a series of footpaths. 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 (and relative to Footnote 3 suboptimal species which may be listed in the UKHab description). Pass B. Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for insects, birds and small mammals to live and breed. Pass C. Cover of bare ground between 1% and 5%, including localised areas, for example, rabbit warrens. Fail D. Cover of bracken Pteridium aquilinum is less than 20% and cover of scrub (including bramble Rubus fruticosus agg.) is less than 5%. Pass E. Combined cover of species indicative of sub-optimal condition and physical damage (such as excessive poaching, damage from machinery use or storage, damaging levels of access, or any other damaging management activities) accounts for less than 5% of total area. If any invasive non-native plant species (as listed on Schedule 9 of WCA4) are present, this criterion is automatically failed. Pass F. There are 10 or more vascular plant species per m2 present, including forbs that are characteristic of the habitat type (species referenced in Footnote 2 and 4 cannot contribute towards this count). Fail The grassland onsite passes 4 of 6 criteria and is therefore in poor condition.	Poor	2.195
See baseline habitat plan	Bramble scrub – h3d	No	No	There are areas of bramble scrub along the northern border of site adjacent to the PRow. Bramble scrub is a medium distinctiveness habitat but does not require a condition assessment.	Condition assessment N/A	0.067
See baseline habitat plan	Bare ground - 510	No	No	There is a PRow footpath along the northern boundary of site which constitutes of bare ground which is a low distinctiveness urban habitat type. A. Vegetation structure is varied, providing opportunities for vertebrates and invertebrates to live, eat and breed. A single structural habitat component or vegetation type does not account for more than 80% of the total habitat area. Fail B. The habitat parcel contains different plant species that are beneficial for wildlife, for example flowering species providing nectar sources for a range of invertebrates at different times of year. Fail C. Invasive non-native plant species (listed on Schedule 9 of WCA1) and others which are to the detriment of native wildlife (using professional judgement) cover less than 5% of the total vegetated area. <i>Note - to achieve Good condition, this criterion must be satisfied by a complete absence of invasive non-native species (rather than <5% cover).</i> Pass The habitat passes 1 of 3 criteria and is therefore in a poor condition.	Poor	0.031

7 features <i>See baseline habitat plan</i>	Rural tree - 200	No	No	There are 7 trees on site, with 6 in good condition and one in moderate condition. There are three extra-large sized trees (all in good condition) and four medium trees. Full condition assessment criteria and sizes are provided below. (P = pass. F = fail). Individual trees which pass 3 or 4 criteria attain moderate condition and those which pass 5 or 6 criteria achieve a good condition.	Good & Moderate	0.2946							
				Condition criteria			T1	T2	T5	T21	T23	T24	T25
				Tree size			XL	XL	XL	M	M	M	M
				A. The tree is a native species (or at least 70% within the block are native species).			P	P	P	P	P	P	P
				B. The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).			P	P	P	P	P	P	P
				C. The tree is mature (or more than 50% within the block are mature).			P	P	P	F	F	F	F
				D. There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.			P	P	P	P	P	P	P
				E. Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.			P	P	P	P	P	F	P
				F. More than 20% of the tree canopy area is oversailing vegetation beneath.			P	P	P	P	P	P	P
				Number of criteria passed:			6	6	6	5	5	4	5

Hedgerows (BI-T05)

Feature Refs	Habitat Type and Code	Irreplaceable	Priority	Description and Condition Justification	Condition	Length (km)
2 features <i>See baseline habitat plan</i>	Native hedgerow with trees - 11	No	Yes	The western boundary of the Site along Long Water Road is delineated by a species-poor unmanaged and leggy hawthorn (<i>Crataegus monogyna</i>) dominated hedgerow, it is over 8m tall and 2m wide, with limited ground flora diversity and mature English oak (<i>Quercus robur</i>) trees along its length. The south-eastern boundary hedgerow is gappy, characterised by mature oaks with a hedgerow understorey of silver birch, holly (<i>Ilex aquifolium</i>) and bramble. Both hedgerows are in moderate condition with one failing 3 criteria including one functional group and the other failing 4 criteria including one functional group. Criteria A1: The height of the hedgerow is >1.5 m average along length. - Pass Criteria A2: The width of the hedgerow is >1.5 m average along length. - Pass	Moderate	0.063 & 0.044

				Criteria B1: The gap between ground and base of canopy <0.5 m for >90% of length. - Fail Criteria B2: The gaps in the canopy make up <10% of total length; and No canopy gaps >5 m. - Fail Criteria C1: There is >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 hedgerow (at least). - Pass Criteria C2: Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground. - Fail Criteria D1: >90% of the hedgerow and undisturbed ground is free of invasive non-native plant species (including those listed on Schedule 9 of WCA3) and recently introduced species. - Pass Criteria D2: >90% of the hedgerow or undisturbed ground is free of damage caused by human activities. - Pass Criteria E1: There is more than one age-class (or morphology) of tree present (for example: young, mature, veteran and or ancient8), and there is on average at least one mature, ancient or veteran tree present per 20 - 50m of hedgerow. – one pass (east hedge) and one fail (west hedge) Criteria E2: 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. - Pass		
--	--	--	--	---	--	--

Watercourses (BI-T06)

Feature Refs	Habitat Type and Code	Irreplaceable	Priority	Description and condition justification	Condition	Length (km)
Offsite	Ditch - 50	No	No	Offsite adjacent to the the southern and south-eastern site boundaries is a wet ditch. The channel is ~ 0.5-1m deep and between 1-2m wide with 45° earthen banks. The ditch is heavily shaded, and water was shallow at the time of survey and the ditch is recorded to seasonally dry out. Criterion A: The ditch is of good water quality, with clear water (low turbidity) indicating no obvious signs of pollution. - pass Criterion B: A range of emergent, submerged and floating-leaved plants are present. As a guide >10 species of emergent, floating or submerged plants present in a 20 m ditch length. – Fail Criterion C: There is less than 10% cover of filamentous algae and or duckweed Lemna spp. (these are signs of eutrophication). - pass Criterion D: A fringe of aquatic marginal vegetation is present along more than 75% of the ditch. – Fail Criterion E: Physical damage is evident along less than 5% of the ditch, with examples of damage including: excessive poaching, damage from machinery use or storage, or any other damaging management activities. - pass Criterion F: Sufficient water levels are maintained - as a guide a minimum summer depth of approximately 50 cm in minor ditches and 1 m in main drains. – Fail Criterion G: Less than 10% of the ditch is heavily shaded. – Fail	Poor	0.292

				Criterion H: There is an absence of non-native plant and animal species. - pass The ditch passes 4 of 8 criteria and is therefore in poor condition.		
--	--	--	--	--	--	--

Priority and Irreplaceable Habitats

Summary of Priority and Irreplaceable Habitats (BI-B07)
There are no irreplaceable habitats located within the project boundary. There are no priority habitats on site, with the exception of hedgerows which are considered priority habitats. All baseline habitat and condition assessment data is taken from The Environmental Dimension Partnership Ltd (2024) Report Reference edp4070_r009a.
Potential Constraints and Opportunities for Project (BI-B08)
Hedgerows have been retained where possible by the design. They will be buffered and protected during the construction works. Additional hedgerows are being created by the scheme in a large excess of the minimum required 10% net gain which increases the amount of this important linear habitat which offers a commuting corridor and valuable food sources for a variety of biodiversity.

