ECOLOGY PARTNERSHIP

Biodiversity Net Gain

Land at Hook Meadow, Westergate

The Ecology Partnership, Thorncroft Manor, Thorncroft Drive, Leatherhead, Surrey KT22 8JB

[redacted]

Contents

1.0 Introduction

1.1 The Ecology Partnership was commissioned by Redrow Homes to produce a report to support the discharge of section 6 of Condition 4 from the appeal decision. The red line boundary of the site is shown below in figure 1.

1.2 The site was granted outline planning permission at appeal APP/C3810/W/23/3323858 in December 2023. The appeal was with regard to planning application AL/178/22/OUT. As part of the appeal decision Condition 4 was issued which contained a number of parts with regards to landscape and ecology. This document has been put together to discharge section 6 (vi) of condition 4 with regards to a reserved matters application for the appearance, landscaping, layout and scale (pursuant to outline permission AL/178/22/OUT) for the construction of up to 89 residential dwellings and open space and associated works". Section 6 of Condition 4 is detailed below:

"(vi) A Biodiversity Gain Plan to ensure that there is a minimum 10% net gain in biodiversity within a 30-year period as a result of the development. The net biodiversity impact of the development shall be measured in accordance with the Secretary of State's biodiversity metric as applied in the area in which the site is situated at the relevant time. The content of the Biodiversity Gain Plan shall include the following: (a) Proposals for the on-site biodiversity net gain; and (b) A management and monitoring plan for onsite biodiversity net gain including 30-year objectives, management responsibilities, maintenance schedules and a methodology to ensure the submission of monitoring reports in years 2,5,10,15,20,25 and 30 from commencement of development,

demonstrating how the Biodiversity Gain Plan is progressing towards achieving its objectives, evidence of arrangements and any rectifying measures needed. The development shall be carried out in accordance with the approved Biodiversity Gain Plan."

2.0 Biodiversity Net Gain

2.1 The Site was originally surveyed by The Ecology Partnership in May 2021 and November 2022 for the outline application. An updated baseline assessment was undertaken in April 2024, with habitat classification and condition assessments undertaken with regards to the latest UKHAB and Statutory Metric Guidance. The baseline condition assessments are found within the 2024 update walkover report. For the updated reserved matters scheme the Statutory Metric has been used. The baseline habitats were identified within the Application Site:

- Cropland – Cereal crops;
- Grassland – Modified land (seeded grass at site entrance);
- Grassland - Other neutral grassland (field margins);
- Heathland and shrub - Bramble scrub ;
- Urban – Developed land, sealed surface (Existing vehicular access and residential house drive etc);
- Urban – Vegetated Garden (Within existing residential property);
- Individual trees – Urban tree;
- Individual trees – Rural tree;
- Native Hedgerow;
- Native Hedgerow – associated with bank or ditch;
- Native Hedgerow with trees - associated with bank or ditch; and
- Native Hedgerow with trees.

2.2 The habitats from The Ecology Partnership survey are shown in Figure 2 below:

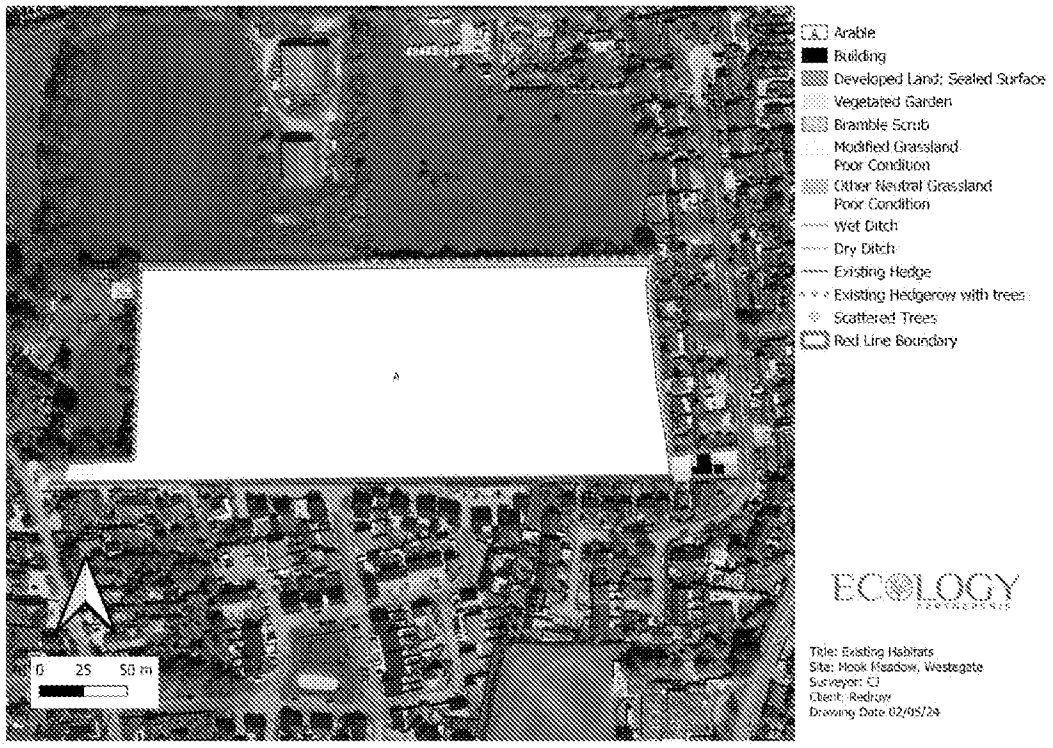


Figure 2: Baseline habitat map

2.3 Arable land dominates the site with the field under crop. The existing vehicular entrance to the field consisted of a hardstanding entrance which transitioned to modified grass into the site. This was formed of what appeared to be a species poor artificial grass which was comprised of meadow fescue and perennial ryegrass, with some small sections of creeping buttercup. The field boundaries were more diverse and considered to be other neutral grassland due to a higher diversity of grasses, and species of grass and herbs present. A small stand of bramble scrub was present near the site entrance. The remaining habitat was comprised of the existing residential property at 24 Meadow Way with house, driveway and paving, vegetated garden and associated small trees.

