

Land off Mill Lane, Whitburn
Draft Habitat Management and
Monitoring Plan

July 2026

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Issuing office

4 Riverside Studios | Newcastle Business Park | Newcastle Upon Tyne | NE4 7YL
T: 0191 303 8964 | W: www.bsg-ecology.com | E: info@bsg-ecology.com

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	Name	Position	Date
Originated	Alexander Permain	Senior Ecologist	06 July 2026
Reviewed	Claire Dewson	Associate Director	12 July 2026
Approved for issue to client	Claire Dewson	Associate Director	15 July 2026
Issued to client	Alexander Permain	Senior Ecologist	16 July 2026

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1 Introduction

Background to commission

- 1.1 BSG Ecology Ltd. was commissioned by Story Homes (the 'Client') in October 2024 to undertake ecological surveys in support of an Ecological Impact Assessment (EclA) that will be used to inform a planning application for a proposed residential development at Land off Mill Lane, Whitburn ('the Site'). A planning application was submitted in January 2026 (planning reference: 260049) which included various ecological documents, including a biodiversity gain assessment (BGA) report. A planning response was delivered in March 2026 and there was a request within the planning response to detail the appropriate management interventions in order to achieve the proposed habitats at their target condition, in a form of a Draft Habitat Management and Monitoring Plan (HMMP). BSG Ecology were further commissioned in June 2026 to produce a Draft HMMP as well as to update other ecological documentation supporting this planning application. The re-submission documents include an updated BGA report (BSG Ecology, 2026d) to which measures within this Draft HMMP are based upon.
- 1.2 This Draft HMMP should be read in conjunction with the following documents which were prepared to support the planning application:
- Pegasus (2026). Landscape masterplan (P21-2566_EN_0001, revision D). See **Appendix 2**.
 - BSG Ecology (2026a). Land off Mill Lane, Whitburn. Ecological Impact Assessment.
 - BSG Ecology (2026d). Land off Mill Lane, Whitburn. Biodiversity Net Gain Assessment.
 - DEFRA (2025). Statutory Biodiversity Metric. Headline Results Summary. See **Appendix 1**.

Draft HMMP Structure and aims

- 1.3 The Draft HMMP is structured in a format with reference to the National HMMP template (Natural England, 2024) and has broadly followed the approach within *A Guide to Management Planning* (Alexander, 2015).
- 1.4 This Draft HMMP has not been prepared directly using the non-mandatory Natural England (NE) HMMP template, as Natural England allows the use of 'an alternative template' as set out at the top of the HMMP Checklist (Natural England, 2024).
- 1.5 The NE HMMP template and HMMP Checklist allow for sections to be excluded as appropriate with justification; in this instance, exclusions relate to:
- Avoidance of duplication of information submission such as existing reports and plans and data shown in the Statutory Biodiversity Metric prepared by BSG Ecology (see **Appendix 2**). This is because the reader is cross referenced back to the relevant information in the appropriate section of this Draft HMMP;
 - The provision of a phasing strategy. This is because phasing is not applicable to the development; and
 - Urban habitats in the Statutory Biodiversity Metric that have low or very low habitat distinctiveness (i.e., artificial or sealed surfaces, introduced shrub and ornamental hedgerows).
- 1.6 The content of the HMMP is structured as follows:
- **Section 2** provides a general description of the Site;
 - **Section 3** describes habitats of ecological value, which will subsequently become Management Features;
 - **Sections 4 to 9** describe in detail the six Management Features, which include objectives and creation and/or management prescriptions and monitoring for these features;
 - **Section 10** provides suggested legal and funding mechanisms for delivery of the Draft HMMP, and provides suggested details of annual reporting and review of the HMMP;

- **Section 11** provides a five-year Action Plan which summarises all habitat creation and management prescriptions and indicates the timing and year in which they are to be carried out; and
- **Section 12** provides a Habitat Monitoring Plan which provides the suggested frequency in which habitat monitoring should be undertaken for each habitat type.

2 Site description

Location

- 2.1 The location of the Site, subject to this Draft HMMP, is shown on the baseline habitat and proposed habitat plans in **Figures 1 and 2, Section 14**. The Site boundary is approximately 10.7 hectares (ha) in size, and it is located adjacent to the east of Lizard Lane, Whitburn, South Tyneside. To the east of the Site is the A183 and to the north of the Site is Kitchener Road. The Site is centred on an Ordnance Survey grid reference (OSGR) of NZ 40564 63396.

Ownership/tenure

- 2.2 The landowner of the land subject to this Draft HMMP is Story Homes.

Public Rights of Way

- 2.3 There are no Public Rights of Way (PRoW) within the Site.

Habitats

- 2.4 The Site is made up of:
- Modified grassland; and
 - Mixed scrub;
- 2.5 Full habitat descriptions can be found within the ecological impact assessment (EclA) report (BSG Ecology, 2026a). The habitat survey and condition assessment were undertaken by Senior Ecologist Hannah Breadin ACIEEM. Hannah has worked as a professional ecologist for over 11 years, is a competent botanical surveyor with FISC Level 4, and has completed numerous habitat surveys across the north-east of England. Refer to **Figure 1, Section 14** for the location of baseline habitats within the Site.
- 2.6 The modified grassland and mixed scrub on Site are not considered to conform to a definition of a Habitat of Principal Importance/Priority Habitat type (BRIG, Ed. Ant Maddock, 2011).
- 2.7 A brief summary of potentially relevant protected and otherwise notable species, and habitats, as of May 2025 is given in **Table 1**. A more comprehensive discussion of species associated with the Site is provided in the EclA report (BSG Ecology, 2026a).

Table 1: Summary of ecological receptors and legislation/planning policy

Ecological Receptor	Summary of findings	Legislation and relevant national planning policy
Habitats		
Modified grassland	The majority of the Site is made up of modified grassland and is 10.7 ha in size. The sward was dominated (more than 80%) by perennial rye grass <i>Lolium perenne</i> with occasional Yorkshire fog <i>Holcus lanatus</i> , cock's foot <i>Dactylis glomerata</i> and soft brome <i>Bromus hordeaceus</i> . Herbs made up less than 5% of the sward, with cow parsley <i>Anthriscus sylvestris</i> , common sorrel <i>Rumex acetosa</i> and white clover <i>Trifolium repens</i> recorded rarely. No bare ground was recorded.	-
Mixed scrub	A total of 0.02 ha of mixed scrub is present on Site and is located along the western boundary forming part of the Lizard Lane	-

	roadside verge. Species include hawthorn <i>Crataegus monogyna</i> , bramble <i>Rubus fruticosus</i> agg, rose <i>Rosa</i> sp. and blackthorn <i>Prunus spinosa</i> .	
Protected species		
Nesting birds	Birds are known to breed within the Site, including species listed as Birds of Conservation Concern (BoCC) (Stanbury <i>et al</i>, 2021): - Amber listed species: meadow pipit <i>Anthus pratensis</i>, common whitethroat <i>Sylvia communis</i>, woodpigeon <i>Columba palumbus</i> and wren <i>Troglodytes troglodytes</i>; - Red listed species: grasshopper warbler <i>Locustella naevia</i>. These birds were reliant on mixed scrub present within the Site and scattered scrub immediately off-site to the north.	The Conservation of Habitats and Species Regulations 2017 (as amended). Section 40 & 41 of the NERC Act 2006.
Birds – over-wintering	Significant numbers of non-breeding curlew use the Site during the wintering period (November – February) and the autumn passage period (August – October) to loaf and forage. Other non-breeding waders also use the Site but in numbers of less significance, including golden plover and lapwing.	The Conservation of Habitats and Species Regulations 2017 (as amended). Section 40 & 41 of the NERC Act 2006.
Hedgehog	The Site and off-site private gardens are suitable for foraging hedgehogs. Hedgehog was recorded on Site in 2025.	Wildlife and Countryside Act 1981 (as amended).

Landscape character

- 2.8 The 10.7 hectare (ha) Site is located on the northern edge of Whitburn village in South Tyneside, positioned between the built edge of the settlement to the south and agricultural land extending toward Cleadon Hills to the north and west. The Site occupies a strategic position within the broader Cleadon Hills landscape, an area of elevated ground that forms one of the highest points in South Tyneside and serves as an important recreational and landscape resource.
- 2.9 The Site is bounded by Mill Lane (A183) to the east, providing the primary vehicular access route and connection to the wider highway network.
- 2.10 Lizard Lane defines the western boundary of the Site, functioning as a rural road that provides access to surrounding agricultural properties. It connects the village centre to the south and extends northward toward Marsden Quarry and the Cleadon Hills plateau. The existing residential area of Whitburn lies to the south, with Marsden Primary School situated just beyond the Site's southern boundary, establishing a clear transition between developed areas and the proposed settlement extension.

Designations

- 2.11 The Site is not subject to any statutory nature conservation designations; however, it is located partially within a Wildlife Corridor, identified in local policy 35: *Delivering Biodiversity Net Gain* (this policy is also considered to be the Wildlife Corridor Network. A total of 4.31 ha of the Site is included within the wildlife corridor. This mainly incorporates land within the north of the Site where the corridor

extent contours at its southerly point and extends east to west to other land offsite. The extent of wildlife corridor within the Site is made up of modified grassland, managed as a short-term grass ley.

- 2.12 Whilst there are statutory and designated sites within the surrounding landscape, they are not considered relevant to the Site due to distance and the lack of ecological connectivity.
- 2.13 Further details of statutory and non-statutory designated sites can be found in the EcIA (BSG Ecology, 2026a).