2. Planned Management Activities

Management Plan Aims and Objectives PM-B01

The main aim of this HMMP is to outline how a sustainable Biodiversity Net Gain will be delivered for the project through adaptive management and robust monitoring of the approved landscape proposals. The main objectives are to:

- Protect Existing Habitat Value - Retain as much existing habitat as possible including existing hedgerows, mature trees, scrub and bare ground, and create habitats which are in keeping with existing habitat types to create similar niches for biodiversity. Habitat creation will also avoid impacts to sensitive areas such as badger sett buffers, riparian zones of the offsite ditch, and PRow margins.
- Deliver High-Quality Habitat Creation - All new habitats (other neutral grassland (wildflower), modified grassland, mixed scrub, hedgerow, SUDS and individual trees) will be created and managed to meet defined condition targets (poor/moderate as appropriate).
- Integrate Biodiversity Into Urban Design – Manage habitats adaptively to ensure an uplift in opportunities for biodiversity alongside public access and amenity usage, informed by both informal and formal monitoring methodology.

The Long-Term Vision of the project is to establish a structurally diverse mosaic of grasslands, scrub, hedgerows, drainage features, and tree habitats that continue delivering biodiversity value long after the 30-year BNG period and animate the immediate local community to provide increase opportunities and appreciation for biodiversity. At the end of the 30 year BNG project term the established habitats should provide ecological networks fully integrated into the developed landscape and be able to continue supporting biodiversity with minimal intervention, supporting resilient wildlife populations and functioning as connected green infrastructure corridors.

SMART Target 1 — Protect and Retain Existing Biodiversity Assets

Specific: Protect all identified important existing habitats on site, including 0.08 km hedgerow, 0.06 ha bramble scrub, 0.03 ha bare ground (PRow), and 0.23 ha of mature trees (three oaks), through protection zones, sensitive working methods and long-term habitat management.

Measurable: 100% of the specified retained areas remain intact and with no net reduction in area or condition at the end of the 30 years.

Achievable: Protection measures including fencing, signage, root protection zones, and restricted access during construction and established management practices ensure retention is realistic and manageable.

Relevant: Preservation of these habitats maintains existing ecological value and forms the foundation of the site's biodiversity network and BNG commitments.

Time-bound: Protection begins at project start (Year 0) and is maintained for the full 30-year management period.

SMART Target 2 — Create High-Quality, Biodiverse New Habitats

Specific: Create new habitats across the site, including wildflower ONG grassland (moderate condition), modified grassland (poor and moderate), mixed scrub, SUDS of moderate condition, 0.29 km of native hedgerow (0.06 km with trees), and 37 new trees (5 urban, 32 rural).

Measurable: Minimum 75% establishment success within each newly created habitat, and all habitats achieving their targeted condition by year 5.

Achievable: Achieved using appropriate soil preparation, native planting, and annual maintenance (watering, establishment care, replacement of failures).

Relevant: These newly created habitats deliver required Biodiversity Net Gain and increase structural and botanical diversity across the site.

Time-bound: Habitats created by Year 2, achieving target condition by Year 5–10, and maintained through Year 30.

SMART Target 3 — Establish a Connected and Resilient Green Infrastructure Network

Specific: Create and maintain functional ecological corridors linking grassland, hedgerow, scrub, SUDS and tree habitats, ensuring connectivity across the site.

Measurable: – No breaks >5 m in hedgerow, scrub or tree corridors and structural diversity maintained across area habitats with a range of grassland sward species composition and height, scrub ages, and tree species.

Achievable: Hedgerow planting, scrub management, grassland regimes and tree planting collectively establish strong ecological linkages.

Relevant: Connectivity supports species movement, ecological resilience and the long-term functioning of green infrastructure.

Time-bound: Connectivity established by Year 10 and maintained through Year 30, contributing to the site’s vision beyond the 30-year BNG period.

Principles Informed by Design Stage

Design Principles Informed by Baseline Information PM-B02

The PRow is an important feature connecting the development to the surrounding area and the maintenance of this will encourage footfall away from created habitats onsite and therefore was highlighted to be retained and enhanced where possible. The bare ground will be retained alongside the bramble scrub and additional mixed scrub will be created to increase the distinctiveness of this habitat and opportunities for biodiversity. There are three very large oak trees on site which are regarded as an important ecological feature due to their age and surrounding habitats and these will be retained and protected over the length of this HMMP. Due to the badger set on the eastern boundary of site and the presence of a ditch along the southern and part of the eastern boundaries areas of other neutral grassland have been retained to provide contingency for the existing biodiversity and will be protected as a buffer throughout construction. Certain planting will be completed to enhance these areas in a sensitive way. Further working methods for buffers are detailed within the associated CEMP. The riparian zone within the Site boundary will be buffered from the proposed development and as such will not be negatively impacted. Areas within the 5m riparian zone, that fall within the Site, will be subject to landscape planting. Additionally, the creation of a SUD feature is required to hold the water run-off and prevent excess water and nutrients spilling into the offsite adjacent ditch.

To meet a 10% net gain, as required by legislation, a further 14.20 habitat units will need to be secured through offsite habitat bank units.

Proposed habitat plan



Habitat and Condition Targets PM-T01

Baseline Habitat Type	Target Habitat Type	Baseline Condition	Targeted Condition	Years to Targeted Condition	Condition Assessment Targets	Comments
N/A	Urban trees	N/A	Poor Moderate	27	Poor condition will be targeted by achieving a pass in 2 of 6 criteria; A, and B. Others will not be targeted. Moderate condition will be targeted by achieving a pass in 3 of 6 criteria; A, B and F, and the others will not be targeted.	Native species will be planted as individual trees and all will therefore pass criterion A and B. Trees planted within the POS will also pass criteria F as they will be oversailing >20% vegetation. Trees may not reach maturity or develop ecological niches, and may experience anthropogenic damage and therefore criteria C, D, and E are not targeted. Details regarding the exact locations and specifications of trees will be presented within an arboriculture report. For the purpose of the Biodiversity Metric, estimations based on the Landscape Strategy have assumed five small urban trees of poor condition planted within the road network and 32 rural trees of moderate condition planted within the POS. Retained trees are in good condition and will be protected and form part of ongoing monitoring visits and will only pruned when required to maintain their condition.
Other neutral grassland	Mixed scrub	Moderate	Moderate	5	Moderate condition will be targeted by achieving a pass in 3 criteria; A, C, and D. Criteria B and E will not be targeted.	Mixed scrub planting will comprise of at least three native scrub species, with no species indicative of sub optimal condition introduced. Surrounding habitat management will result in a well-developed edge habitat. Retained bramble scrub cannot change in condition and is always recorded as 'poor'.
Other neutral grassland	Sustainable Drainage Systems	Moderate	Moderate	3	Moderate condition will be targeted by achieving a pass in criteria B, C, and E1. Criteria A and E2 will not be targeted.	The SuDS will be planted with a range of appropriate botanical species to provide new opportunities for biodiversity through the provision of aquatic habitats in addition to flood attenuation.
Other neutral grassland	Other neutral grassland	Moderate	Moderate	5	Moderate condition will be targeted by achieving a pass in criteria A, B, C, and D. Criteria E and F will not be targeted.	A native species rich wildflower grassland meadow mix will be used for these areas. Moderate condition will be achieved with the careful placement of these areas away from public hay cut management regime to maintain structural and botanical diversity, and the provision of no public paths within these areas to discourage damage. Existing ONG which is retained will be protected during development and then absorbed into ongoing site management alongside all other areas of this grassland type.
Other neutral grassland	Modified grassland	Moderate	Poor Moderate	1 2	Certain areas of the grassland will pass 3 of 7 criteria and other parcels will pass 4 of 7 criteria, with the additional essential criterion A. Moderate condition will be targeted by achieving a pass in criteria A, C, F and G. Criteria B, D, E will not be	Public Open Space (POS) will be split 75% modified grassland moderate condition (rough grassland), 25% modified grassland poor condition (amenity grassland). Poor condition grassland will be consistently mown to an amenity lawn which is likely to encourage public disturbance and limit botanic diversity. Moderate condition areas will be mown less regularly and are therefore likely to be use utilised by the public.