2.4 There are four hedgerow and tree line habitats within the site.

- Hedgerow 1 – Native Hedgerow from the southern boundary and is dominated by hawthorn.
- Hedgerow 2 – Hedgerow associated with bank or ditch, this formed the western half of the northern boundary and again was dominated by hawthorn, this parallel with a small ditch which held a small amount of water for part of the feature at time of the survey. This has been noted as being dry for the majority of the year.

- Hedgerow 3 – Native Hedgerow with trees and associated with bank or ditch – this formed the eastern half of the northern boundary and was associated with a section of dry ditch. This had no water at the time of the survey.
- Hedgerow 4 – Native hedgerow with trees – this formed the western site boundary, much of this feature is actually now outside the site boundary, but several scattered trees were present forming the feature just inside the site boundary fence. This has therefore been included in the assessment.

2.5 The baseline habitats are provided below in table 1 and 2.

Table 1: Baseline Habitats – 3.84ha (Excluding Trees)

Habitat	Ha (area)	Condition
Cropland – Cereal Crop	3.5852	N/A
Grassland – Modified Grassland	0.0469 (0.0388 enhanced to Other Neutral Grassland – Moderate Condition)	Poor
Heathland and Shrub – Bramble Scrub	0.002	N/A
Urban – Developed Land; Sealed Surface	0.044	N/A - Other
Urban – Vegetated Garden	0.0224	N/A
Grassland – Other Neutral Grassland	0.1441 0.0468 (enhanced to Other Neutral Grassland – Moderate Condition)	Poor
Individual Trees – Urban Tree (Small)	0.0163	Moderate
Individual Trees – Rural Tree (Small)	0.0041 (Retained)	Moderate
Individual Trees – Rural Tree (Medium)	0.0163 (Retained)	Moderate

Table 2: Baseline linear features 0.76km

Habitat	Length (Km)	Condition
Hedgerow 1 – Native Hedgerow	0.356 (Retained)	Moderate
Hedgerow 2 – Hedgerow associated with bank or ditch	0.124 (Retained)	Moderate
Hedgerow 3 – Native Hedgerow with trees and associated with bank or ditch	0.168 (Retained)	Moderate
Hedgerow 4 – Native hedgerow with trees	0.111 (Retained)	Moderate

2.6 Post development habitats provided below in tables 3 and 4.

Table 3: Post development habitats – 3.84 ha (Excluding Trees)

Habitat	Ha (area)	Condition
Urban – developed land sealed surface (New buildings, roads and paths)	1.7514	N/A - Other
Urban – Vegetated Garden (New residential gardens)	1.0107	N/A
Artificial Unvegetated; Unsealed Surface (Gravel paths)	0.0354	N/A - Other
Heathland and shrub – Mixed Shrub (New Scrub on the north and east boundaries)	0.1488	Moderate
Grassland – Modified Grassland (Grassland verges in management)	0.0197	Moderate
Urban – Introduced Shrub (Ornamental planting in LEAP)	0.0261	N/A
Grassland – Other Neutral Grassland (New boundary wildflower grassland)	0.3426	Moderate (A soil test will be undertaken to ensure best mix is chosen)
Grassland – Other Neutral Grassland (Flowering lawn in LEAP and select verges)	0.126	Poor
Grassland – Other Neutral Grassland (Wet wildflower mix within SUDs)	0.1758	Moderate
Individual Trees – Urban Tree (100 new trees planted across the development)	0.4560	Poor
Urban – Developed Land; Sealed Surface (LEAP hardstanding)	0.0331	N/A
Urban – Introduced (Ornamental planting within management)	0.0969	N/A
Grassland – Other Neutral Grassland	0.0358 Enhanced from Modified Grassland	Moderate
Grassland – Other Neutral Grassland	0.0468 Enhanced from 'Poor' Condition Other Neutral Grassland	Moderate

Table 4: Post development linear features – 0.98km

Habitat	Length (KM)	Condition
Hedgerow 1 – Native Hedgerow	0.356 retained	Moderate
Hedgerow 2 – Hedgerow associated with bank or ditch	0.124 retained	Moderate
Hedgerow 3 – Native Hedgerow with trees and associated with bank or ditch	0.168 retained	Moderate
Hedgerow 4 – Native hedgerow with trees	0.111 retained	Moderate
New Hedgerow 1 – Species-rich native hedgerow	0.023	Moderate
New Hedgerow 2 – Species-rich native hedgerow	0.027	Moderate
New Hedgerow 3 – Species-rich native hedgerow	0.053	Moderate
New Hedgerow 4 – Species-rich native hedgerow	0.01	Moderate
New Hedgerow 5 – Species-rich native hedgerow	0.013	Moderate