3 Selection of Management Features

3.1 The management features are identified below:

- Feature 1: Modified grassland (creation);
- Feature 2: Mixed scrub (enhancement);
- Feature 3: Mixed scrub (creation);
- Feature 4: Native hedgerows (creation);
- Feature 5: Individual trees (creation); and
- Feature 6: Sustainable Urban Drainage Systems (creation)

3.2 The above management features have been selected based on existing knowledge of the main nature conservation interests of the Site, the projected vision for the long-term habitat creation and management of those features (areas) proposed, and their contribution to the biodiversity gain of the proposed development. The locations of the management features are shown on the proposed habitat plan on **Figure 2, Section 14** and the landscape masterplan provided in **Appendix 2**. The justification for each feature's selection is provided in more detail in subsequent sections.

Structure for management feature entries

3.3 Having identified six management features, and the areas in which they are located, **Sections 3 to 9** of this report describe management objectives that are recommended to enable the successful delivery of these objections.

3.4 The terms used are defined as follows:

Management objective

3.5 This is a clear, site-specific description of the desired condition for each feature and how it will be attained. It includes the following:

- *Management Vision*: A description of a feature in favourable (target) condition in the short to medium term.
- *Targets*: Targets are linked to the management vision. They provide the evidence required to determine whether or not the target condition is being met and allow progress to be monitored. Targets will be both achievable and quantifiable, with upper and lower limits set wherever possible.
- *Current Status*: This provides a summary of the current status of each feature.
- *Explanation of Targets*: This part explains why the targets have been set (if applicable) and describes the actions required to achieve the desired target condition, taking into consideration the current status and potential risk factors that might affect target condition from being achieved.

Habitat creation, enhancement, management and monitoring prescriptions

3.6 The following definitions of habitat creation, enhancement, management and monitoring are included below to provide clarity:

- Habitat creation is the work required to create new habitat where it does not currently exist (such as creation of other neutral grassland habitat on former species-poor modified grassland, and creation of broadleaved woodland);
- Habitat enhancement relates to habitats retained and subsequently restored/enhanced to higher distinctiveness (e.g. elevation of poor ditch to moderate condition);
- Management prescriptions are recommendations put forward to help achieve the desired management vision of created and restored habitats; and

- Monitoring prescriptions allow progress against the vision to be charted, and if appropriate, inform refinement to management prescriptions to bring better outcomes.

4 Feature 1: Modified grassland (creation)

Management objective

- 4.1 The subsections below provide the framework for the management objective.

Management vision

- 4.2 Several areas of modified grassland will be created within the proposed development, the majority of which will be used for amenity in the form of public open space. This amenity areas of modified grassland are located within the centre of the Site and near the proposed residential plots, as shown on the landscape masterplan as “species-rich amenity/mown grass” (see **Appendix 2**). These parcels will be sown with Emorsgate EL1 mix (or similar)¹. Although these parcels will be sown with a species-rich mix that is tolerant to more intensive mowing regimes, it is expected that these parcels of grassland will only achieve poor condition due to recreational impacts from the new residents. Due to these areas being in amenity usage and there not being a specific requirement for species-richness, this is not a selected management feature no further management prescriptions are detailed for poor condition modified grassland. However, it is considered that areas of modified grassland in poor condition can still follow the same creation, management and monitoring prescriptions as per **Table 3**.
- 4.3 Other larger parcels of modified grassland will be created within the Site, targeted for moderate condition. These areas are located to the north and to the west. These areas are shown on the landscape masterplan as “species-rich meadow grass” (see **Appendix 2**). These parcels will be sown with Emorsgate EM3 mix (or similar)². The species mix will also include yellow rattle *Rhinanthus minor* in order to control vigorous grasses due to its semi-parasitic characteristics. The species mix selected is able to establish in conditions where precise soil characteristics have not been established before sowing.

Target

Create modified grassland in moderate ecological condition

- 4.4 Modified grassland is the appropriate habitat for areas which may be subject to some recreational use. The modified grassland parcels will have a diverse species composition made up of 20% native wildflowers and 80% slow growing grasses.
- 4.5 A target condition of ‘moderate’ has been assigned to proposed areas of modified grassland that are not considered to be focal points for amenity and recreational usage. These will be predominately situated to the north and west of the Site where a more species-rich mix will be sown, located on the edges of the proposed development. Although some recreational footpaths are proposed within these areas, it is considered that these footpaths will deter access to the main species-rich grassland areas. Additionally, an appropriate mowing regime is to be adopted which will exclude the immediate verges (approximately 2 m) from the footpath that are regularly mown (these areas are considered part of the modified grassland – poor condition area). In turn, this will extend the buffer from the path to the more species-rich areas of grassland.
- 4.6 To meet moderate condition, the grassland must pass at least three of the Condition Assessment Criteria (including essential criterion A) set out under *Grassland – Low Distinctiveness* in The Statutory Biodiversity Metric - Technical Annex 1 Condition Assessment Sheets and Methodology v 1.0.2 (July 2025) Natural England, 2025. These criteria are:
- A. There are 6-8 vascular plants per m² present, including at least 2 forbs. This criterion is essential for achieving Moderate or Good condition;

¹ Emorsgate EL1 Flowering Lawn Mixture [Available Online: <https://wildseed.co.uk/product/mixtures/complete-mixtures/special-habitat-mixtures/flowering-lawn-mixture/>].

² Emorsgate EM3 Special General Purpose Meadow Mixture [Available Online: <https://wildseed.co.uk/product/mixtures/complete-mixtures/general-purpose-meadow-mixtures/special-general-purpose-meadow-mixture/>]

- 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;
- C. Any scrub present accounts for less than 20% of the total grassland area. (Some scattered scrub such as bramble *Rubus fruticosus* agg may be present;
- D. Physical damage is evident in less than 5% of the 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;
- E. Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens);
- F. Cover of bracken *Pteridium aquilinum* is less than 20%; and
- G. There is an absence of invasive non-native plant species (as listed on Schedule 9 of WCA).

Current status

- 4.7 All modified grassland habitat will be newly created once the ground works are completed.

Explanation of targets

- 4.8 Modified grassland in moderate condition will be created in areas situated away from focal amenity grassland areas. The grassland mix will be sown with an Emorsgate EM3 mix (or similar) which contains a reasonable species diversity (minimum of 6 plant species per m²); this is essential in order to meet moderate target condition per criterion A.
- 4.9 The grassland will need to be cut twice a year, and the arisings (cuttings) removed to maintain species diversity and low nutrient levels. Cutting will follow a traditional hay meadow management regime whereby the grassland will be left to grow from April to late summer (late July or August) and cut in late summer or early autumn. The arisings left over from the cuttings should be allowed to rest for no more than five days, this allows seeds held within the arisings to settle out of the plant material and into the soil below. After this period the arisings must be removed and responsibly disposed of to prevent nutrient build up and maintain a low level of nutrients within the soil. A second cut will be undertaken in early Spring (i.e., March). A third cut can be completed in the Autumn if required.
- 4.10 Cutting is necessary to prevent the grassland from being encroached by ruderal plants or scrub. Avoiding any cutting during the key growing, flowering and seeding period of April to July will allow the wildflowers to grow and set seed and will allow other species (such as insects) to make use of the flowers and habitat structure.
- 4.11 Injurious weeds³ will only be tolerated in low densities so that they do not become too numerous at the expense of more desirable grassland indicator species. Invasive non-native species will not be tolerated at all. Weed control will be via targeted hand pulling or spot treatment with a suitable herbicide.
- 4.12 Invasive and non-native species will be managed either using targeted hand pulling or spot treatment with a suitable herbicide.
- 4.13 Apart from this spot treatment and during initial habitat creation, there will be no herbicide fertiliser or pesticide applications at all.
- 4.14 **Table 2** details the creation, management and monitoring prescriptions for modified grassland in moderate condition.

³ Common ragwort *Senecio jacobaea*, Broad-leaved dock *Rumex obtusifolius*, Curled dock *Rumex crispus*, Creeping thistle *Cirsium arvense*, Spear thistle *Cirsium vulgare*.

Table 2: Creation, management and monitoring prescriptions for modified grassland (moderate condition)

Project 1a: Ground preparation and seeding for modified grassland	
Purpose	To prepare soils in readiness for seeding.
Responsibility	Landscape Contractor (LC)
Equipment and materials	Petrol driven rotovator, method of dispersing seed by hand, lawn roller, rakes to prepare the surface for seeding. Native, flower-rich, grassland meadow seed mix (e.g., Emorsgate EM3 mix)
Methodology	Grassland will be established through the sowing of an appropriate seed mix to the specification and method described by the seed merchant. However, in summary, this is likely to involve the following: <i>Soil Preparation</i> The areas to be seeded will be cultivated to an approximate depth of 100 mm using a tractor mounted plough and disc harrow to create a fine tilth seed bed. <i>Seeding</i> Seed will be broadcast at the required rate by hand. Sand will be used to bulk out the seed for easier sowing. The seeded areas will be lightly rolled using a Cambridge roller (or similar) to achieve contact with the soil. Seeding should be carried out in autumn or spring. All operations to be undertaken when the soil is moist but not waterlogged. After seeding, spot-treat weeds as required using a foliar applied translocated herbicide.
Timing	In April or September / October to achieve best results.
Frequency	Complete once earthworks and final ground levels have been achieved.
Project 1b: Manage modified grassland to moderate condition	
Purpose	Ensure establishment and function of grassland.
Responsibility	LC
Equipment	Cut and collect mower and tine rake.
Methodology, timing and frequency	In year 1, the grassland should be mown or trimmed every 6 weeks during the growing season to allow the sward to establish and consolidate. From year 2 onwards: the grassland should be mown or strimmed twice per year, once in late August and once in late March. There should be no cutting between April and July. There should be no fertiliser, herbicide or pesticides applied at any time. All arisings to be removed from site.
Project 1c: Monitor modified grassland	
Purpose	Ensure targets for modified grassland are met.
Responsibility	Site Ecologist (SE)
Methodology	Plan a walked transect route that covers each area of grassland.