					targeted. Poor condition areas will not pass criterion A.	
N/A	Native hedgerow	N/A	Poor Moderate	1 5	Poor condition will be targeted by achieving a pass in criteria B1, B2, D1, D2. Criteria A1, A2, C1, C2 will not be passed. Moderate condition will be targeted by achieving a pass in criteria A1, A2, B1, B2, D1, D2. Criteria C1, C2 will not be targeted.	Amenity hedgerows will achieve poor condition due to their management as a short and thin hedge within urban habitat. Moderate condition hedgerows will be managed above the minimum height and width.
N/A	Native hedgerow with trees	N/A	Moderate	10	Moderate condition will be targeted by achieving a pass in criteria A1, B1, B2, D1, D2, E2. Criteria A1, C1, C2, E1 will be failed.	This hedgerow is required to meet trading summaries. Retained existing native hedgerows with trees will be protected during development and then absorbed into ongoing rotational management alongside created hedgerows.

Habitat and Condition Targets Further Comments

Habitat conditions have been allocated to reflect reasonable targets given public access across the scheme. Management will be adaptive and responsive and ensure that these conditions remain passed at a minimum.

Habitat Retention

Measures to be Implemented to Protect Retained Habitats PM-03

- Retained habitats have been entered into the metric as follows:
- 0.3334ha of other neutral grassland (medium distinctiveness) retained along field margins, within badger sett buffer and below mature retained trees;
 - 0.06ha of bramble scrub (medium distinctiveness) retained north of the PRoW;
 - 0.03ha of bare ground, the existing PRoW pathway; and
 - 0.23ha of rural trees, three mature oak trees in the east of the Site.
 - 0.08km (72%) of the total hedgerow network (0.11km) is to be retained;
 - 0.292 km of offsite ditch.

Specification of Protective Measures to be Used PM-04

Protective measures have been conditioned as per the planning permission. Detailed technical specifications of protection of important ecological features including trees and hedgerows will be present within an updated Tree Protection Plan, and other protective measures within the requested CEMP.

Grassland (Low Distinctiveness)

Target Habitat:		Modified grassland				
Condition Assessment Criteria		Targeted	Relevant Parcels	Creation Approach	Enhancement Approach	Management Approach
A	There are 6-8 vascular plant species per m² present, including at least 2 forbs. Note - this criterion is essential for achieving Moderate or Good condition. Where the vascular plant species present are characteristic of medium, high or very high distinctiveness grassland, or there are 9 or more of these characteristic species per m², please review the full UKHab description to assess whether the grassland should be classified as a higher distinctiveness grassland. Where a grassland is classed as medium, high or very high distinctiveness, please use the relevant condition sheet.	No Yes		Some areas of modified grassland will consist of laid turf which consists of a hard-wearing species poor mix and is unlikely to meet the minimum threshold of 6 species per m². Some areas of modified grassland will be sown with a flowering lawn mixture (e.g. Emorsgate Flowering Lawn Mixture EL1) which comprises a wider species mix including forbs. However given the amenity management of these areas, it is presumed that the average species per m² will fall within this threshold.		Regular amenity length mowing will limit species diversity to this threshold.
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 vertebrates and invertebrates to live and breed.	No		After seeding the grassland will be permitted to grow long to create an establish sward before being maintained at 7cm with no sward height variation.		All modified grassland sward on site will be regularly mown to a uniform structure and maintained below 7cm.
C	Any scrub present accounts for less than 20% of the total grassland area. (Some scattered scrub such as bramble <i>Rubus fruticosus</i> agg. may be present). Note - patches of scrub with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.	Yes		Any encroaching scrub during establishment will be removed by hand where necessary.		Regular mowing to maintain amenity sward height should prohibit establishment of scrub. Monitoring visits will record levels and advise any remedial actions if required.
D	Physical damage is evident in less than 5% of total grassland area Examples of physical damage include excessive poaching, damage from machinery use or storage, erosion caused by high levels of access, or any other damaging management activities.	No		Grasslands will be temporarily fenced with appropriate signage during seeding to allow for establishment.		Due to public access across site all modified grassland swards are likely to fail this criterion.

E	Cover of bare ground between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens.)	No				Due to public access across site all modified grassland swards are likely to fail this criterion.
F	Cover of bracken <i>Pteridium aquilinum</i> less than 20%.	Yes		No bracken was recorded onsite and none shall be introduced during habitat creation.		Regular mowing to maintain amenity sward height should prohibit establishment of bracken. Monitoring visits will record levels and advise any remedial actions if required.
G	There is an absence of invasive non-native species (as listed on Schedule 9 of WCA).	Yes		Seed will be sourced from a reputable supplier and biosecurity measures during creation will protect against invasive species introduction.		Regular mowing to maintain amenity sward height should prohibit establishment of scrub. Monitoring visits will record levels and advise any remedial actions if required.

Action	Relevant Parcels	Timing	Prescriptions
Laying of turf	Poor condition modified grassland	Between mid-autumn and early spring, in good conditions (not too wet or frosty). The longer newly laid turf can be left relatively undisturbed for several weeks, which will help it get rooted in.	• Complete the site preparation well before buying or having the turf delivered. Bare ground will be required for laying turf. • Remove any existing perennial weeds by forking out the roots and then dig or rotovate the soil to a depth of 20–25cm (8–10in), to ensure there is no compaction. Spread with organic matter, e.g., manure or well-rotted compost, to hold moisture in the soil as required. • Leave the ground to settle for at least a few days and ideally five to six weeks or more. • Weed again if necessary, hoeing off seedlings or hand-weeding regrowth of perennial weeds, then firm and level the surface by treading the area several times in different directions using shuffling steps. Then rake several in different directions • Measure the area of your new lawn and check the dimensions of the turf pieces carefully before buying, to make sure you order enough. • Source an appropriate modified grassland turf from a reputable local supplier. E.g., Spooners Turf - Standard Turf. Turf must be laid within 24 hours of delivery if possible. • Scatter a mix of sand and soil or garden compost onto the lawn and brush it into the joints where turf sections meet. This top-dressing fills any small gaps and helps the turf knit together and get established more quickly • Water well if no rain is forecast, then leave the turf undisturbed – the first few days are critical for root development. • In dry weather, you may need to water regularly to keep the new turf constantly moist and ensure it roots in well. During dry periods in mid- to late summer, water every five to ten days. At other times, water during dry periods every fortnight. Ensure enough water is added to soak down through the turf. Only wetting the upper layer of new turf can lead to shallow rooting and encourages coarser weed grasses. • Mow with the blades set high once the turf has rooted well, usually about three weeks after laying. Tug on the grass to check it doesn't lift easily – also see our guide to mowing. • Once established mow following an appropriate mowing regime to maintain an amenity sward length.
Introduction of seed	Moderate condition modified grassland	April to May or from September to October, during calm weather and not when the ground is frost bound, waterlogged, or in prolonged dry weather periods.	• Emorsgate Seeds EM1 wildflower, or similar mixture, will be used on site in order to attain a more diverse modified grassland sward which can attain moderate condition. • Seed will be slot-sown or broadcast across the grassland restoration area in good weather conditions and not in prolonged dry weather. Areas of seeded grassland creation will be with a or other appropriate equipment to and produce on site for introduction of seed. • Prepare the ground by scarifying the surface by harrowing or raking reduce any existing thatch, provide bare ground, and produce a medium soil tilth. Then roll, or tread, to produce a firm surface. • 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. • Following the initial seeding works, the grassland must not be disturbed. Temporary fencing may be required. Once an established sward forms the mowing regime may begin. First Year Management:

			- Most of the sown meadow species are perennial and are slow to establish. Soon after sowing there will be a flush of annual weeds, arising from the soil seed bank. These weeds can look unsightly, but they will offer shelter to the sown seedlings, are great for bugs, and they will die before the year is out. So resist cutting the annual weeds until mid to late summer, especially if the mixture contains Yellow Rattle, or has been sown with a nurse of cornfield annuals. Then cut, remove and compost. Early August is a good time. This will reveal the young meadow, which 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. Management Once Established: - In the second and subsequent years EM1 sowings can be managed in a number of ways which, in association with soil fertility, will determine the character of the grassland. The best results are usually obtained by traditional meadow management based around a main summer hay cut in combination with autumn and possibly spring mowing or grazing. - Meadow grassland is not cut or grazed from spring through to late July/August to give the sown species an opportunity to flower. - After flowering in July or August take a 'hay cut': cut back with a scythe, petrol strimmer or tractor mower to c 50mm. Mow regularly to maintain an amenity lawn of ~7cm. - No fertiliser will be added to the grassland as this would only benefit the fast-growing species such as the grasses, resulting in the herbaceous species being outcompeted.
Mowing	All onsite modified grassland	March – October, with other cuts as necessary.	- With new lawns, wait until the grass is at least 5cm (2in) tall before mowing with the blades on the highest setting. - Lawns should generally be mown weekly or fortnightly between March and October to keep them in good condition. As well as giving a neat-looking lawn, regular mowing helps to eliminate unwanted weeds and encourages denser turf. - The mowing scheme should be adaptive, and the frequency of mowing will be adjusted depending on grassland sward growth in order to maintain the lawn at the amenity length 7cm. - Aim to mow regularly, so you only need to remove a small amount each time – never take off more than one-third of the grass height. - In dry, shady areas under trees: grass may need less frequent mowing than areas in full sun with good moisture levels. - Avoid excessively close mowing – this can weaken the grass plants, encouraging shallow rooting and making the lawn more susceptible to drought damage, weeds and moss . Close-mown lawns also need more frequent maintenance and feeding. Extremely low cutting may also scalp the lawn, leaving bare patches where there are bumps or tree roots at the surface - this should be avoided. - Where possible areas of modified grass can periodically be allowed to grow longer in order to provide flowering plants and ecological niches for invertebrates. Flower-rich lawns can be mown every four to six weeks. Consider participating in No Mow May along edge habitat or in designated areas. - Never mow grass that is wet or frozen, very soft, or experiencing spells of cold weather or drying winds. This can damage your turf and compact the soil. Wait until later in the day when the lawn has dried out or defrosted or postpone mowing to another day. During periods of drought mow less regularly (once every three weeks or longer).
Arisings	All onsite modified grassland	Following mowing at any point over the 30-year management period.	Any arisings that are resultant from the mowing of grassland will be piled onsite in the designated compost heap which is recorded in the provision plan (condition 26) as an 'grass snake egg laying bundle'. Additionally, this feature will provide new habitat suitable for species of invertebrates, amphibians, and other reptiles. The created heap will be approximately 3m across and 1.5m high (the latter will reduce as the cut vegetation decomposes) and will incorporate sticks and twigs for aeration, to aid wildlife access and to prevent overheating as described by ARG (Amphibian and Reptile Group). A location for the heaps is recommended in the southern part of the site so as to be near to the created SuD wetland feature and offsite ditch, away from roads, and in an area that receives at least partial sunshine.

What Does Success Look Like? (GL-F01)



Grassland (Medium, High, and Very High Distinctiveness)

Creation, Enhancement and Management Summary (GH-T01)

Target Habitat				Other neutral grassland		
Condition Assessment Criteria		Targeted	Relevant Parcels	Creation Approach	Enhancement 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		The sward will be sown with a species-rich wildflower seed mixture e.g., Emorsgate seeds EM34 Diverse Meadow Mixture, to ensure that there are >9 species per m ² including herbs, sedges, and rye grasses below <30% coverage.		Hay meadow management will create a diverse sward with a range of flowering flora.
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				The mowing regime will ensure that a variety of sward heights are mown into the grassland.

C	Cover of bare ground between 1% and 5%, including localised areas, for example, rabbit warrens.	Yes				It is expected that this criterion will naturally become passed with good management and usage of the habitat by fauna. Monitoring visits will record levels of bare ground and advise remedial actions as required.
D	Cover of bracken <i>Pteridium aquilinum</i> less than 20% and cover of scrub (including bramble) less than 5%.	Yes		No bracken or scrub will be planted during creation.		It is expected that the mowing regime will prohibit establishment of scrub and bracken. Monitoring visits will record levels of bare ground and advise remedial actions as required.
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.	No				Due to public access across site the grassland is likely to fail this criterion. Monitoring visits will record levels of physical damage and any invasive species will be removed immediately following the most recent relevant guidance.
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.	No				The species mix to be sown will be a species-rich wildflower grassland mix and managed appropriately however this criterion will not be specifically targeted by the proposals.

Grassland (Medium, High, and Very High Distinctiveness)

Creation, Enhancement and Management Detailed Methods (GH-T02)

Action	Relevant Parcels	Timing	Prescriptions
Fencing	All onsite other neutral grassland	Prior to introduction of seed.	Grassland parcels will be fenced with temporary fencing e.g., Heras to protect the establishing sward from damage, material storage and/or public access.
Preparation of ground	All onsite other	October 2025 in suitable conditions (not too wet).	Existing land areas for ONG creation will be scarified with a disc/chain harrow to reduce the thatch and provide bare ground on site for introduction of seed.

	neutral grassland		The soil on site previously supported ONG and therefore topsoil stripping or the introduction of any additional soils or fertilisers is not required prior to seeding for other neutral grassland.
Introduction of seed	All onsite other neutral grassland	Beginning in April. Steps contain appropriate timings.	- Emorsgate seeds EM34 Diverse Meadow Mixture, or similar mixture, will be used on site in order to attain a species rich Other Neutral Grassland sward that meets the UKHab definition for this habitat type. - Seed will be slot-sown or broadcast across the grassland creation area in good weather conditions and not in prolonged dry weather. - Grass seed will be sown in accordance with BS 4428 (1989) and will be sown from April to May or from September to October, during calm weather and not when the ground is frost bound or waterlogged. Seed will be sown in two equal sowings in transverse directions at 4g/m² or as recommended by the chosen mix and provider. After sowing the seed will be lightly raked to create intimate contact with the soil. - Following the initial seeding works, the grassland must not be disturbed until an established sward forms (up to 12 months after sowing). - For the first cut, wait until mid to late summer (early August is a good time) to cut the grassland and remove arisings as detailed. Dig out any residual perennial weeds such as docks in the following months as required.
Mowing	All onsite other neutral grassland	As detailed	- All areas of other neutral grassland will be mechanically cut using traditional hay management techniques using hand tools or machinery. - Grass will be cut twice a year; once in early spring (February-March) to a short length of approximately 25-50mm. and again in autumn after flowering (August-October). - Different areas of grassland may be mown at different times within these specified periods in order to create a diversity of sward heights. - Mowing will only take place during periods of dry weather. - Certain grassland areas e.g., along hedgerows will be cut annually. Cutting should be carried out at the end of September or October to a height of 100mm with arisings removed off site. This will provide an important edge habitat and a variety in sward heights across the scheme. - Paths within the grassland sward may be mown to and managed as an amenity height to focus public access away from the general sward. - No herbicides should be used on-site unless targeting specific injurious weeds. - The grassland will not be improved by fertilizer as this would only benefit the fast-growing species such as the grasses, resulting in the herbaceous species being outcompeted. - Retained ONG will be protected during development and then absorbed into the ongoing rotational hay meadow site management alongside all other areas of created ONG.
Arisings	All onsite other neutral grassland	Following mowing at any point over the 30-year management period.	Any arisings that are resultant from the mowing of grassland will be piled onsite in the designated compost heap which is recorded in the provision plan (condition 26) as an 'grass snake egg laying bundle'. Additionally, this feature will provide new habitat suitable for species of invertebrates, amphibians, and other reptiles. The created heap will be approximately 3m across and 1.5m high (the latter will reduce as the cut vegetation decomposes) and will incorporate sticks and twigs for aeration, to aid wildlife access and to prevent overheating as described by ARG (Amphibian and Reptile Group). A location for the heaps is recommended in the southern part of the site so as to be near to the created SuD wetland feature and offsite ditch, away from roads, and in an area that receives at least partial sunshine.