2.7 The proposals for the site are shown in Figure 3 below and attached in Appendix 1.

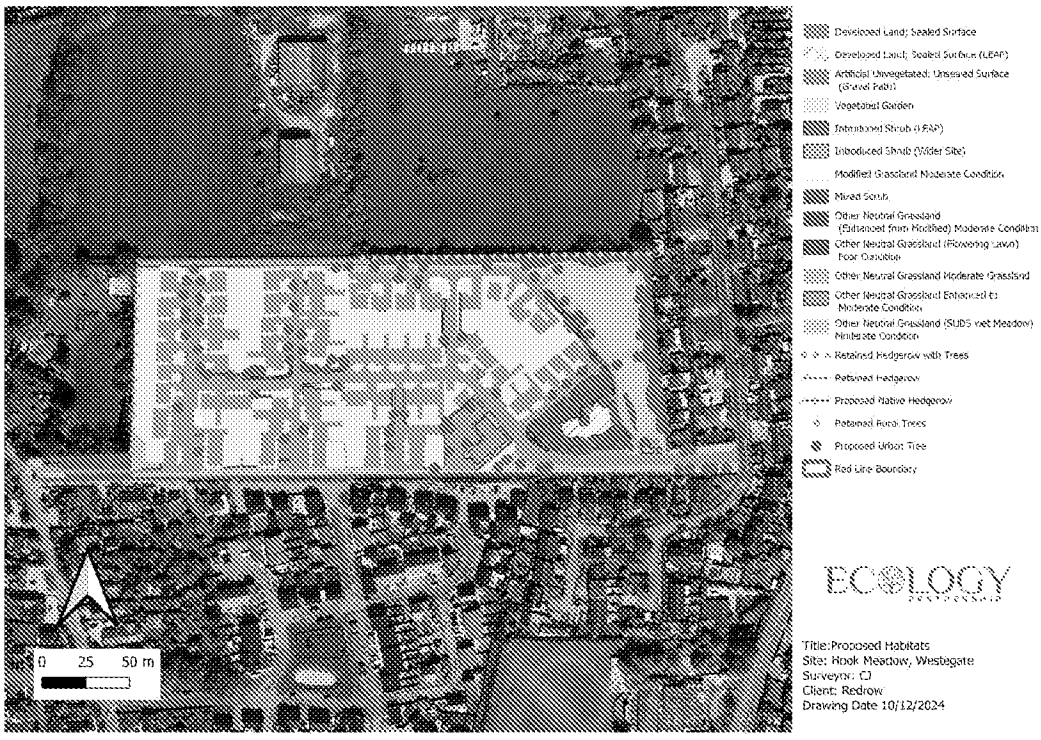
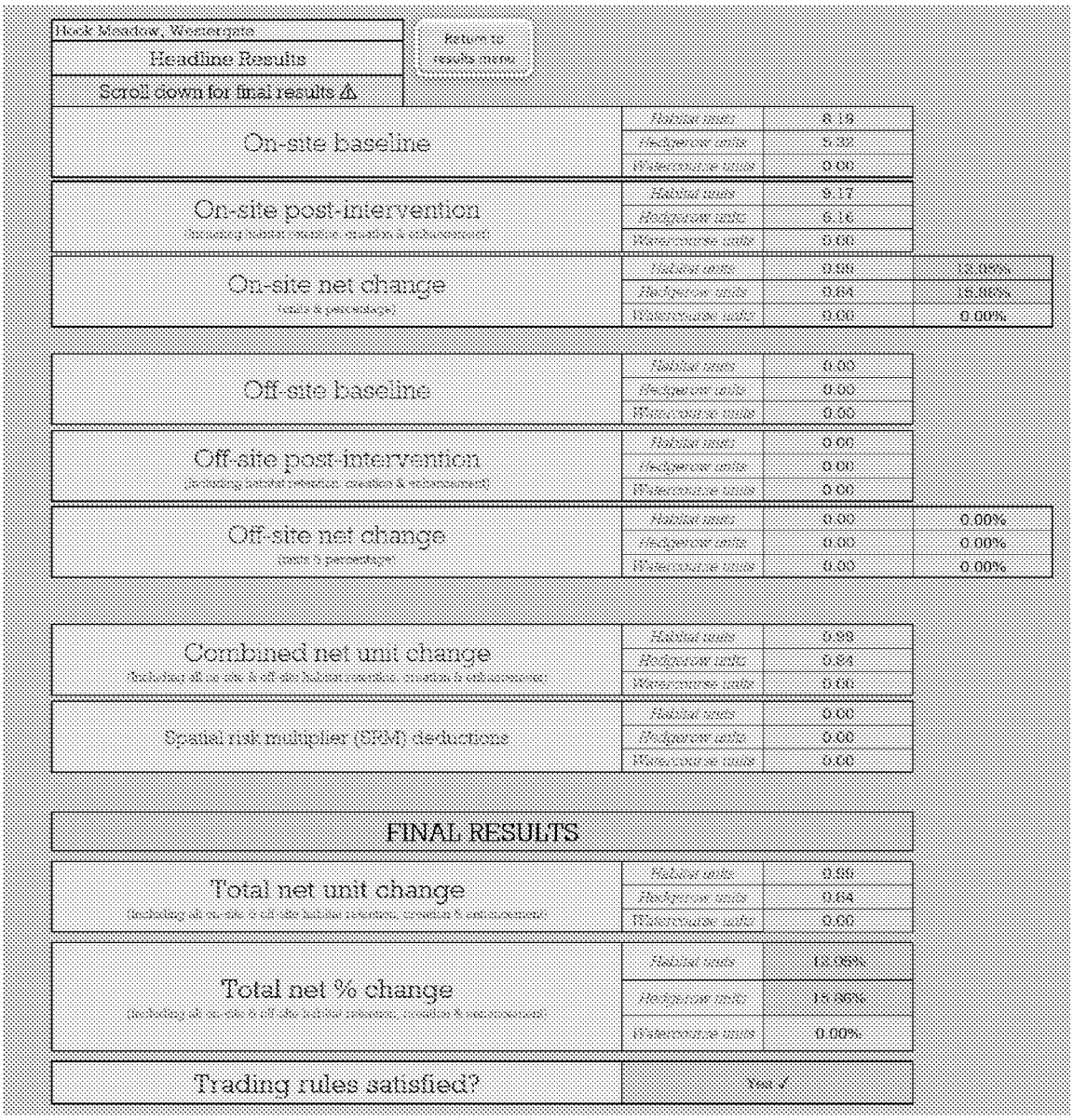