	Undertake a walkover that covers all accessible areas of retained and newly created modified grassland habitat and score them against each of the condition assessment criteria (DEFRA, 2025). In evenly spaced 1 m² quadrat survey points in each grassland area, record the following: • The composition of plants using a DAFOR scale; • Average sward height; • Percentage cover of bare ground; and • The presence and % cover of any undesirable weeds and invasive non-native plant species. Additionally, note the presence of any invasive non-native plant species AND large stands of undesirable weeds (>3 m² i.e. 1 m x 3 m) anywhere within grassland parcels.
Timing	Ideally mid-June to mid-July (i.e., prior to cutting).
Frequency	Monitor in years 1 to 5, then at years 10, 15, 20 and 30 to ensure adequate establishment and appropriate management of the feature to meet target condition.
Risks and Remedial action	Risks: poor habitat establishment, influx of injurious/undesirable weeds; introduction of invasive, non-native species; recreation pressures causing damage to habitat. <u>Remedial action:</u> Review management methods if modified grassland targets are not being met. This may include, for example: further seeding if herb frequency is low and / or changes to the cutting frequency to reduce nutrient levels. Consult suitably experienced specialist contractor on the eradication of invasive, non-native weeds if presence is confirmed.

5 Feature 2: Mixed scrub (enhancement)

Management objective

- 5.1 The subsections below provide the framework for the management objective.

Management vision

- 5.2 A small section of mixed scrub (0.02 ha) is present on Site located on the western boundary. It is proposed that the existing area of scrub is improved from its current state of poor condition to a target condition of moderate.
- 5.3 Enhancements to the existing area of mixed scrub include planting new specimen saplings in order to increase its age and structural diversity. Bramble will be reduced to prevent it outcompeting other native specimens. The native specimens will provide important structural habitat for a range of fauna, including birds, amphibians and invertebrates. The scrub will provide places of refuge for animals, as well as foraging habitat.
- 5.4 Existing mixed scrub is shown on the current landscape masterplan as retained under a dark green filled parcel on the western boundary (**Appendix 2**).

Target

Enhance mixed scrub from poor condition to moderate condition

- 5.5 in The Statutory Biodiversity Metric - Technical Annex 1 Condition Assessment Sheets and Methodology v 1.0.2 (July 2025) outlines the criteria for mixed scrub. These are:
- A. The parcel closely matches the UKHab description. At least 80 % of scrub is native and there are at least three native woody species. No single species comprises more than 75% of the cover;
 - B. There is a good age range – all of the following are present: seedlings, young shrubs and mature shrubs;
 - C. There is an absence of invasive non-native species (as listed on Schedule 9 of WCA) and undesirable species⁴ make up less than 5% of ground cover;
 - D. The scrub has a well-developed edge with scattered scrub and tall grassland and or forbs present between the scrub and the adjacent habitat; and
 - E. There are clearings glades or rides present within the scrub, providing sheltered edges.
- 5.6 With enhancement measures it is expected that this feature will achieve additional criteria A and B.

Current status

- 5.7 The existing area of mixed scrub on Site is in poor condition. It only passed one (C) out of the five criteria (absence of invasive non-native species).

Explanation of targets

- 5.8 The objective for this feature is to increase species diversity through the planting of young shrubs. It is considered that the additional planting as well as thinning of existing bramble will increase its biodiversity value and achieve conditions A and B which will enhance the feature to moderate condition.
- 5.9 The scrub species to be used will include a range of woody species which will create a diverse vertical structure due to differences in growth rate. These will be sourced from a reputable UK based supplier of native stock.

⁴ e.g. cherry laurel *Prunus laurocerasus*, snowberry *Symphoricarpos* spp., buddleia *Buddleja* spp., cotoneaster *Cotoneaster* spp., Spanish bluebell *Hyacinthoides hispanica* and hybrid bluebells *Hyacinthoides x massartiana*

- 5.10 The following native shrub species are suggested which complement the existing species found within this feature (hawthorn, blackthorn and bramble):
- Gorse *Ulex europaeus*;
 - Dogwood *Cornus sanguinea*;
 - Dog rose *Rosa canina*; and
 - Guelder rose *Viburnum opulus*.
- 5.11 Woody species will be planted following the preparation of the ground. Injurious weeds will only be tolerated in low densities so that they do not become too numerous. Over time, woody species will cast shade over the grassland species, but the creation of clearings will allow grassland to persist in small areas of the scrub.
- 5.12 Non-native / undesirable plant species (such as bramble *agg*) which are currently present within this feature are often highly competitive and may slow development of native shrubs and trees. Monitoring the presence of these species will trigger proactive management to minimise competition in planted areas
- 5.13 **Table 3** below details the enhancement, management and monitoring prescriptions for mixed scrub.

Table 3: Enhancement, management and monitoring prescriptions for mixed scrub

Project 2a: Mixed scrub ground preparation and planting	
Purpose	To enhance mixed native scrub habitat from poor condition to moderate condition.
Responsibility	LC
Equipment and materials	Native shrub species, biodegradable tree guards and hand tools for planting such as spades.
Methodology	Scrub planting shall be undertaken as per Appendix 2. This is likely to involve the following: • Mark out planting areas; • Aim to provide 80% coverage of the Mixed Scrub area; • Dip the roots of transplants into a mycorrhizal root dip; • Transplants to be individually planted at approximately 1.5 m centres, with planting compost added if appropriate. Roots should be completely soaked before planting. Transplants will be planted to the existing nursery root collar level; • Each transplant will be protected by a Rainbow Bio-spiral biodegradable spiral guard (or similar). The transplants and spiral guards will be supported by a single 750 mm long bamboo cane, 15 mm diameter; driven into the ground to a minimum depth of 150 mm, secured using natural fibre ties; and • Native shrub species will be used and sourced from a reputable UK based supplier; and All operations to be undertaken when the soil is moist but not waterlogged.
Timing	November to February (avoid frosty conditions)
Frequency	Complete once earthworks and final ground levels have been achieved.
Project 2b: Manage mixed scrub to moderate condition	
Purpose	To maintain the new specimens planted within the existing mixed scrub habitat.
Responsibility	LC, SE
Equipment	Chainsaws, strimmers and brushcutters.

Methodology, timing and frequency	September / October (no works within breeding bird season March-August inclusive). SE and LC to co-sign on areas for localised clearance / thinning. LC to undertake coppicing and removal of scrub in co-signed areas. The aim will be to create sheltered edges by cutting woody vegetation and grassland low to the ground and to encourage varied age structure of woody vegetation. LC to control undesirable scrub species (such as bramble <i>agg</i>) to prevent spreading and outcompeting other scrub species. Removed material will be used to create habitat piles on the margins of the scrub habitats in areas deemed suitable by SE.
Project 2c: Monitor mixed scrub	
Purpose	To monitor the area coverage and condition of mixed scrub to assess performance against net gain targets.
Responsibility	SE
Methodology	Undertake a walkover that covers all accessible areas of mixed scrub habitat and score them against each of the condition assessment criteria (DEFRA, 2024). The walkover will record: • The area covered by mixed scrub; • the composition of woody plants using a DAFOR scale; • age range of woody plants (i.e., sapling, young, semi-mature, mature) • the presence of clearings and a well-developed edge with scattered scrub and grassland/forbs; and • the presence and % cover of any injurious weeds and invasive, non-native plant species. Additionally, note the presence of any invasive, non-native plant species and large stands of injurious weeds (> 3 m² i.e. 1 m x 3 m), anywhere within the mixed scrub. Note any failing shrubs and flag a suitable replacement species. Investigation into the reason for failure may be necessary. The above will be mapped and reported, with reference to targets, as well as any remedial action to be undertaken. A short report, suitable for submission to the planning authority, will be produced by SE in monitoring years. Updated biodiversity calculations using the Statutory Biodiversity Metric will be provided alongside the report.
Timing	Mid-June to mid-July.
Frequency	Monitor yearly between years 1 to 5, then at years 10, 15, 20 and 30 to ensure adequate establishment and appropriate management of the feature to meet target condition. If plantings fail and replacement planting is required, then additional monitoring may also be required between years 5 and 10.
Risks and Remedial action	<u>Risks</u> Poor habitat establishment (shrub failure), drought, influx of injurious weeds; introduction of invasive, non-native species; recreation pressures causing damage to habitat. <u>Remedial Action</u> Review management prescriptions if target condition and area is not being met. Replace failed shrubs as appropriate. Undertake intermittent watering during extended periods of dry weather. Fence areas of mixed scrub from the public

	if damage occurs. Consult suitably experienced contractor on the eradication of invasive, non-native weeds if presence is confirmed.
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6 Feature 3: Mixed scrub (creation)

Management objective

- 6.1 The subsections below provide the framework for the management objective.

Management vision

- 6.2 Native mixed scrub creation will comprise of shrub planting that provides important structural habitat for a range of fauna, including birds, amphibians and invertebrates. The scrub will provide places of refuge for animals, as well as foraging habitat.
- 6.3 The management vision of the larger area mixed scrub forming the northern boundary of the Site is desired to achieve a higher ecological status (good condition) through the creation of glades, providing additional sheltered edges and ecological niches.
- 6.4 Within the landscape masterplan, native mixed scrub is referred to as “mixed native shrubs” (see **Appendix 2**).