What Does Success Look Like? (GH-F01)



Urban – Sustainable drainage system (SuDS)

Creation, Enhancement and Management Summary (GH-T01)

Target Habitat			SuDS			
Condition Assessment Criteria		Targeted	Relevant Parcels	Creation Approach	Enhancement Approach	Management Approach
A	Vegetation structure is varied, providing opportunities for vertebrates and invertebrates to live, eat and breed. A single structural habitat component or vegetation type does not account for more than 80% of the total habitat area.	No		The habitat present will comprise a SuDS basin which although planted with aquatic flora will only comprise a single ecotone.		Vegetation will be permitted to naturally colonise the SuDS and this criterion will not be targeted.
B	The habitat parcel contains different plant species that are beneficial for wildlife, for example flowering species providing nectar sources for a range of invertebrates at different times of year.	Yes		The aquatic planting will comprise a diverse range of native species, including species of value to insects.		

C	Invasive non-native plant species (listed on Schedule 9 of WCA1) and others which are to the detriment of native wildlife (using professional judgement) cover less than 5% of the total vegetated area. Note - to achieve Good condition, this criterion must be satisfied by a complete absence of invasive non-native species (rather than <5% cover).	Yes		Plants will be sourced from a reputable supplier, and no non-native species will be planted within the planting regime. Biosecurity measures during creation such as the cleaning of footwear with antimicrobials e.g., Virkon, will be followed during creation.		Monitoring visits will record presence and abundance of non-native species which have colonised the SuDS. Any invasive species will be removed immediately following the most recent relevant guidance.
E1	Plant species are mostly native. If non-native species are present, they should not be detrimental to the habitat or native wildlife.	Yes		Only native species will be planted during creation.		Monitoring visits will highlight presence and potential risk of non-native species, to inform remedial action.
E2	The vegetation is comprised of plant species suited to wetland or riparian situations.	No		Appropriate 'wet-loving' plants will be planted by the scheme.		A diverse riparian habitat will not be targeted by management.

Grassland (Medium, High, and Very High Distinctiveness)

Creation, Enhancement and Management Detailed Methods (GH-T02)

Action	Timing	Prescriptions
Creation of SUDs feature	Onset of project	Use an approved construction methods and hydrologically sound design for the feature which includes the following prescriptions to ensure BNG condition is delivered: - Excavate using low-impact machinery where possible to reduce compaction. - Grade banks to 1:4 to 1:6 slopes for planting stability and wildlife access. - Form microtopography: hollows, berms, and shallow shelves (100–300 mm depth) within the feature and around the perimeter to diversify wetness gradients and for marginal planting. - Remove contaminated or nutrient-rich topsoil; SuDS planting requires low-nutrient substrates e.g., washed sand or clean subsoil (low nutrient), to favour native species and discourage aggressive weeds. The full design of this feature including check dams, flow control orifices, spillways, overflow pipes, and or other inlet structures is beyond the scope of this report. Please refer to XXX.
Planting scheme	After site preparation methods (listed above) Planting in Spring or early autumn, avoiding high-flow seasons or prolonged drought.	- Source native plants from reputable suppliers, local where possible. - Planting is arranged according to moisture zones: dry margins, damp margins, shallow aquatic, and deeper aquatic. Plant species according to the species list provided in the following section. Summary: - Dry Upper Bank Zone – experiences Occasional Moisture and Supports pollinators and stabilises banks. A species rich meadow mix containing grasses and sedges and forbs should be sewn here. - Damp Meadow Lower Banks Zone – Another species rich grassland mix should be sewn here containing species tolerant of periodic flooding. - Shallow Aquatic Margins (0–10 cm water depth) – Plug planting of specimens of aquatic plants e.g., reeds and greater pond sedge to Provides habitat for invertebrates, amphibians, and water purification. - Deeper Aquatic Zone (>30 cm) – plants introduced via plug planting e.g., water lilies to creates oxygenation, habitat structure, and increase nutrient uptake. Methods: - Appropriate UK-native wildflower seed mixes should be sown at 4 g/m² (or as per the manufacturers recommnedations) only on dry upper zones and damp lower zones e.g., EM8 Meadow Mixture for Wetlands and EP1 Pond Edge Mixture. - Bare-root or plug plants in wet zones with Marginal plugs: 6–8 plants/m², and Aquatic plants: 3–5 plants/m² (depending on species vigour) - Turfing or matting (coir pre-planted mats) can be used where required e.g., for erosion-prone banks. Species lists: - Dry Upper Bank Zone: <i>Festuca rubra</i> (Red fescue), <i>Carex panicea</i> (Carnation sedge), <i>Achillea millefolium</i> (Yarrow) – summer nectar, <i>Lotus corniculatus</i> (Bird’s-foot trefoil) – excellent for bees, <i>Knautia arvensis</i> (Field scabious) – long flowering period, <i>Leucanthemum vulgare</i> (Oxeye daisy), <i>Centaurea nigra</i> (Common knapweed) – late-season nectar - Damp Meadow Lower Banks Zone: <i>Lythrum salicaria</i> (Purple loosestrife), <i>Filipendula ulmaria</i> (Meadowsweet), <i>Iris pseudacorus</i> (Yellow flag iris), <i>Cirsium palustre</i> (Marsh thistle – important for bumblebees), <i>Succisa pratensis</i> (Devil’s-bit scabious – key for late-season pollinators)