Figure 3: Site proposals



Hook Meadow, Westergate			
Headline Results	Return to results menu		
Scroll down for final results ⚠			
On-site baseline	Habitat units	8.16	
	Hedgerow units	5.32	
	Watercourse units	0.00	
On-site post-intervention (including habitat retention, creation & enhancement)	Habitat units	8.17	
	Hedgerow units	6.16	
	Watercourse units	0.00	
On-site net change (units & percentage)	Habitat units	0.96	12.05%
	Hedgerow units	0.84	15.86%
	Watercourse units	0.00	0.00%
Off-site baseline	Habitat units	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Off-site post-intervention (including habitat retention, creation & enhancement)	Habitat units	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Off-site net change (units & percentage)	Habitat units	0.00	0.00%
	Hedgerow units	0.00	0.00%
	Watercourse units	0.00	0.00%
Combined net unit change (including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	0.98	
	Hedgerow units	0.84	
	Watercourse units	0.00	
Spatial risk multiplier (SRM) deductions	Habitat units	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	
FINAL RESULTS			
Total net unit change (including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	0.96	
	Hedgerow units	0.84	
	Watercourse units	0.00	
Total net % change (including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	12.05%	
	Hedgerow units	15.86%	
	Watercourse units	0.00%	
Trading rules satisfied?	Yes ✓		

Figure 4: Headline results

2.8 It can be seen that a +12.05% increase of habitat units, with an increase of +0.95 habitat units overall. With regards to hedgerow units, there will be an increase of +15.86% hedgerow units with an increase of +0.84 hedgerow units overall.

3.0 On Site Management Programme

3.1 All the operations in the maintenance and management strategy will prioritise sustainability, and this will be reviewed as part of the landscape documents. This review will include the suitability of species in the long term with a view to global warming, the need for watering after the initial maintenance liability period and the use of imported mulches. The habitats will need to be managed for a minimum of 30 years as part of the biodiversity net gain agreement, this will ensure the establishment and the establishment of targeted conditions. The habitats will then be managed beyond this time following the same management plan to ensure long-term landscape management for the housing development.

Maintenance Operations: Operational Phase Year 1-5

3.2 This management plan assumes that the landscape scheme will have been implemented based on detailed drawings that have been produced in accordance with the landscape areas as shown in Appendix 2. This document has incorporated the maintenance provisions for plant establishment and therefore provides a comprehensive source of maintenance requirements following practical completion.

3.3 Proposed maintenance operations are outlined in the below list of overarching requirements which should be read in conjunction with the actions contained in the tables outlining annual management operations.

3.4 Management principles are devised for the following landscape elements that are proposed or existing within the site:

- Planting of new street trees within the development to create new habitat features;
- Planting of additional trees within landscaped areas;
- New native scrub thicket planting within the eastern and eastern half of the northern boundaries of the site;
- Seasonably wet areas of SuDS attenuation basins;
- Ornamental planting within the LEAP
- Grassed areas: mown amenity, flowering lawn and wildflower meadow and

- Hedgerow creation and management.

Overarching Requirements

3.5 All areas of planting/vegetation should be cleared of litter at least once a month to keep the site clean and tidy.

3.6 The requirement for watering should be assessed regularly during long, dry periods (typically during the summer months between April and September) to ensure that all areas of new and existing planting are maintained in good health and vigour. Trees, shrubs, and hedge planting should be watered regularly and in response to weather conditions.

3.7 Any damaged shoots/branches are to be pruned back to healthy wood. Plants are to be pruned in accordance with good horticultural practice to maintain healthy well-shaped specimens.

3.8 As part of turfing and seeding, when newly turfed and seeded areas reach 50mm they should be lightly rolled and cut to a height of 40mm. All arisings shall be removed. Any bare patches shall be made good at this time. Amenity (Modified Grassland) Lawn areas should then be cut at appropriate intervals during the growing season to maintain a 40mm high sward. Watering, weeding and repair of all erosion and settlement with reseeding or turfing shall be undertaken as required to establish a uniform and healthy stand of grass.

3.9 Replacement planting should be carried out in November or February/March, avoiding the winter frosts. Replacement seeding should be carried out in spring or autumn.

New Tree Planting

3.10 The objectives for new tree planting include the following

- To integrate ecological features within the development area;
- To strengthen the landscape structure;
- Provide new habitat creation;
- Provide a range of trees with differing age, structure, character and species.

3.11 An annual inspection will be undertaken of tree stakes and ties, which are to be adjusted as necessary and removed once tree anchorage has been established. Similarly, any trees that are supported by underground guys will be inspected for wind-throw or rotation within their planting pits, and the pits excavated, and guys repositioned and tightened, if necessary.

3.12 Trees found to be dead or dying to be replaced on a like-for-like basis as soon as possible within the next available planting season. During the first 5 years of the management plan period, the following activities would be required to improve the condition of the tree planting:

- Clear vegetation from around the tree base;
- Replace dead/dying or vandalised trees;
- Manage scrub encroachment if required;
- Check stability and remove staked/ties;
- Prune as appropriate.