Target

Create mixed scrub to good condition

- 6.5 The created native mixed scrub within the north of the Site will be managed to good condition. This area of scrub will be managed to meet all criteria A – E of the Condition Assessment Criteria *Scrub* in The Statutory Biodiversity Metric - Technical Annex 1 Condition Assessment Sheets and Methodology v 1.0.2 (July 2025). These are:
- A. The parcel closely matches the UKHab description. At least 80 % of scrub is native and there are at least three native woody species. No single species comprises more than 75% of the cover;
 - B. There is a good age range – all of the following are present: seedlings, young shrubs and mature shrubs;
 - C. There is an absence of invasive non-native species (as listed on Schedule 9 of WCA) and undesirable species⁵ make up less than 5% of ground cover;
 - D. The scrub has a well-developed edge with scattered scrub and tall grassland and or forbs present between the scrub and the adjacent habitat and
 - E. There are clearings glades or rides present within the scrub, providing sheltered edges.

Create mixed scrub to moderate condition

- 6.6 The created native mixed scrub in other areas within the Site (excluding the area forming the northern boundary) will be managed to moderate condition. In reference to the criteria set out above, scrub will be managed to meet criteria A, B and C.
- 6.7 The following native shrub species are suggested for both targets:
- Hawthorn;
 - Blackthorn;
 - Gorse;
 - Dogwood;
 - Dog rose; and
 - Guelder rose

Current status

- 6.8 Mixed scrub habitat will be newly created once the ground works are completed.

⁵ e.g. cherry laurel *Prunus laurocerasus*, snowberry *Symphoricarpos* spp., buddleia *Buddleja* spp., cotoneaster *Cotoneaster* spp., Spanish bluebell *Hyacinthoides hispanica* and hybrid bluebells *Hyacinthoides x massartiana*

Explanation of targets

- 6.9 The objective for this feature is to establish and maintain mixed scrub and associated grassland clearings. Over time, in the absence of management, scrub will form a dense thicket that is of similar age and possibly uniform species composition. This will be of limited ecological value compared to what could potentially be achieved. Management should therefore focus on establishing a varied structure with diverse age range of shrubs and selection of species that are beneficial to wildlife. To maintain a mosaic of this habitat in which scrub will be the most abundant, but not dominant feature. Management (e.g., cutting) will be required to inhibit scrub establishment and maintain a variety of age ranges and create new clearings of tussocky grassland. Management around the edge of parcels should promote limited natural gradation and some isolated scattered scrub at grassland interfaces, but not to a level that could impact on the condition assessment of the grassland (see above).
- 6.10 The scrub species to be used will include a range of woody species which will create a diverse vertical structure due to differences in growth rate. These will be sourced from a reputable UK based supplier of native stock. Bramble will not be planted as it is already present on Site and can colonise naturally without any intervention.
- 6.11 Woody species will be planted following the preparation and seeding of the ground. Injurious weeds will only be tolerated in low densities so that they do not become too numerous at the expense of more desirable grassland species. Over time, woody species will cast shade over the grassland species, but the creation of clearings will allow grassland to persist in small areas of the scrub.
- 6.12 Non-native / undesirable plant species (such as bramble *agg*) are often highly competitive and may slow development of native shrubs and trees. Monitoring the presence of these species will trigger proactive management to minimise competition in planted areas.
- 6.13 The area of scrub targeted for good condition will also include the creation of glades within the scrub. This will create sheltered areas which are known to be of benefit to birds. The sheltered areas will be managed appropriately to avoid these glades from closing in time.
- 6.14 **Table 4** below details the creation, management and monitoring prescriptions for mixed scrub.

Table 4: Creation, management and monitoring prescriptions for mixed scrub

Project 3a: Mixed scrub ground preparation and planting	
Purpose	To create mixed native scrub habitat in good condition. To create mixed native scrub habitat in moderate condition
Responsibility	LC
Equipment and materials	Native scrub species, biodegradable tree guards and hand tools for planting such as spades.
Methodology	Scrub planting shall be undertaken as per Appendix 2. This is likely to involve the following: • Mark out planting areas. Avoid planting in rows. For good condition scrub where glades are marked on the planting plan, leave a gap between shrub planting so as to create a natural glade that can be managed accordingly; • Aim to provide 80% coverage of the Mixed Scrub area; • Dip the roots of transplants into a mycorrhizal root dip. • Transplants to be individually planted at approximately 1.5 m centres, with planting compost added if appropriate. Roots should be completely soaked before planting. Transplants will be planted to the existing nursery root collar level; • Each transplant will be protected by a Rainbow Bio-spiral biodegradable spiral guard (or similar). The transplants and spiral

	guards will be supported by a single 750 mm long bamboo cane, 15 mm diameter; driven into the ground to a minimum depth of 150 mm, secured using natural fibre ties; • Native shrub species will be used and sourced from a reputable UK based supplier; and • All operations to be undertaken when the soil is moist but not waterlogged.
Timing	November to February (avoid frosty conditions)
Frequency	Complete once earthworks and final ground levels have been achieved.
Project 3b: Manage mixed scrub	
Purpose	To maintain the created scrub habitat in good condition (northern boundary) and moderate condition (all other areas)
Responsibility	LC, SE
Equipment	Chainsaws, strimmers and brushcutters.
Methodology, timing and frequency	<u>Good condition scrub</u> September / October (no works within breeding bird season March-August inclusive). SE and LC to co-sign on areas for localised clearance / thinning. LC to undertake coppicing and removal of scrub in co-signed areas. Coppicing should be done every 3 – 5 years. The aim will be to create sheltered edges by cutting woody vegetation and grassland low to the ground and to encourage varied age structure of woody vegetation. Where glades are marked on the landscape masterplan (see Appendix 2), control any scrub-regrowth LC to control undesirable scrub species (such as bramble <i>agg</i>) to prevent spreading and outcompeting other scrub species. Removed material will be used to create habitat piles on the margins of the scrub habitats in areas deemed suitable by SE. <u>Moderate condition scrub</u> September / October (no works within breeding bird season March-August inclusive). SE and LC to co-sign on areas for localised clearance / thinning. LC to undertake coppicing and removal of scrub in co-signed areas. Coppicing should be done every 3 – 5 years. The aim will be to create sheltered edges by cutting woody vegetation and grassland low to the ground and to encourage varied age structure of woody vegetation. LC to control undesirable scrub species (such as bramble <i>agg</i>) to prevent spreading and outcompeting other scrub species. Removed material will be used to create habitat piles on the margins of the scrub habitats in areas deemed suitable by SE.
Project 3c: Monitor mixed scrub	
Purpose	To monitor the area of coverage and condition of mixed scrub to assess performance against net gain targets.
Responsibility	SE
Methodology	Undertake a walkover that covers all accessible areas of mixed scrub habitat and score them against each of the condition assessment criteria (DEFRA, 2024).

	The walkover will record: • The area covered by mixed scrub; • the composition of woody plants using a DAFOR scale; • age range of woody plants (i.e., sapling, young, semi-mature, mature) • the presence of clearings and a well-developed edge with scattered scrub and grassland/forbs; and • the presence and % cover of any injurious weeds and invasive, non-native plant species. Additionally, to note the presence of any invasive, non-native plant species and large stands of injurious weeds (> 3 m² i.e. 1 m x 3 m), anywhere within the mixed scrub. Note any failing shrubs and flag a suitable replacement species. Investigation into the reason for failure may be necessary. The above will be mapped and reported, with reference to targets, as well as any remedial action to be undertaken. A short report, suitable for submission to the planning authority, will be produced by SE in monitoring years. Updated biodiversity calculations using the Statutory Biodiversity Metric will be provided alongside the report.
Timing	Mid-June to mid-July.
Frequency	Monitor yearly between years 1 to 5, then at years 10, 15, 20 and 30 to ensure adequate establishment and appropriate management of the feature to meet target condition. If plantings fail and replacement planting is required, then additional monitoring may also be required between years 5 and 10.
Risks and Remedial action	<u>Risks</u> Poor habitat establishment (shrub failure), drought, influx of injurious weeds; introduction of invasive, non-native species; recreation pressures causing damage to habitat. <u>Remedial Action</u> Review management prescriptions if target condition and area is not being met. Replace failed shrubs as appropriate. Undertake intermittent watering during extended periods of dry weather. Fence areas of mixed scrub from the public if damage occurs. Consult suitably experienced contractor on the eradication of invasive, non-native weeds if presence is confirmed.

7 Feature 4: Native hedgerow (creation)

Management objective

- 7.1 The subsections below provide the framework for this management objective.

Management vision

- 7.2 All hedgerows will be managed to maintain a minimum height and width of 1.5 m to provide visual screening between different areas of the Site and along the Site boundary. Management of the features will not be overly intense such that the features maintain a semi-natural appearance, whilst providing ecological value.

Native hedgerows (single species)

- 7.3 Some of the newly planted native hedgerows will be a single species hedgerow made through planting European hornbeam *Carpinus betulus*. These will be located near residential properties and amenity areas (see **Appendix 2** for the planting plan). Given their setting within the development, achieving moderate condition or higher may not be an appropriate target for these hedges, but the creation, management and monitoring methods used for more distinctive hedges should still be followed.

Native hedgerows (mixed species)

- 7.4 Other newly planted hedgerows around Site will be created through planting a mix of native species, ensuring that a minimum of four native woody species are planted within any one 20 m section of hedgerow.
- 7.5 Selected woody species (see **Appendix 2**) include:
- Hawthorn;
 - Hazel *Corylus avellana*;
 - Holly *Ilex aquifolium*;
 - Wild privet *Ligustrum vulgare*;
 - Blackthorn;
 - Elder *Sambucus nigra*;
 - Gorse *Ulex europaeus*; and
 - Guelder rose *Viburnum opulus*.