		- Shallow Aquatic Margins (0–10 cm water depth): <i>Carex riparia</i> (Greater pond sedge), <i>Mentha aquatica</i> (Water mint), <i>Caltha palustris</i> (Marsh marigold – early spring nectar), <i>Myosotis scorpioides</i> (Water forget-me-not), <i>Ranunculus flammula</i> (Lesser spearwort) - Deeper Aquatic Zone (>30 cm): <i>Potamogeton natans</i> (Broad-leaved pondweed), <i>Ceratophyllum demersum</i> (Rigid hornwort – oxygenator), <i>Nuphar lutea</i> (Yellow water lily) – shade, cover for wildlife
Management Methods		Year 1 Establishment: - Watering during prolonged dry periods. - Weed control via the hand-pulling of any competitive ruderal species which establish, species spreading excessively e.g., <i>Iris pseudacorus</i>, and the sensitive removal of any invasive species following the most up to date guidance. This should occur monthly during year one between April and October. Routine Management (Years 2+): - Cut swales & meadow zones once or twice per year, after flowering and seed set, with the main cut from late July–September, and an optional second cut where required in March. Remove arisings to maintain low nutrient conditions. - Thin vigorous species in wet margins every 2–3 years in late summer to prevent domination. Maintain at least 3–4 species per zone for ecological resilience. Hand pulling methodology. - Remove excessive vegetation from the aquatic zone ≤30% at a time and outside of the amphibian breeding season. Pond clearance is recommended in autumn (September – December) to avoid disturbance to nesting birds and amphibians. IT is expected the pond will need clearance every 5-10 years but this is at the discretion of the adaptive management plan. - Check for silt accumulation in a dry summer period; de-silt every 5–10 years if needed. Remove sediment when depth exceeds 150 mm or 1/3 design capacity. - Remove debris from the pond quarterly, and blockages and litter from inlets/outlets as and when it is required. - Checks for invasive species will be carried out during UKHab survey monitoring visits. However, presence should/could be reported at any time by any relevant stakeholder. Invasive species must be removed as a priority, following the most up to date guidance.
Monitoring		- Condition assessment and species list updated. - Amphibian presence recorded. - Levels of duckweed recorded and informing remedial action where required for the health of aquatic biodiversity. - Hydraulic performance monitoring (inlet/outlet condition, standing water levels).

What Does Success Look Like? (GH-F01)



Scrub

Creation, Enhancement and Management Summary (SC-T01)

Target Habitat:		Mixed scrub				
Condition Assessment Criteria		Targeted	Relevant Parcels	Creation approach	Enhancement 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 comprising more than 75% of the cover (except hazel <i>Corylus avellana</i>, common juniper <i>Juniperus communis</i>, sea buckthorn <i>Hippophae rhamnoides</i> or box <i>Buxus sempervirens</i>, which can be up to 100% cover).	Yes	All scrub	Only native species will be planted including at least 4 species at 20% coverage to increase redundancy and ensure that this criterion is passed.		Failed whips will be replanted like for like where necessary in order to maintain a diverse species mix.
B	Seedlings, saplings, young shrubs and mature (or ancient or veteran) shrubs are all present.	No	All scrub	Planted whips will all be of a similar age.		Management will prohibit high levels of encroachment of scrub into adjacent habitats so young shrubs will not be able to develop, and mature shrubs may not develop within this management period.
C	There is an absence of invasive non-native species (as listed on Schedule 9 of WCA) and species indicative of suboptimal condition make up less than 5% of ground cover.	Yes	All scrub	Whips will be sourced from a reputable supplier, and no invasive non-native species or species indicative of suboptimal condition will be introduced during creation.		Appropriate management of this and adjacent habitats should maintain low levels of species indicative of suboptimal condition. Any invasive species will be removed immediately following the most recent relevant guidance.
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	All scrub	Whips will be planted in a scalloped shape to maximise edge habitat.		Management pruning and adjacent mowing will maintain the scalloped edge and tall grassland border to the scrub.

E	There are clearings, glades or rides present within the scrub, providing sheltered edges.	No	All scrub	Scrub is likely to naturally regenerate to fill in any gaps within planting regime.		Due to the small extent of the scrub and management through mechanical means no clearings/rides will be created.
---	---	----	-----------	---	--	--

Scrub

Creation, Enhancement and Management Detailed Methods (SC-T02)

Action	Relevant parcels	Timing	Prescriptions
Planting of whips	<i>As detailed in approved Soft Landscaping Proposals</i>	During dormant tree season; November - March	• Use bare root whips of native species as detailed, sourced from a reputable local supplier. • Spacing: 1.5–2.5 m between plants to allow for growth and natural spread. • Layout: Random or clustered groups to mimic natural scrub formation. • Method: - Dig a hole slightly larger than the root system with hand tools. - Place the whip upright, backfill with soil, and firm gently. - Use mulch mats or woodchip to suppress growth of bramble around the base.
Management	<i>As detailed in approved Soft Landscaping Proposals</i>	From the onset of the project Rotational cutting to occur in October – February. Avoiding bird nesting season and peak public use times if possible.	• Replace any whips which fail within the first 2 years with another whip of the same species in order to attain a varied species mix. • Water often within first year and in the following 3 years during periods of drought. • Manage with rotational cutting to maintain varied structure without visually harsh intervention. Method: - Each year, cut back 8–12% of the scrub block, equivalent to approximately 40–60 m², removing vegetation adjacent to public access and in irregular small patches elsewhere. The following year, cut back a different 8-12% which has grown out longer, and repeat process. - Areas of cutting should rotate on a 5–7 year cycle due to small parcel area and fast visibility recovery needs. • Technique: - Use hand tools or battery-powered hedge trimmers / chainsaws to minimise noise and maintain controlled cuts. - Retain at least 10% of stems as standing deadwood snags (shortened to 1–1.5 m for safety).

Scrub Species Lists (SC-T03)

Common Name	Scientific Name	Abundance / %	Comments
Hazel	<i>Corylus avellana</i>	20	
Hawthorn	<i>Crataegus monogyna</i>	20	
Blackthorn	<i>Prunus spinosa</i>	20	
Dogwood	<i>Cornus sanguinea</i>	20	
Bramble	<i>Rubus fruticosus</i> agg.	20	

Other Supporting Information

Supporting Information (SC-B02)

Existing bramble scrub will be retained by the proposals and managed in line with the above Management Detailed Methods of created parcels of scrub.

Any scrub maintenance work e.g., rotational cutting, must occur outside of bird nesting season (March- September inclusive), or if required within this period subject to a pre-works check by Suitably Qualified Ecologist (SQE).

What Does Success Look Like? (SC-F01)



Individual Trees

Creation, Enhancement and Management Summary (UT-T01)

Target Habitat:		Urban trees and rural trees				
Condition Assessment Criteria		Targeted	Relevant Features	Creation Approach	Enhancement Approach	Management Approach
A	The tree is a native species (or more than 70% within the block are native species).	Yes	All trees	All planted trees will be of native species.		
B	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Yes	All trees	All planted trees will be planted as individual trees which automatically pass this criterion.		
C	The tree is mature (or more than 50% within the block are mature).	No		Young whips will be planted which are unlikely to mature within the 30-year timeframe of the project.		
D	There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.	No		Due to public access across site and tree location, adverse impacts occurring from anthropogenic activities may occur.		
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	No		Young whips will be planted which are unlikely to develop these niches within the 30-year timeframe of the project.		
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	Yes and No	Urban setting and POS trees	Some trees within the development are likely to over sail predominantly urban habitats, while others are to be planted within vegetated areas as rural trees and will therefore pass this criterion.		On site habitats are secured for the 30-year timeframe of the project so this criteria will remain the same throughout the project.

Additional Management Prescriptions (UT-B01)

In accordance with Condition 24 of the associated approved planning permission ‘Hard and Soft Landscaping Proposals - Notwithstanding the details submitted, prior to the commencement of the development above slab level, full details of both hard and soft landscape proposals shall be submitted to and approved in writing by the local planning authority.’ – These landscape proposals will detail the exact locations of individual tree planting. Trees will be planted using the methodology within this report.

Any trees which, within a period of ten years after planting, are removed, die or become seriously damaged or defective, shall be replaced in the next planting season with others of species, size and number as originally approved and permanently retained.