3.13 These activities would continue throughout the 30-year management plan period, but it may be necessary for the timing/frequency of activities to be adapted accordingly. Table 5 sets out management objectives and prescriptions for the newly planted trees.

Table 5: New Tree Planting Management

Task	Management Objective / Performance Standard	Years 1-5	Years 5-10	Years 11-30+
Water trees as required to ensure satisfactory establishment, and for a period of not less than two years after planting. Frequency: as required to maintain healthy plant growth.	To ensure sustained tree growth	✓	✓	✓
Trees should be inspected every 3 months for the first two years of the plan to ensure that trees are healthy, not diseased, damaged, or dead. Inspection to identify any dead limbs or other parts of a tree that may cause harm to the tree or a member of the public.		✓	✓	✓
Establishment maintenance for new trees (maintenance of tree stakes, ties, guys and guards). Once established any guards and stakes should be removed and taken off-site and disposed of responsibly. Tree guards will be biodegradable.		✓	✓	✓
Any species which die, become diseased or seriously defected within the first 5 years should be replaced like for like in the first available planting season.		✓	✓	✓

Task	Management Objective / Performance Standard	Years 1-5	Years 5-10	Years 11-30+
Tree replacement should be undertaken as required in early spring or late autumn.				
Yearly pruning should be conducted between January and March based on findings of inspections. Formative pruning as required. Emergency pruning should be conducted immediately when a critical fault is noticed.		✓	✓	✓
Weeds on top of tree pits should be removed by hand. Litter and other debris should be removed from planting beds. Mulch should be topped up to depths and levels set out in the planting works implementation specification. • Frequency of weed removal: fortnightly from spring to autumn and then monthly during the winter months; • Frequency of debris removal: bimonthly • Frequency of mulch replenishing: every 6 months.		✓	✓	✓

New Native Mixed Scrub Planting

3.14 The objectives for new native planting mixtures will include the following;

- New areas for new native scrub planting to provide robust ecological networks to the eastern edge of the site;
- To create a diverse a rich species mixture within the site boundaries and additional areas to provide new opportunities for nectar and fruiting resources;
- To provide new opportunities for nesting and foraging areas for birds and commuting and foraging bats as well as refuge and foraging habitat for reptiles, amphibians and other wildlife;
- To provide a layered effect of the vegetation on habitat edges of the site.

3.15 The native matrix species will have been planted with the aim to achieve a shallow curved form edge. Ruderal vegetation should be allowed to develop at the margins and along associated ditch. In years 1-5, the primary aim is to ensure successful establishment of plants. From year 5 onwards, the aim will be to create a visually diverse, mature, and natural looking area. The proposed species mix is as follows:

- Field Maple (*Acer campestre*)
- Hazel (*Corylus avellana*)

- Hawthorn (*Crataegus monogyna*)
- Blackthorn (*Prunus spinosa*)
- Dog Rose (*Rosa canina*)
- Bramble (*Rubus fruticosus*)
- Elder (*Sambucus nigra*)
- Wayfaring Tree (*Viburnum lantana*)
- Guelder Rose(*Viburnum opulus*)

Table 6: New Native Planting Mixture Management

Task	Management Objective / Performance Standard	Years 1-5	Years 5-10	Years 11-30+
Water native scrub as required to ensure satisfactory establishment, and for a period of not less than two years after planting. Frequency: as required to maintain healthy plant growth.	To ensure sustained shrub growth To conserve the 'layered effect' of vegetation in the local landscape	✓	✓	✓
Scrub planting should be inspected every 3 months to ensure that scrub plants are healthy, not diseased, damaged, or dead. Formative pruning as required. Dead or unhealthy shrubs should be removed on inspection and replaced with the same species and size as required to achieve the desired visual effect. • Frequency of inspections: 3 monthly • Frequency of remedial work: immediately as required. • Frequency of seasonal remedial pruning works: Pruning at the end of plant flowering seasons (spring to autumn) as required		✓	✓	✓
Once established any guards and stakes should be removed and taken off-site and disposed of responsibly. Tree guards will be biodegradable.		✓	✓	✓
Any species which die, become diseased or seriously defected within the first 5 years should be replaced like for like in the first available planting season. Tree replacement should be undertaken as required in early spring or late autumn.		✓	✓	✓
Yearly pruning should be conducted between January and March based on findings of inspections. Formative pruning as required. Emergency pruning should be conducted immediately when a critical fault is noticed.		✓	✓	✓
Litter and other debris should be removed from planting beds. Mulch should be topped up to depths and levels set out in the planting works implementation specification.		✓	✓	✓

Task	Management Objective / Performance Standard	Years 1-5	Years 5-10	Years 11-30+
• Frequency of weed removal: fortnightly from spring to autumn and then monthly during the winter months; • Frequency of debris removal: bimonthly • Frequency of mulch replenishing: every 6 months				

Species Rich Native Hedgerows

3.16 The objectives for new hedgerow planting include the following;

- Creation of new native hedgerow with a variety of species to provide diversity in species and structure;
- Establish new habitats for nesting and foraging birds;
- To soften the edges of the development areas and hard landscaping.

3.17 An annual inspection to replace dead/diseased plants will be undertaken at the end of each growing season for the first 5 years after planting, and pruning to promote healthy growth, where required. After that period, pruning of native hedgerows will be carried out, once in 5 years, between November - February.