Native hedgerows with trees

- 7.6 Both above types of hedgerows will, in some locations, feature prominent specimen trees (see **Appendix 2**). These trees will be planted less than 20 m apart and managed differently from the rest of the hedgerow, being allowed to take their natural shape. Hedgerows with trees are mostly proposed on the boundaries of the Site, with the longest extent on the western boundary.
- 7.7 Hedgerow features will complement the scrub and grassland in providing resource for foraging birds, bats and small mammals, as well as important early-season nectar and pollen for invertebrates.
- 7.8 Selected specimen species should be native and these could include:
- Oak; *Quercus spp.*
 - Beech *Fagus sylvatica*;
 - Field maple *Acer campestre*;

- Cherry *Prunus spp*; and
- Hazel.

Target

Create native hedgerows and native hedgerow with trees in poor and moderate condition.

- 7.9 Some hedgerows will be managed to meet poor condition (where there is only a single species proposed) the rest will be managed to meet moderate condition. For the purpose of this feature, management methods have only been described for moderate condition as it is considered that all hedgerows will be subject to the same management. Native hedgerows must not fail more than four criteria total and must not fail both criteria in more than one functional group (denoted by letters A – D), as set out in the Condition Assessment Criteria *Hedgerow* in The Statutory Biodiversity Metric - Technical Annex 1 Condition Assessment Sheets and Methodology v 1.0.2 (July 2025). Attributes include:
- A1 Height: >1.5 m from the base of the stem to the top of the shoots on average along the length of the hedgerow;
 - A2 Width: >1.5 m at the widest point on average along the length of the hedgerow.;
 - B1 Gaps (hedge base): <0.5 m between the ground and the base of the canopy along >90% of the length of the hedgerow;
 - B2 Gap (hedge canopy continuity): <10% gaps along the total length of the hedgerow with no canopy gaps exceeding 5 m;
 - C1 Undisturbed ground: >1 m width of undisturbed ground with perennial vegetation should be present along >90% of the length of the hedgerow;
 - C2 Undesirable perennial vegetation: Species such as nettle *Urtica spp*, cleavers *Galium aparine* and docks *Rumex spp*. should not exceed 20% cover of undisturbed ground along the base of the hedgerow;
 - D1 Invasive non-native species: >90% of the hedgerow should be free of invasive non-native species and recently introduced species; and
 - D2 Damage: >90% of the hedgerow should be free of damage caused by human activities.
- 7.10 For native hedgerows with trees to meet moderate condition, the total number of criteria that can be failed is increased to five, however there are two additional criteria to assess. These are:
- E1 Tree Class: There is more than one age class (or morphology) 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 – 50 m of hedgerow; and
 - E2 Tree Health: 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 trees health by damage from livestock or wild animals, pests or diseases, or human activity.

Current status

- 7.11 All hedgerows will be newly created once the ground works are completed.

Explanation of targets

- 7.12 Hedgerows will be managed towards 'poor' and to 'moderate' condition. Hedgerows that are targeted to poor condition are those planted with a single native species.
- 7.13 The value of the hedgerows to a variety of wildlife will improve as the hedgerow matures thus providing a more complex environment that will benefit invertebrates, amphibians, birds and mammals. Establishment will occur quickest when trees and shrubs are healthy and when competition from tall grasses and other competitive plants is minimal.

- 7.14 Non-native / undesirable plant species (including common nettle *Urtica dioica*, cleavers *Galium aparine* and docks *Rumex spp*) are often highly competitive and may slow development of newly planted hedgerow. Monitoring the presence of these species will trigger proactive management to minimise competition with planted hedgerow shrubs. Should invasive species listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) be identified, a specialist contractor would need to be appointed for proper removal and disposal.
- 7.15 **Table 5** below details the creation, management and monitoring prescriptions for all newly planted hedgerow types.

Table 5: Creation, management and monitoring prescriptions for native hedgerows

Project 4a: Hedgerow and specimen tree planting	
Purpose	Plant new native hedgerows and standard trees to the required length.
Responsibility	LC
Equipment and materials	Planting plan, spade, planting stock (see below), compost, guards and canes.
Methodology	Mark out planting beds and dig double staggered hedgerow trenches approximately 800 mm wide and to a depth of approximately 450 mm. Plant stock in a double staggered line ensuring a good mix of selected species is present in any one 20 m section. Plant stock to the root collar and firm well in place, backfilling with one part compost to two parts in verted topsoil. After planting, a thin layer of fine bark is to be spread over the length and breadth of the hedge to discourage colonisation by injurious weeds. Each shrub will be protected from grazing by a Rainbow Bio-spiral biodegradable spiral guard (or similar). The shrubs and spiral guards will be supported by a single 750 mm long bamboo cane, 15 mm diameter; driven into the ground to a minimum depth of 150 mm, secured using natural fibre ties. Stock will be sourced from a reputable UK supplier.
Timing	November to February (avoid frosty conditions)
Frequency	Planting to be achieved throughout the construction period.
Project 4b: Manage hedgerows to poor and moderate condition	
Purpose	To maintain new hedgerows in target condition in line with net gain targets.
Responsibility	LC
Equipment	Chainsaws, strimmers and brushcutters.
Methodology, timing and frequency	Chainsaw for trimming. Allow hedgerow to mature by adopting low-intervention management. Only trim back hedgerow if public access becomes an issue. Consideration will be given to cutting only one side of a hedgerow each year to allow invertebrates to recolonise or rotationally managing different sections of a hedgerow in different years. Rotating the cutting over several years will ensure that invertebrate and bird foraging and breeding resource will always be present and that plants are allowed to flower each year. Hedgerows should be cut after most of the berries have been depleted (late winter e.g., December-February) to prevent loss of important food sources for wildlife such as farmland birds and overwintering birds.

	Retain at least a 1 m undisturbed strip of vegetation along at least 90% of the hedgerow length on at least one side wherever possible, in line with condition assessment criteria for net gain. Specimen trees will be marked out and left unmanaged, save for occasional pruning only if public access becomes an issue. These trees should be allowed to take their natural shape and will not be subject to the same cutting regime as the other hedgerow stock.
Timing	Late winter (preferably January to mid-February), before the breeding bird season starts in March.
Frequency	Five-year rotational programme of maintenance and management.
Project 4c: Monitoring of new hedgerows	
Purpose	To identify condition of hedgerows and assess the need for changing management measures.
Responsibility	SE
Methodology	Undertake a walkover that covers all accessible areas of retained and newly created hedgerow habitat and score them against each of the condition assessment criteria (DEFRA, 2025). Record presence of damaged / diseased trees and non-native / undesirable species and plot location on GPS, to be passed to SC / LA for remedial action. Flag presence of invasive species and evidence of any physical damage (such as the removal of guards) to SC.
Timing	Mid-June to mid-July
Frequency	Monitor yearly between years 1 to 5, then at years 10, 15, 20 and 30 to ensure adequate establishment and appropriate management of the feature to meet target condition. If plantings fail and replacement planting is required, then additional monitoring may also be required between years 5 and 10.
Risks and Remedial action	<u>Risks</u> Poor habitat establishment (shrub/tree failure), influx of injurious weeds; introduction of invasive, non-native species; recreation pressures causing damage to habitat and drought. <u>Remedial Action</u> Where necessary, replacement planting of failed trees, using an appropriate and approved species. Investigation into the reason for failure may be necessary to inform species selection. Removing competitive grasses and weeds from within spiral guards as appropriate; or keep base weed free throughout the season by topping up the overlying layer of bark, or through spot treatment with herbicide and/or hand-pulls. Undertake intermittent watering during extended periods of dry weather. Removing tree/shrub guards and stakes when plants have become established to allow basal growth to develop. Consult suitably experienced contractor on the eradication of invasive, non-native weeds if presence is confirmed.

8 Feature 5: Urban tree (creation)

Management objective

- 8.1 Urban trees that will be planted across the Site do not have a condition target above 'poor'; the management objective does not relate to specific condition assessment criteria as set out in the Statutory Biodiversity Metric. However, creation and management methods are provided to maintain the habitat in favourable ecological condition.

Management Vision

- 8.2 Specimen trees will be planted throughout the Site as frontage, along verges, and within landscaping areas to provide vertical structural interest and important foraging and sheltering habitat for suburban wildlife.
- 8.3 Selected specimen species should be native, and these could include:
- Oak;
 - Beech;
 - Field maple;
 - Cherry; and
 - Hazel.
- 8.4 The following principles will be followed for urban trees:
- Damaged and diseased trees will be replaced; and
 - Consideration will be given to allowing ground flora to develop beneath tree once established.

Current status

- 8.5 All specimen trees will be newly planted once the ground works are completed.
- 8.6 **Table 6** below details the creation, management and monitoring prescriptions for all newly planted urban trees.