Individual Trees

Creation, Enhancement and Management Detailed Methods (UT-T02)

Action	Relevant Features	Timing	Prescriptions
Planting	As detailed in approved Soft Landscaping Proposals	After site preparation in suitable conditions in the winter months	• Locations to plant trees will be selected prior to planting and detailed in approved Soft Landscaping Proposals. • It is recommended to plant a variety of native species with the aim of providing a variety of ecological niches and aesthetic value (see below for suggested species list). • Bare root trees will be planted between November and January to allow them to bed in before the next growing season. • A pit will be dug for each tree to accommodate the roots without bending them. • Topsoil and subsoil will be kept separate. • Drive a short stake into the hole, leaving no more than 30 cm above ground level. This will allow the tree to flex and strengthen the trunk and roots. • Put in the tree and carefully backfill the soil around the roots, ensuring that the final soil level is at the root collar. • Trees guards will be installed around each of the trees. This will include four wooden posts with stock fencing in place.
Management	As detailed in approved Soft Landscaping Proposals	Immediately after planting	• Trees should be watered regularly and thoroughly for the first few weeks and during any dry spells for the first year after planting. • Tree health and growth, including the efficacy of tree guards, should be checked regularly. Remove guards as soon as they split and before they start to disintegrate - usually after 5-10 years. • Any failed trees must be replaced like for like.
Pruning	As detailed in approved Soft Landscaping Proposals	To be undertaken in the winter months (December – January) Formative: Years 1-5 of tree growth Maintenance: After 5+ years of tree growth	• Pruning will be undertaken on the trees to shape the trees into a manageable shape, provide rejuvenation, and limit/prevent disease. • Trees should naturally form their adult shape as they grow, but formative pruning may be required to aid the development of a basic tree shape with a clear trunk and a well-spaced canopy of branches. Branches may be removed with hand tools as required by a landscape gardener or other appropriate individual. • Trees should be left to grow with minimal intervention where possible. • Urban trees may be pruned more heavily to maintain small crowns for visibility and ease of maintenance. Badly positioned or damaged branches may be removed to ensure that the remaining branches do not crowd, shade or rub against each other, and the tree forms an aesthetically pleasing shape. • Diseased, damaged, and/or potentially dangerous branches should be removed from all trees across the scheme. This is to safeguard public safety and prevent disease spread

Individual Trees Species Lists (UT-T03)

Common Name	Scientific Name	Abundance / %	Comments
Silver birch	Betula pendula	As detailed on approved landscape plan	As detailed on approved landscape plan
Field maple	Acer campestre		
Oak	Quercus robur		
Rowan	Sorbus aucuparia		
Cherry	Prunus avium		

What Does Success Look Like? (UT-F01)



Hedgerow

Creation, Enhancement and Management Summary (HD-T01)

Target Hedgerow Type:		Native hedgerow and native hedgerow with trees				
Condition Assessment Criteria		Targeted?	Relevant Features	Creation Approach	Enhancement Approach	Management Approach
A1	Height >1.5m average along length.	Yes	0.35km	Whips will be permitted to grow to appropriate heights of hedgerows within the scheme, in which some hedgerows will fail this criterion and some will not.		Some hedgerow will be managed at an amenity height, likely below 1m, so will fail this criterion. Other hedgerows which are targeting this criterion will be managed through rotational cutting to a grow to >1.5m tall.
A2	Width >1.5m average along length.	Yes	0.35km	Whips will be planted in a staggered line at 2-foot intervals to ensure the width is above 1.5m along the entire length.		Hedges will be managed through rotational cutting to a grow out to >1.5m wide.
B1	Gap – hedge base Gap between ground and base of canopy <0.5m for >90% of length.	Yes	0.5km			Whips will be formatively pruned in order to create a bushy structure and improve the woody basal growth. Monitoring visits will inform necessary changes to management plans to ensure this criterion is passed.
B2	Gap – hedgerow canopy continuity Gaps make up <10% of total length; and no canopy gaps >5m.	Yes	0.5km	Whips will be planted at 40cm intervals to ensure that the hedge is continuous. Any whips that fail will be replanted to ensure continuity.		Any whips which fail will be replaced like for like species.
C1	Undisturbed ground and perennial vegetation >1m 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				Public access along both sides of hedgerows resulting in disturbance.
C2	Nutrient-enriched perennial vegetation Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground.	No				This will not be targeted by the scheme.

D1	Invasive and neophyte species >90% of the hedgerow and undisturbed ground is free of invasive non-native plant species (including those listed on Schedule 9 of WCA) and recently introduced species.	Yes	0.5km	Whips will be sourced from reputable suppliers and will comprise native species.		Monitoring will include checking the hedgerows for invasive species and informing any remedial action needed.
D2	Current damage >90% of the hedgerow or undisturbed ground is free of damage caused by human activities.	Yes	0.5km		Retained hedgerows will be buffered during construction.	No damaging activities are expected, and hedge conditions will be monitored to inform adaptive management.
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				Planted whips will be of the same age class and therefore this will not be targeted.
E2	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.	Yes	Hedgerow with trees (0.075km)			Healthy individuals of native species e.g., field maple, will be selected to grow out as standard trees within hedgerows and their health will be monitored. Disease susceptible species such as ash and elm will not be used.

Additional Management Prescriptions (HD-B01)

Retained hedgerows will be protected by the development as detailed within an updated Tree Protection Plan in accordance with BS5837: 2012, and condition 25 of the granted planning permission. Retained hedgerows will be absorbed into the management scheme detailed within this plan to ensure that they maintain a moderate condition. Retained existing native hedgerows with trees shall be gapped up where required in order to provide screening for the development and achieve a pass in criteria B1 and B2, as expected public access may result in the failure of criteria C1 and C2, for these hedgerows. The retained hedgerows will be rotationally cut with height and width not falling below the required 1.5m.

Hedgerow

Creation, Enhancement and Management Methods (HD-T02)

Action	Relevant Features	Timing	Prescriptions
Creation of new hedges	All created hedgerows	October – December (when trees are dormant and to allow time for trees to root prior spring). In good conditions (not too wet and when ground is not frozen).	- The vegetation at the ground level will be cleared before the hedgerow is planted. All extraneous matter such as plastic, wood, metal and stones greater than 50mm diameter will be removed from site to a registered waste disposal facility. - Native whips will be sourced from a reputable supplier (see species list below). - Whips will be notch planted with a spade. Tree guards and stakes will be used to support the whips to grow in a healthy structure. - The hedgerow will be planted with bare root stock and the soil firmed in once planted. - The whips will be planted in zig zag lines at two-foot intervals. - The hedgerow whips must be watered regularly during the first 12 months with increased frequency during summer and extended dry periods. - The hedge will be left uncut for the first five years to aid establishment. After 5 years all tree guards and stakes should be removed. Method: - Bare-root hedge plants shall be notch planted in a zig zag line at the rate of 4-5 plants per linear metre (using L-, T-, H-shaped or straight notches) using spades of a design suitable for this purpose. The notches must be vertical and deep enough for the roots to hang freely, with the transplant being planted so that the root collar is exactly level with the ground surface. The notch must then be closed, and the soil will be well firmed round the roots in line with the guidelines as set out in BS 4428 (1989). Container-grown hedge plants will be planted into a pit dug 1.5x the diameter of the root mass, with the bottom and sides of the planting pit broken up to aid root expansion. The plants will be planted so that the root collar is exactly level with the ground surface. All hedge planting stock will be protected from rabbit damage using approved proprietary 600mm spiral guards, supported with softwood canes as advised by the manufacturer. - Until established, all trees and shrubs are to be watered during the growing season. Following any dry periods of more than 7 days, soil moisture content should be assessed with an examination of root base and watering undertaken as necessary. Trees should receive a minimum of 40 litres per tree, but this may need to be increased if trees should show signs of drought stress such as wilting leaves etc.
Long term management of hedgerows	All hedgerows	January – February (outside of bird breeding season, when trees are dormant, and to retain berries for birds during the majority of the autumn/winter).	Once the initial establishment of the hedges is completed the created hedgerows will be managed following the methodology as set out below to ensure that they meet their target conditions. - Hedgerows will be cut on rotation once every year on alternate sides (left/top/right) to ensure high fruit production - The hedgerows will be cut with hand tools e.g., hedge strimmer. - Height and width should be maintained at >1.5m, ideally 2m for some hedgerows, and 1m for poor condition hedgerows. No pruning works to hedgerows or trees will occur between 1st March and 31st August inclusive to avoid bird nesting season. Works during this period if required should be subject to a check by suitably qualified ecologist to ensure no nesting birds are present.