Table 7: New Hedgerow Management

Task	Management Objective / Performance Standard	Years 1-5	Years 5-10	Years 11-30+
Establishment maintenance for new hedges: trimming, weeding, annual inspection, replacement of losses, irrigation as required, hedgerow formative pruning, thinning). Adjustment and replacement of stakes and guards as required. Replace as necessary. Plant guards to be straightened and ties checked during each inspection (at least 4 inspections during the year) and adjust to avoid chaffing and other damage. Guards and stakes to be removed at the appropriate time, typically during 4th or 5th year, dependant on the mammal population.	To ensure successful establishment	✓		
Trim as required to maintain neat appearance (works subject to restrictions within bird nesting season). Gap up as required in winter.		✓	✓	✓

3.18 Existing Hedgerows will be managed as per management regime post establishment, i.e treated as 5 + plus, with trimming required subject to nesting bird season, with gap up work undertaken in winter.

New Ornamental Shrub and Bed Planting

3.19 The Objectives for new Ornamental Shrub and Bed planting:

- To provide an attractive and sensual environment for residents
- To establish new opportunities for Insects and Birds
- To soften the edges of the development areas, the LEAP and landscaping area

Table 8: New Native Planting Mixture Management

Task	Management Objective / Performance Standard	Years 1-5	Years 5-10	Years 11-30+
Water native scrub as required to ensure satisfactory establishment, and for a period of not less than two years after planting. Frequency: as required to maintain healthy plant growth.	To ensure sustained shrub growth To conserve the 'layered effect' of vegetation in the local landscape	✓	✓	✓
Scrub planting should be inspected every 3 months to ensure that scrub plants are healthy, not diseased, damaged, or dead. Formative pruning as required. Dead or unhealthy shrubs should be removed on inspection and replaced with the same species and size as required to achieve the desired visual effect. • Frequency of inspections: 3 monthly • Frequency of remedial work: immediately as required. • Frequency of seasonal remedial pruning works: Pruning at the end of plant flowering seasons (spring to autumn) as required		✓	✓	✓
Once established any guards and stakes should be removed and taken off-site and disposed of responsibly. Tree guards will be biodegradable.		✓	✓	✓
Any species which die, become diseased or seriously defected within the first 5 years should be replaced like for like in the first available planting season. Tree replacement should be undertaken as required in early spring or late autumn.		✓	✓	✓
Yearly pruning should be conducted between January and March based on findings of inspections. Formative pruning as required. Emergency pruning should be conducted immediately when a critical fault is noticed.		✓	✓	✓
Litter and other debris should be removed from planting beds. Mulch should be topped up to depths and levels set out in the planting works implementation specification. • Frequency of weed removal: fortnightly from spring to autumn and then monthly during the winter months; • Frequency of debris removal: bimonthly		✓	✓	✓

Task	Management Objective / Performance Standard	Years 1-5	Years 5-10	Years 11-30+
• Frequency of mulch replenishing: every 6 months				

Amenity Grass (Modified Grass)

3.20 The objectives for amenity grassland include the following;

- Amenity grassland of moderate condition which is managed for amenity value.

3.21 The amenity grassland relates to short-mown grassland areas, largely found associated with road verges around the residential section of the site. During the initial establishment, the grassland should be mown when it reaches 75mm in height and cut to 40mm in height in the first year. The arisings (cuttings) from this first mow should be removed off-site to encourage grassland establishment. Prior to cutting all areas will be cleared of litter and debris in accordance with the section detailed above.

3.22 All operations will be carried out using machinery appropriate to the task. Mowing operations will only be carried out during appropriate weather conditions avoiding sustained periods of rain, heavy frost, snow, and waterlogging. Where operations are suspended due to unsuitable conditions additional maintenance visits will be agreed upon in order to maintain the sward within acceptable growth limits.

Table 9: Amenity Grassland Management

Task	Management Objective / Performance Standard	Years 1-5	Years 5-10	Years 11-30+
The first cut of the grassed area do be done when the grass is reasonably dry and has reached an initial growth of 75mm. All arisings are to be removed from hard surfaces and all works in a clean and tidy condition. Generally, maximum height of growth at any time should be 50mm. All litter and debris should be removed prior to mowing. Cut as and when necessary to a height of 25mm or 50mm, depending on area, with all arisings removed. Trim all edges. Weed control: grass should be kept substantially free of broad-leaved weeds using a suitable selective herbicide according to manufacturer's instructions.	To achieve sward establishment to 95% minimum cover	✓		

Yr 2 onwards: cut to maintain grass height of 25mm or 50mm, depending on the area, and remove arisings.	To maintain healthy growing grassed areas with 90% minimum grass cover	✓	✓	✓
Inspect and, if required, cultivate and overseed areas of worn grass. Fertiliser for grassed areas should be applied in March (spring) and September (autumn) according to manufacturer's instructions.		✓	✓	✓
Inspect in late autumn and assess the need for winter maintenance; principally scarification and/or aeration.		✓	✓	✓

Wetland Grassland Planting / Swale (Other Neutral Grassland)

3.23 The objectives for new swale / wetland grassland planting including the following;

- Create a species rich grassland habitat (EM8 grassland seed mixture or equivalent);
- Monitor the area for invasive species and scrub species present so drainage is retained and the species diversity is maintained;
- Avoid the use of chemicals to manage invasive species / pesticides etc; and
- Cut to a minimum length of 100mm to avoid killing and injury of reptiles.