Table 6: Creation, management and monitoring prescriptions for urban trees

Project 5a: Hedgerow and specimen tree planting	
Purpose	Plant new urban trees.
Responsibility	LC
Equipment and materials	Planting plan, spade, planting stock (see below), compost, guards and canes.
Methodology	Mark out planting areas per the landscape masterplan and dig pits 1 m x 1 m wide and 900 mm deep. Root barriers are to be employed where planting takes place near underground services. Plant stock to the root collar and firm well in place, backfilling with one part compost to two parts inverted topsoil. After planting, a thin layer of fine bark is to be spread around the base of the tree to discourage colonisation by injurious weeds. Each tree will be protected from grazing by a Rainbow Bio-spiral biodegradable spiral guard (or similar). The trees and spiral guards will be supported by a

	single 750 mm long bamboo cane, 15 mm diameter; driven into the ground to a minimum depth of 150 mm, secured using natural fibre ties. Stock will be sourced from a reputable UK supplier.
Timing	November to February (avoid frosty conditions)
Frequency	Planting to be achieved throughout the construction period.
Project 5b: Maintain and monitor trees	
Purpose	To maintain new trees and replace any that have failed.
Responsibility	LC and SE
Equipment	Chainsaws, strimmers and brushcutters. Recording forms, GPS.
Methodology, timing and frequency	Trees should be allowed to take their natural shape but can be subject to infrequent pruning via chainsaw. Trees should not be pruned during establishment. Undertake a walkover that covers all accessible areas of urban tree planting to find diseased or failing trees. Record presence of damaged / diseased trees and non-native / undesirable species and plot location on GPS, to be passed to SC / LA for replacement planting of an appropriate and approved species. Investigation into the reason for failure may be necessary to inform species selection. Flag presence of invasive species and evidence of any physical damage (such as the removal of guards) to LC.
Timing	Any trimming in late winter (preferably January to mid-February), before the breeding bird season starts in March. Monitoring in May – July inclusive.
Frequency	No set trimming regime. Monitor annually up to and including year 5 to ensure adequate establishment, and then monitoring in years 10, 15, 20 and 30. If plantings fail and replacement planting is required, then additional monitoring may also be required between Years 5 and 10.
Risks and Remedial action	<u>Risks</u> Poor habitat establishment (tree failure), influx of injurious weeds; introduction of invasive, non-native species; recreation pressures causing damage to habitat and drought. <u>Remedial Action</u> Where necessary, replacement planting of failed trees, using an appropriate and approved species. Investigation into the reason for failure may be necessary to inform species selection. Removing competitive grasses and weeds from within spiral guards as appropriate; or keep base weed free throughout the season by topping up the overlying layer of bark, or through spot treatment with herbicide and/or hand-pulls. Undertake intermittent watering during extended periods of dry weather. Removing tree/shrub guards and stakes when plants have become established to allow basal growth to develop.

	Consult suitably experienced contractor on the eradication of invasive, non-native weeds if presence is confirmed.
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9 Feature 6: Sustainable Drainage System (SuDS) (creation)

Management objective

9.1 The subsections below provide the framework for the management objective.

Management vision

9.2 A SuDS basin will be created near the eastern Site boundary (see **Appendix 2**). It will be managed to maintain both hydrological function and provide a wet habitat area that supports species tolerant of occasional inundation which will benefit invertebrates, birds and other wildlife.

Target

Create a SuDS basin to good condition

9.3 To meet good condition, the SuDS basin must pass all of the following criteria listed in the *Urban* set Condition Assessment Criteria in The Statutory Biodiversity Metric - Technical Annex 1 Condition Assessment Sheets and Methodology v 1.0.2 (July 2025):

- 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;
- 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;
- "Invasive non-native plant species (listed on Schedule 9 of the Wildlife and Countryside Act 1981) 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);
- Plant species are mostly native. If non-native species are present, they should not be detrimental to the habitat or native wildlife; and
- The vegetation is comprised of plant species suited to wetland or riparian situations.

Current status

9.4 The SuDS will be newly created following ground works.

Explanation of targets

9.5 To achieve good condition the SuDS must feature varied habitat structure, a varied native species composition suited to occasional inundation and an absence of invasive non-native species. Within the planting plan (see Appendix 2), a species-mix tolerant to wet conditions is proposed (Emorsgate EM8⁶ or similar). Should invasive species listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) be identified, a specialist contractor would need to be appointed for proper removal and disposal.

9.6 **Table 7** below details the creation, management and monitoring prescriptions for the SuDS.

Table 7: Creation, management and monitoring prescriptions for urban trees

Project 6a: Creation of SuDS feature following ground and drainage works.	
Purpose	Create new SuDS feature.
Responsibility	LC

⁶ Emorsgate EM8 Meadow Mixture for Wetlands [Available online: <https://wildseed.co.uk/product/mixtures/complete-mixtures/meadow-mixtures-for-specific-soils/meadow-mixture-for-wetlands/>]

Equipment and materials	Petrol driven rotovator, method of dispersing seed by hand, lawn roller, rakes to prepare the surface for seeding. Native, flower-rich, grassland meadow seed mix tolerant of wetland conditions (Emorsgate EM8 mix).
Methodology	Grassland will be established through the sowing of an appropriate seed mix to the specification and method described by the seed merchant. However, in summary, this is likely to involve the following: <i>Soil Preparation</i> The areas to be seeded will be cultivated to an approximate depth of 100 mm using a tractor mounted plough and disc harrow to create a fine tilth seed bed. <i>Seeding</i> Seed will be broadcast at the required rate by hand. Sand will be used to bulk out the seed for easier sowing. The seeded areas will be lightly rolled using a Cambridge roller (or similar) to achieve contact with the soil. Seeding should be carried out in autumn or spring. All operations to be undertaken when the soil is moist but not waterlogged. After seeding, spot-treat weeds as required using a foliar applied translocated herbicide.
Timing	April, or September to October
Frequency	Sowing to take place during the construction period.
Project 6b: Manage SuDS	
Purpose	Ensure establishment and maintain species-richness of the SuDS basin.
Responsibility	LC
Equipment	Cut and collect mower and tine rake.
Methodology, timing and frequency	In the first year: the sown seed mix will be slow to establish. A flush of annual weeds arising from the soil seed bank would be expected initially. The weeds provide sheltered conditions for seedling establishment and should not be cut back until late summer (and any arisings removed). The wet grassland will then establish. Any residual perennial weeds, such as docks <i>rumex</i> sp., should be dug out. From year 2 onwards: the basin should be mown or strimmed twice per year, once in late March and once in late August. There should be no cutting between April and July to give plants an opportunity to flower and re-seed.
Project 6c: Monitor SuDS	
Purpose	Ensure targets for SuDS are met.
Responsibility	Site Ecologist (SE)
Methodology	Survey the SuDS using condition assessment criteria described above, taking a species list to determine the success of sown mixture. Note overall habitat structure and composition. Record presence of any invasive non-native species using GPS to flag to the LC, who will appoint a specialist contractor to handle the removal and disposal of the weeds.

Timing	Mid-June to mid-July (i.e., prior to cutting).
Frequency	Monitor annually in years 1 to 5, then in years 10, 15, 20 and 30 to ensure adequate establishment and appropriate management of the feature to meet target condition.
Risks and Remedial action	<u>Risks:</u> poor habitat establishment due to hydrology, influx of injurious/undesirable weeds; introduction of invasive, non-native species; recreation pressures causing damage to habitat. <u>Remedial action:</u> Review management methods if targets are not being met. This may include, for example: plug planting of species better suited to typical yearly hydrological conditions (such as sedges or reeds). Consult suitably experienced specialist contractor on the eradication of invasive, non-native weeds if presence is confirmed.

10 Delivery of the HMMP

Reporting and Meetings

- 10.1 There are requirements for monitoring by the Site Ecologist (SE) for specific features as it is only through regular monitoring that management can be appropriately reviewed and suggestions for improvements be made as required. To provide evidence of monitoring and responsive management, periodical reporting will be required, a copy of which will be provided to the planning authority. It is likely that the precise monitoring methodology and frequency of reporting will be subject to an appropriately worded planning condition and may vary from year to year.
- 10.2 Meetings with the planning authority (which may need to involve both the SE and LC) may need to be convened; these will be offered should the reports flag the need for significant remedial action. Further meetings may be required (at the discretion of the planning authority). Any site-based meeting with the LPA will be the most productive if conducted in spring, at which time the progress made can be reviewed and future actions / amendments agreed and committed to in writing, in time for the year's management activities.

Funding and Legal Delivery Mechanism for Management

- 10.3 Habitat creation, enhancement, management and monitoring in this Draft HMMP should be secured through an appropriately worded planning condition and Section 106 agreement.
- 10.4 Where possible to do so, habitat creation and management works identified in this Draft HMMP will start immediately following ground works. This will allow habitats the opportunity to establish early in the life of the development and therefore contribute to the biodiversity interest of the Site and its wider setting as soon as possible.
- 10.5 During the 30-year period covered by this Draft HMMP, Story Homes and subsequently, the Land Management Company will be responsible for implementing this plan.

11 Management Plan

11.1 Table 8 summarises the delivery and monitoring tasks to be undertaken for each management feature as well as responsibility for delivery and timing of works.

Table 8: Action plan for management features

Management Prescription		Responsibility	Timing	Upon completion of the Construction Period	Activities in Each Year post-construction (first five years)				
					Year 1	Year 2	Year 3	Year 4	Year 5
	Feature 1: Modified grassland								
1a	Ground preparation and seeding	LC	April or September / October	✓					
1b	Manage grassland	LC	Every 6 weeks in year 1 only . Relax mowing in Year 2 onwards to twice a year in late March and late August.		✓	✓	✓	✓	✓
1c	Monitor grassland	SE	June to July (i.e., prior to mowing)		✓	✓	✓	✓	✓
	Feature 2: Mixed scrub								
2a	Ground preparation and planting	LC	November to February (avoid frosty conditions)	✓					
2b	Manage mixed scrub	LC & SE	September and October		✓	✓	✓	✓	✓
2d	Monitor mixed scrub	SE	June to July		✓	✓	✓	✓	✓
	Feature 3: All hedgerow types								
3a	Plant new hedgerow	LC	November to February (avoid frosty conditions)	✓					
3b	Manage hedgerows rotationally	LC	Late winter (preferably January to mid-February), before the breeding bird season starts in March		✓	✓	✓	✓	✓
3c	Monitor hedgerows	SE	June to July		✓	✓	✓	✓	✓
	Feature 4: Urban trees								
4a	Plant new trees	LC	November to February (avoid frosty conditions)	✓					
4b	Monitor trees	SE and LC	June to July		✓	✓	✓	✓	✓
	Feature 5: SuDS								
5a	Ground preparation and seeding	LC	April or September / October	✓					
5b	Manage SuDS	LC	Year 1: Single cut in August. Year 2 onwards: strim twice a year in late March and late August.		✓	✓	✓	✓	✓
5c	Monitor SuDS	SE	June to July		✓	✓	✓	✓	✓

Management Prescription		Responsibility	Timing	Upon completion of the Construction Period	Activities in Each Year post-construction (first five years)				
					Year 1	Year 2	Year 3	Year 4	Year 5
	Reporting								
	Reporting	SE	Annual (suggested)	✓	✓	✓	✓	✓	✓

12 Monitoring Plan

12.1 Table 9 summarises the yearly monitoring regime for each management feature detailed above. Monitoring years are suggested and should be agreed via an appropriately worded planning condition.