Hedgerows with trees	Retained and some created hedgerows.	n/a	Monitoring visits will check the condition and health of standard trees within hedgerows as per the condition assessment criteria. Standing dead trees should always be left in position where possible. However, in order to not result in a loss in distinctiveness, additional trees can be managed as standard trees within the hedgerow or trees planted adjacent to assume this function. In created hedgerows at least 4 trees per hedgerow should be managed as standard trees to provide redundancy in case of damage to trees.
----------------------	--------------------------------------	-----	--

Hedgerow Species Lists (HD-T03)

Common Name	Scientific Name	Abundance / %	Comments
Hawthorn	<i>Crataegus monogyna</i>	20	
Common beech	<i>Fagus sylvatica</i>	20	
Hazel	<i>Corylus avellana</i>	20	
Field maple	<i>Acer campestre</i>	20	To be left to grow out as standard trees in relevant hedgerows.
Blackthorn	<i>Prunus spinosa</i>	20	

What Does Success Look Like? (HD-F01)



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

Risk Identification Date	Habitat Type	Risk Factor	Trigger for Action	Remedial Measure
From onset of tree planting	Individual trees Hedgerows Scrub	Newly planted trees failing to establish	Any dead trees post planting within first year. 10% of targeted number of newly planted trees found to be dead during years 2-10.	- Source trees of local stock and higher resilience to climate change from a reputable supplier. - Undertake a second round of planting, replacing failed specimens on a like-for-like basis. - Within scrub plant a larger number of trees initially as contingency against some losses in the early years.
From Year 2 onward	Individual trees Hedgerows	Damage to trees	>10% trees are damaged.	- Fix or replace tree guards. - Adjust ties. - Implement signage to decrease human impact.
Annual, from onset of project	Grassland	Failure to deliver areas of species rich grassland	Monitoring will inform if species rich other neutral grassland is delivered within this scheme. Although the entirety of the grassland is not expected to reach the >10 species per m ² some areas are expected to obtain this amount. The grassland must met the UKHab definition for other neutral grassland in order to be compliant. Therefore, the trigger to further actions is <60% of monitoring survey plots to fail on species richness 10 species per m ² within 10 years of initiation of project.	- Reassess mowing regime. - Introduction of seed either through green hay or overseeding with an alternative species rich mix. - Nutrient stripping through repeated removal of vegetation as a last resort.
From onset of project	Grassland	Public access	Increase in disturbance, damage, and/or bare ground levels above 50%.	- Additional signage. - Temporary fencing. - Reseeding if necessary.
After creation	SuD	Failure to deliver areas of botanic diversity and targeted condition	Monitoring will record species lists and botanic diversity and condition assessment criteria	- Reseeding and replanting - Removal of overgrowth and/or invasive species as necessary
Annual, from onset of project	Any habitat type	Invasive species	Presence of schedule 9 species	Fence off problem area. Treat and remove according to the most up to date guidance.

3. Monitoring Schedule

Monitoring Strategy

Provide details of the monitoring strategy to encourage successful implementation of the management plan (MS-B01)

There will be regular checks of all onsite habitat types carried out by the management organisation alongside the day-today management of the public open space (POS) and general scheme. The monitoring of the grassland will focus on ensuring management is conducted appropriately, signs of which will include species richness, sward length, levels of damage and presence of undesirable species. Retained trees will also be monitored by this project to ensure that they are in a healthy condition.

Monitoring visits including UKHab assessments can be conducted by any suitably qualified ecologist (SQE) and will produce a report containing updated condition assessments of the habitat, fixed point photos for comparison across years, and advice on any change required to management methods. Monitoring visits will occur in years 1, 2, 5, 10, 20 and 30, and will be undertaken at an appropriate time for year for botany assessment (April-October) with hedgerows assessment data ideally collected in January/February. It will then be the responsibility of the client to perform any remedial measures in order to improve condition. The report detailing progress and future proposals to achieve condition targets and enhancements for biodiversity will be reviewed and agreed by Wokingham Borough Council.

Monitoring Methods and Intervals MS-T01

Habitat Type	Monitoring Methods	Monitoring Interval and Timing
Grassland and SuD	Establishment survey and update on species presence and composition, also to include hedgerow creation measures. A minimum of 3 quadrats per habitat type will be recorded.	Year 1.
Hedgerows Individual trees Scrub	Establishment survey and update on species presence, composition, health of whips, and current and future management prescriptions.	Year 2.
UKHab and Condition Survey	A full UKHab and condition assessment of all onsite habitats will be undertaken on years 5, 10, 20 and 30. This will cover all habitats on site, as detailed within this management plan. This will include updated GIS mapping of the site, an updated UKHab report with condition assessments, and a document summarising changes to the habitats.	Years 5, 10, 20, 30 Surveys to be completed between May and August

Monitoring Reports

Monitoring Report Schedule MS-T02

Organisation Responsible for Submitting the Monitoring Reports	Organisation Receiving and Responsible for Reviewing Reports
Aster Homes Limited	Wokingham Borough Council

Project Year	Month Report to be Submitted	Month Management Plan to be reviewed	Comments
Y1	September	September or October	Report on results of initial grassland and SUD creation measures, and establishment of whips within individual tree, scrub, and hedgerow habitats.

Adaptive Management

Summary of Adaptive Management Approaches (MS-B02)

Management will be an adaptive and collaborative effort between the landowner Aster Homes Limited, landscape management contractors, and other relevant stakeholders including residents of the residential development scheme. This includes an adaptive management regime, with mowing, hedge cutting, SUD monitoring and all habitat maintenance clearly scheduled but able to be reactive to increased pressures caused by public access, weather conditions, and other unexpected causes. The adaptive management approach aims to deliver and maintain the specified condition or better of habitats on site. Observations and notes from day-to-day management by the landowner and residents will be reported between relevant stakeholders and will feed into monitoring reports presented to Wokingham Borough Council to ensure adaptive management as results will feed into changes in management prescriptions, then through to subsequent monitoring reports. Observations and notes from day-to-day management are important for delivering adaptive management especially in regard to public access pressure on habitats during the first few years of establishment and across the project term.

Monitoring results inform necessary management changes to promote achieving BNG targets stated in the statutory biodiversity metric and this HMMP. The monitoring can pick up any unexpected, external influences e.g., plant failure or disease, or an invasive species that is thriving due to climate change.

Management will involve monitoring and evaluating the effectiveness of management actions over time then adjusting as necessary to improve outcomes. If BNG objectives are affected by external factors, decisions on changes to the management prescriptions and targets will be agreed between all responsible authorities, including the management organisation and Wokingham Borough Council. Following the review, any changes to this management plan and schedule will be recorded as updates to this.

It is not expected that Ethos will be the appointed ecologist throughout the 30-year period and are only responsible for the production of this HMMP.