Table 10: Wetland Grassland Planting

Task	Management Objective / Performance Standard	Years 1-5	Years 5-10	Years 11-30+
Regular litter removal and grass cutting/ grass edges - grass should be cut at 100mm. Periodic removal of any excess silt, as required. Once established, lift and divide marginal planting annually according to species. Replace any losses.	To maintain structures as safe and fit for sustainable drainage function To maintain feature and plant cover in attractive condition and achieve biodiversity and habitat objectives	✓	✓	✓
Inspections should be undertaken on a minimum basis of once a month, particularly during the vegetation establishment period and after significant storm events to identify areas of erosion, locations of silt deposits, and health of the vegetation and soil. Undertake any repairs/maintenance as required.		✓	✓	✓
Cut back vegetation as required in autumn to ensure optimum functioning and free flow of water.		✓	✓	✓
Remove invasive species.		✓	✓	✓

Flowering Lawn (Other Neutral Grassland within LEAP and Central Open Space)

3.24 The objectives for Flowering Lawn include the following;

- Grassland kept to a short length for use by residents but promoting a diverse range of species and flowering plants for pollinators.

3.25 The flowering lawn will be maintained to a short sward within the areas of the LEAP to allow access and play space to the residents. Grassland can be left to grow to a longer sward height around the edges to give a more natural feel and promote the growth of different species across the whole grassland. In general during the initial establishment, the grassland should be mown when it reaches 75mm in height and cut to 40mm in height in the first year. The arisings (cuttings) from this first mow should be removed off-site to encourage grassland establishment and prevent nutrient build up which may reduce the diversity of the grassland. Prior to cutting all areas will be cleared of litter and debris in accordance with the section detailed above.

3.26 All operations will be carried out using machinery appropriate to the task. Mowing operations will only be carried out during appropriate weather conditions avoiding sustained periods of rain, heavy frost, snow, and waterlogging. Where operations are suspended due to unsuitable conditions additional maintenance visits will be agreed upon in order to maintain the sward within acceptable growth limits.

Table 11: Flowering Lawn Grassland Management

Task	Management Objective / Performance Standard	Years 1-5	Years 5-10	Years 11-30+
The first cut of the grassed area to be done when the grass is reasonably dry and has reached an initial growth of 75mm. All arisings are to be removed from hard surfaces and all works in a clean and tidy condition. Generally, maximum height of growth at any time should be 50mm. All litter and debris should be removed prior to mowing. Cut as and when necessary to a height of 40mm, depending on area, with all arisings removed. Trim all edges. All arisings should be removed.	To achieve sward establishment to 95% minimum cover	✓		
Yr 2 onwards: cut to maintain grass height of 40mm or 75mm, depending on the area, and remove arisings.	To maintain healthy growing grassed areas with 90%	✓	✓	✓

	minimum cover and a diverse flowering sward			
Inspect and, if required, cultivate and overseed areas of worn grass.		✓	✓	✓
Inspect in late autumn and assess the need for winter maintenance; principally scarification and/or aeration.		✓	✓	✓

Wildflower Meadow (Other Neutral Grassland around the site margins)

5.27 The objectives for wildflower grassland include the following;

- To promote a biodiverse sward with desirable species composition (EM5 meadow mix for loamy soils or EM5F), a soil test should be undertaken to ensure the most appropriate mix is used;
- To promote a natural, attractive appearance;
- To maintain a diverse sward composition through the use of sensitive management regimes and control scrub and undesirable ruderal species;
- As far as practicable avoid the use of fertiliser and herbicides;
- To promote habitat diversity and a nectar-rich sward; and
- Cut to a minimum height of 100mm to avoid killing and injury to reptiles.

5.28 Wildflower grassland areas are present along the site boundaries of the site and within the open space around the SuDS.

5.29 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 grazing or mowing through to the end of March of the following year. Dig out any residual perennial weeds such as docks. The grassland will be mown to a height of 40-60mm with arisings cleared from the site.

5.30 In the second and subsequent years EM5 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. Meadow grassland is not cut 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 100mm. Leave the 'hay' to dry and shed seed for 1-7 days then remove from site. Mow the re-growth through to late autumn/winter to c 100mm and again in spring if needed. Loamy soils tend to be more fertile, encouraging the growth of grasses. Increasing the frequency of mowing or grazing to remove surplus grass can help to maintain a balanced sward structure with a good flower content

5.31 The diversity of the grassland should be subject to ongoing monitoring to ensure maximum ecological benefit. The monitoring of the grassland will be undertaken by the management company and should include a review of a suitably qualified ecologist against the baseline and the aspired condition.

5.32 No selective herbicides will be used within these grassland areas. Instead, pernicious weeds (for example, dock and thistle) will be removed by hand, or burnt. All arisings will be removed from the site, immediately after cutting. Any litter will be removed prior to each cut, and leaves will be raked off grass prior to autumn cuts.

5.33 Management of the wildflower grassland areas is shown in table 15 below.

Table 12: Wildflower Grass Management

Task	Management Objective / Performance Standard	Years 1-5	Years 5-10	Years 11-30+
Year 1: scarify in autumn and sow suitable native wildflower mix. Cut to a height of 100 mm four times during the first year to encourage wildflower root development. All arising should be removed. Repeat as required for 3 to 5 years to establish wildflower content. Spot treat or hand-pull undesirable weed species. Minimise chemical use.	To achieve sward establishment to 95% cover To achieve floristically diverse sward content, providing colour and seasonal variety for visitors and habitat for insects and birds. Control invasive weed species (by cutting prior to seed set)	✓	✓	

Task	Management Objective / Performance Standard	Years 1-5	Years 5-10	Years 11-30+
Post establishment: The wildflower meadow should be cut once per year to between 100mm (late August/ September for summer flowering meadow or July for spring flowering). However, subject to the results of monitoring, an additional cut in late March may be carried out, especially in the first few years following establishment. This measure would help control the vigour of the sward, especially of the bulkier grasses, and would encourage greater species richness. All arisings should be left in situ for 48 to 72 hours prior to removal. Minimise chemical use.	To ensure floristically diverse sward content and Control invasive weed species	✓	✓	✓
Monitoring to review the grassland condition. This will then review management techniques.	To monitor floristically diverse sward	✓	✓	✓

4.0 Condition Monitoring

4.1 Monitoring of the habitats to ensure development to the conditions as forecast within the BNG assessment will be undertaken in years 2, 5, 10, 15, 20, 25 and 30 years from the commencement of development. Monitoring should be undertaken during the summer months, i.e May – August when most flowering plants are present to undertake the best botanical surveys and to accurately assess condition of grasslands.