Table 9: Monitoring timetable for management features

Habitat feature	Monitoring visits (years after on-site HMMP implementation)													
	1	2	3	4	5	6	7	8	9	10	15	20	25	30
Other neutral grassland	✓	✓	✓	✓	✓					✓	✓	✓		✓
Mixed scrub	✓	✓	✓	✓	✓					✓	✓	✓		✓
Urban trees	✓	✓	✓	✓	✓					✓	✓	✓		✓
Native hedgerows	✓	✓	✓	✓	✓					✓	✓	✓		✓
Monitoring report	✓	✓	✓	✓	✓					✓	✓	✓		✓

13 References

Alexander, M. (2015). A Management Planning Guide. CMS Consortium, Talgarth, Wales.

BSG Ecology (2026a). Land off Mill Lane, Whitburn. Ecological Impact Assessment.

BSG Ecology (2026d). Land off Mill Lane, Whitburn. Biodiversity Net Gain Assessment.

DEFRA (2025). Statutory Biodiversity Metric. See Appendix 2.

Natural England (2024) Habitat Management and Monitoring Plan Template [Habitat Management and Monitoring Plan Template - JP058](#)

Natural England (2024) Habitat Management and Monitoring Plan Checklist

Natural England (2026) National Character Area Profiles [Natural England - National Character Area Profiles - National Character Area Profiles](#)

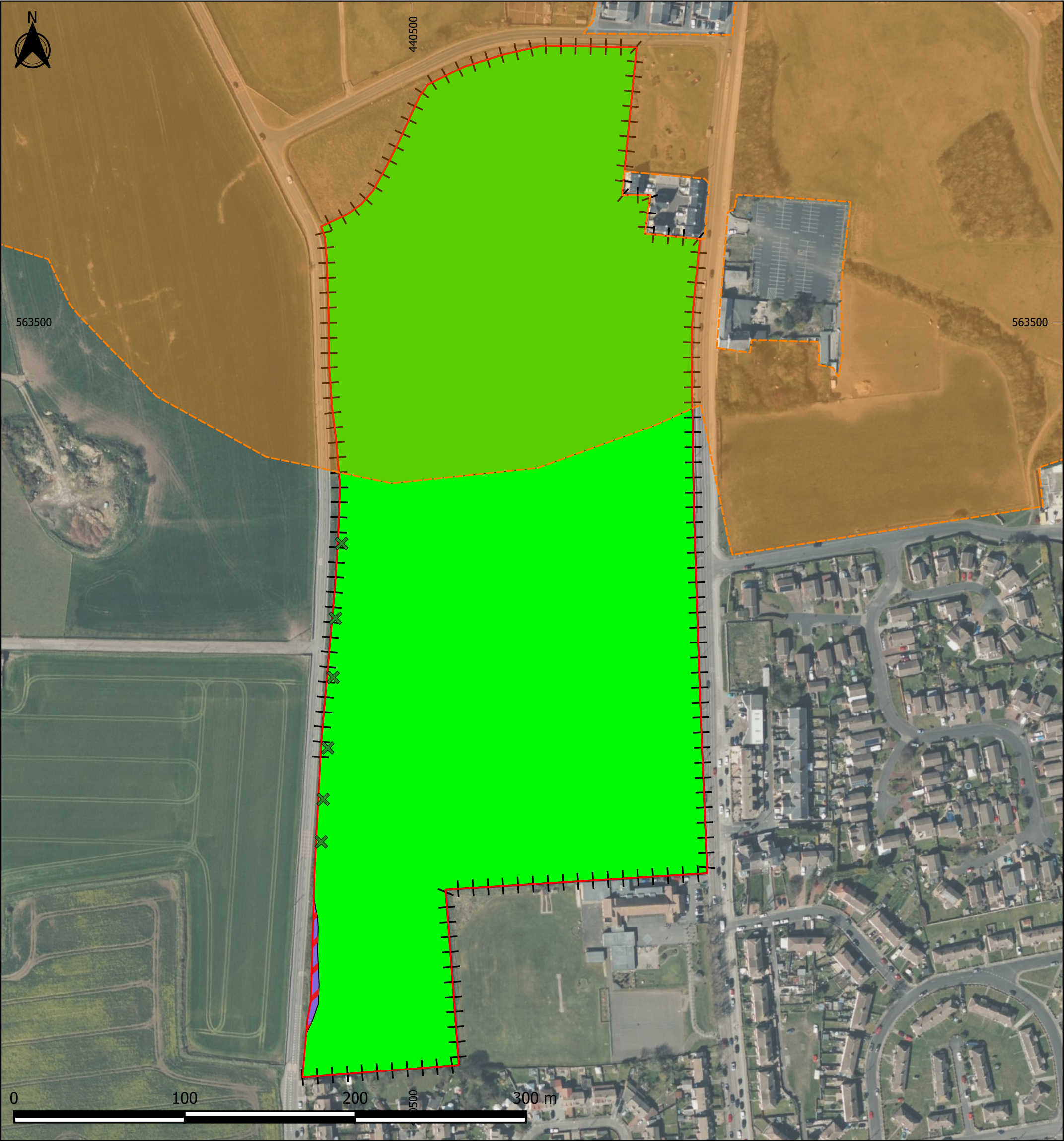
Maddock, A. (2011). UK Biodiversity Action Plan Priority Habitat Descriptions. JNCC.

14 Figures

(Overleaf)

Figure 1: Baseline Habitats

Figure 2: Post-Development Habitats



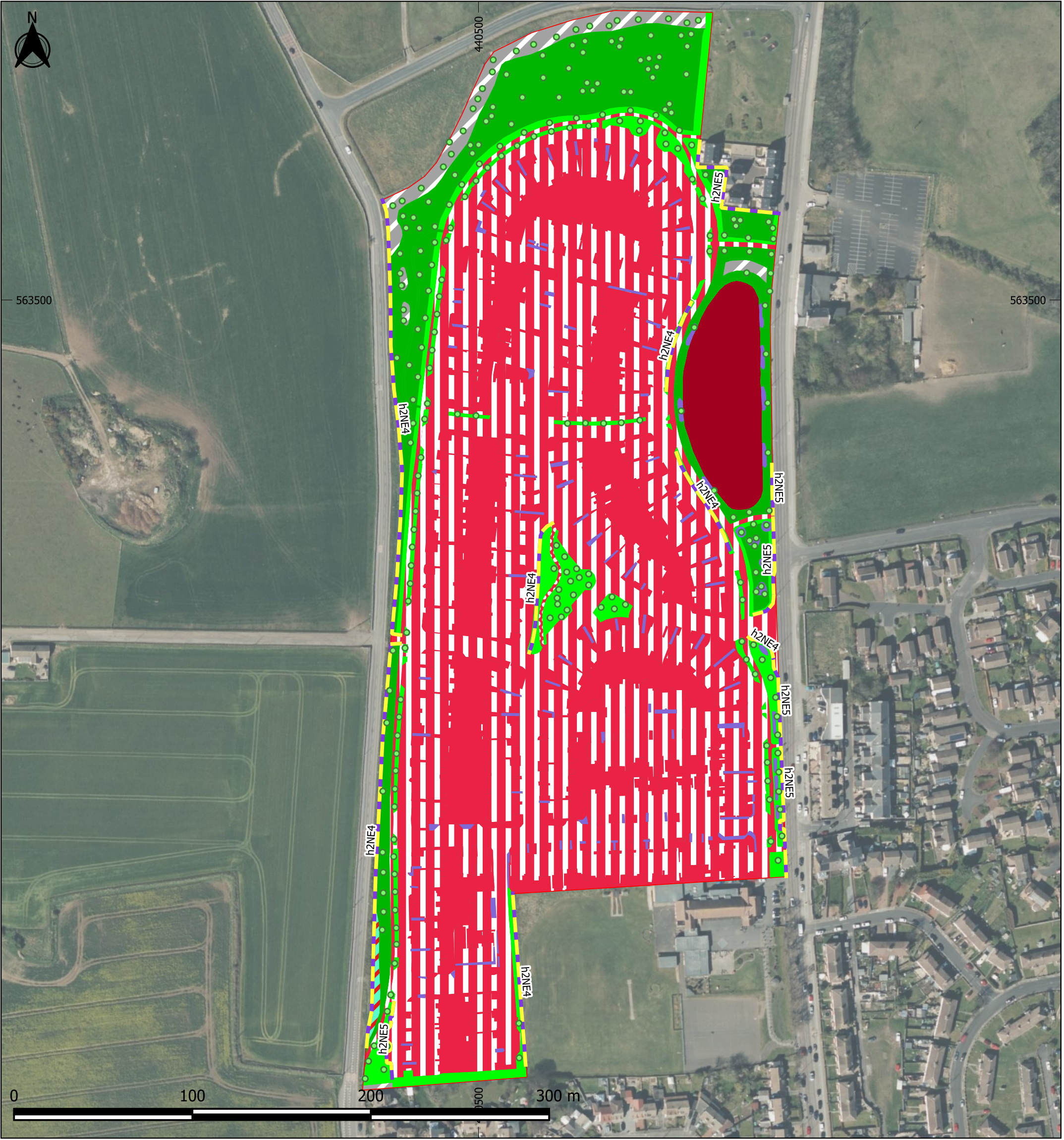
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T: 0191 303 8964
JOB REF: P24-775

PROJECT TITLE
LAND OFF MILL LANE, WHITBURN

DRAWING TITLE
Figure 1: UK Habs baseline habitats

DATE: 17/10/2025
DRAWN: BH
CHECKED: AP
APPROVED: IH
SCALE: 1:2,200
VERSION:1.2

- Legend
- Scattered scrub
 - Fence
 - Mixed scrub
 - Modified grassland
 - Wildlife corridor
 - Site boundary



OFFICE: NEWCASTLE
T: 0191 303 8964
JOB REF: P26-405

PROJECT TITLE
LAND OFF MILL LANE – RESUBMISSION

DRAWING TITLE
Figure 2: Post Development Habitat Plan

DATE: 10/07/2026
DRAWN: MZ
CHECKED: HS
APPROVED: HS
SCALE: 1:2,100
VERSION:1.1

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Projection: OSGB 1936/British National Grid - EPSG 27700

Sources: BSG Ecology survey data

Legend

- | | |
|--|---|
| Proposed Small Urban Tree | Mixed scrub (Created) |
| Native Hedgerow (h2NE5) | Modified grassland (Moderate condition) |
| Native Hedgerow with trees (h2NE4) | Modified grassland (Poor condition) |
| Artificial unvegetated, unsealed surface | Sustainable drainage system |
| Developed land; sealed surface | Vegetated garden |
| Introduced shrub | Site boundary |
| Mixed scrub (Enhanced) | |

Appendix 1: BNG Result Summary

On-site baseline	<i>Area habitat units</i>	21.27	
	<i>Hedgerow units</i>	0.00	
	<i>Watercourse units</i>	0.00	
On-site post-intervention (Including habitat retention, creation & enhancement)	<i>Area habitat units</i>	17.67	
	<i>Hedgerow units</i>	5.21	
	<i>Watercourse units</i>	0.00	
On-site net change (units & percentage)	<i>Area habitat units</i>	-3.60	-16.91%
	<i>Hedgerow units</i>	5.21	N/A
	<i>Watercourse units</i>	0.00	0.00%

Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	<i>Area habitat units</i>	-3.60
	<i>Hedgerow units</i>	5.21
	<i>Watercourse units</i>	0.00
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	<i>Area habitat units</i>	-16.91%
	<i>Hedgerow units</i>	N/A
	<i>Watercourse units</i>	0.00%
Trading rules satisfied?	No - Check Trading Summaries ▲	

Unit Type	Target	Baseline Units	Units Required	Unit Deficit
<i>Area habitat units</i>	10.00%	21.27	23.40	5.72
<i>Hedgerow units</i>	10.00%	0.00	0.00	0.00
<i>Watercourse units</i>	10.00%	0.00	0.00	0.00

Appendix 2: Landscape Masterplan

(Overleaf)

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- KEY**
- Site boundary
- Blue line boundary
- EXISTING LANDSCAPE FEATURES**
- Trees/vegetation to be retained
- Hedgerow to be retained
- Root Protection Area (RPA)
- Existing vegetation to be removed
- Public Right of Way (PROW)
- Existing stone walling to be repaired
- Existing agricultural context views
- Existing cycle routes

- PROPOSED LANDSCAPE FEATURES**
- POS trees (individual and hedgerow)
- Feature trees
- Plot trees
- Single species native hedgerow
- Mixed species native hedgerow
- Ornamental hedgerow mix
- Native mixed shrubs (5+ woody species)
- Glades within native shrubs
- Ornamental/amenity planting to POS
- Indicative ornamental groundcover, shrubs & herbaceous planting
- Species rich meadow grass suitable for location (Emorsgate EM3)
- Species rich amenity/mown grass (Emorsgate EL1)

- Mown paths and verges/varied sward height
- Species rich SuDS grass (Emorsgate EM8)
- Front garden turf (or gravel in areas of unsuitable growth)
- Development plot rear garden grass seed
- Bulb planting
- Footpath - timber edged crushed stone
- Indicative location of LEAP/LAP
- Indicative location of trim trail equipment
- Bow top play railings with 2no. gates TBC
- Timber knee rail 450mm high
- Principle circulation routes
- Green corridor
- Indicative bench location

INDICATIVE PLANT SCHEDULE

Below is an indicative schedule of plants which may be used, amongst others. Exact plant location, species and specification will be determined at the detailed soft landscape design phase.

Feature Trees (POS)

Planted as Extra Heavy Standard 14-16cm girth

Acer freemanii 'Autumn Blaze'
Acer platanoides 'Emerald Queen'
Acer rubrum 'October Glory'
Aesculus hippocastanum
Castanea sativa
Pinus sylvestris
Populus tremula
Quercus palustris

Trees (POS)

Planted as Heavy Standard 12-14cm girth

Acer campestre
Alnus glutinosa
Carpinus betulus
Fagus sylvatica
Gleditsia triacanthos
Pinus sylvestris
Prunus avium
Pyrus calleryana 'Chanticleer'
Quercus robur
Sorbus torminalis
Tilia cordata 'Streetwise'
Ulmus 'New horizon'

Native Trees (within native shrub buffer)

Planted as Standards 8-10cm girth

Acer campestre
Alnus glutinosa
Carpinus betulus
Pinus sylvestris
Prunus padus
Quercus robur
Sorbus aucuparia

Street Trees (development edge and verges)

Planted as Heavy Standard 12-14cm girth

Acer campestre 'Streetwise'
Prunus 'Sunset Boulevard'
Pyrus calleryana 'Chanticleer'
Sorbus aria 'Majestica'
Tilia cordata 'Streetwise'

Plot Trees (to front gardens)

Planted as Heavy Standard 12-14cm girth

Acer griseum
Malus 'Evereste'
Prunus 'Snow Goose'
Prunus subhirtella 'Autumnalis'
Sorbus 'Olympic Flame'

Native Scrub

Native shrub plants B, 60-80cm height; planted at 15m centres on even staggered grid

Species	%
Crataegus monogyna	15
Cornus sanguinea	10
Corylus avellana	15
Hippophae rhamnoides	5
Ilex aquifolium	5
Malus sylvestris	10
Prunus spinosa	15
Rosa canina	5
Viburnum opulus	10
Ulex europaeus	10

Native Hedgerow

Native plants B, 60-80cm height; planted in double staggered row

Species	%
Crataegus monogyna	30
Corylus avellana	15
Ilex aquifolium	5
Ligustrum vulgare	10
Prunus spinosa	20
Sambucus nigra	5
Ulex europaeus	5
Viburnum opulus	10

Ornamental /Single Species Hedgerow (to development edges and front gardens)

Carpinus betulus
Escallonia 'Apple Blossom'
Escallonia 'Iveyi'
Ligustrum ovalifolium
Prunus laurocerasus 'Otto Luyken'
Prunus Lusitanica

Amenity Planting (example shrubs)

Anemranthele lesssoniana
Aucuba japonica
Brachyglottis 'Sunshine'
Ceanothus thyrsiflorus repens
Choisya ternata 'Sundance'
Choisya x dewitteana 'Aztec Pearl'
Cistus x purpureus 'Alan Fradd'
Cornus sanguinea 'Midwinter Fire'
Cornus sericea 'Flaviramea'
Cornus alba 'Kesselringii'
Euonymus fortunei 'Emerald Gaiety'
Hebe 'Autumn Glory'
Hebe 'Great Orme'
Hypericum 'Hidcote'
Mahonia japonica
Miscanthus sinensis 'Morning Light'
Lonicera pileata
Photinia x fraseri 'Little Red Robin'
Potentilla fruticosa
Prunus laurocerasus 'Otto Luyken'
Phormium 'Tricolor'
Stipa gigantea
Viburnum davidii

SPECIES RICH GRASS

Meadow grass areas sown with Emorsgate EM3 Special General Purpose Meadow Mixture
Mix comprises EG1 grass mix with EM3F Wildflower component.
Composition 80% grass, 20% wildflower species

Amenity grass areas sown with Emorsgate EL1 Flowering Lawn Mixture
Species rich grass suitable for regular mowing
Composition 80% grass, 20% wildflower species

SuDS grass areas sown with Emorsgate EM8 Meadow Mixture For Wetlands
Species rich grass suitable seasonally wet soils
Composition 80% grass, 20% wildflower species

Landscape Masterplan

Mill Lane, Whitburn

Client: Story Homes Ltd

DRWG No: P21-2566_EN_0001

SHEET: S1

Drawn by : NW

Date: 17/11/2025

Scale: 1:1000 @ A1

REV: D

Approved by: KC

PEGASUS GROUP

Rev	Date	By	Note
D	2026.07.07	NW	Amends in line with new layout and ecology requirements
C	2026.06.15	NW	Amends in line with new layout and comments
B	2025.12.16	NW	Amends in line with comments
A	2025.12.11	KCH	Amends in line with comments
-	2025.11.17	NW	First draft