4.2 The contractors will be provided with the proposed planting detail to ensure the planting lists are adhered to. Monitoring must be undertaken by a suitably qualified ecologist and provision and funding for this will be agreed between Redrow Homes and any management company employed to enact this management plan. The following condition assessment sheets must be used to ensure that the desired condition of habitats is being achieved, in particular for the establishment of wildflower grassland. Funding will be available for remediation measures required to achieve the desired condition. Recommendations for remedial actions will be given within the monitoring reports and must be actioned by the management company to ensure compliance. The monitoring reports will be supplied to Redrow Homes, the appointed management company and the Local Planning Authority (Arun District Council).

Modified Grassland

4.3 This accounts for the amenity grass verges of low value grassland which fall within the communal areas of the development under remit of the management company. It is required that 'moderate' condition is achieved. The following assessment sheet should be used to establish that the grassland condition requirement is on track.

Table 13: Modified Grassland Condition Criteria

Condition Sheet: GRASSLAND Habitat Type (low distinctiveness)		
UKHab Habitat Type(s): Grassland - Modified grassland		
Condition Assessment Criteria		
	There are 6-8 vascular plant species per m present, including at least 2 forbs (this may include those listed in Footnote 1). **Note - this criterion is essential for achieving Moderate or Good condition.**	
A	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 m~ (excluding those listed in Footnote 1), please review the full UKHab description to assess whether the grassland should instead 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.	
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 vertebrates and invertebrates 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). **Note – patches of scrub with continuous (more than 90% cover should be classified as the relevant scrub habitat type.**	
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.	
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%.	
G	There is an absence of invasive non-native plant species. (as listed on Schedule 9 of WCA*).	
	Condition	**Moderate Required**

Condition Assessment Result	
Good	Passes 6 or 7 of 7 criteria including essential criterion A
Moderate	Passes 4 or 5 of 7 criteria including passing essential criterion A
Poor	Passes 3 or fewer criteria; OR 4-6 of criteria but failing criterion A

Footnote 1 – Creeping thistle Cirsium arvense, spear thistle Cirsium vulgare, curled dock Rumex crispus, broad-leaved dock Rumex obtusifolius, common nettle Urtica dioica, creeping buttercup Ranunculus repens, greater plantain Plantago major, white clover Trifolium repens and cow parsley Anthriscus sylvestris.

Footnote 2 – For example, this could include small, scattered areas of bare ground allowing establishment of new species, or localised patches where not exceeding 10% cover.

Footnote 3 – Assess this for each distinct habitat parcel. If the distribution of invasive non-native species varies across the habitat, split into parcels, accordingly, applying the buffer zone around the invasive non-native species with a size relative to its risk of spread into adjacent habitat, using professional judgement.

Footnote 4 – Wildlife and Countryside Act 1981 (as amended)

Other Neutral Grassland

4.4 This accounts for the more diverse wildflower grassland present on site. This includes:

- Flowering Lawn located within the LEAP area and select grass verges – Poor Condition Required
- Wildflower Grassland around site boundaries – Moderate Condition Required
- Wet Meadow located within the SUDs basin – Moderated Condition Required

4.5 It is anticipated that there will be additional footfall and more management required for the flowering lawn LEAP areas, as such a precautionary poor condition has been estimated, although it may well be achievable to gain a higher condition within this area.

Table 14: Condition assessment tables for neutral grassland

Condition Sheet: GRASSLAND Habitat Type (medium, high & very high distinctiveness)		
UKHab Habitat Type(s): All other grassland types and tall ruderal (ie. not amenity/modified)		
Condition Assessment Criteria		
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). [1] **Note - this criterion is essential for achieving Moderate or Good condition for non-acid grassland types only.**	
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	Cover of bare ground is between 1% and 5%, including localised areas, for example, rabbit warrens[2].	.
D	Cover of bracken *Pteridium aquilinum* is less than 20% and cover of scrub (including bramble *Rubus fruticosus* agg.) is less than 5%.	
E	Combined cover of species indicative of sub-optimal condition[3] 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[4] (as listed on Schedule 9 of WCA[5]) are present, this criterion is automatically failed.	
Additional Criterion - must be assessed for all non-acid grassland types		
F	There are 10 or more vascular plant species per m² present, including forbs that are characteristic of the habitat type (species referenced in Footnotes 3 and 5 cannot contribute towards this count). **Note - this criterion is essential for achieving good condition for non-acid grassland types only.**	
	Condition	**Poor Required for Flowing Lawn** **Moderate for Wildflower Meadow and Wet SUDs area**

Condition Assessment Result	
Good	Passes 5 of 6 criteria, including essential criterion A and F
Moderate	Passes 3 or 4 of 6 criteria, including essential criterion A
Poor	Passes 0, 1, 2 criteria of 6 criteria; OR Passes 3 or 4 criteria excluding criterion A and F

Footnote 1 – Professional judgement should be used alongside the UKHab description.
Footnote 2 – For example, this could include small, scattered areas of bare ground allowing for plant colonisation, or localised patches where not exceeding 5% cover.
Footnote 3 – Species indicative of suboptimal condition for this habitat type include: creeping thistle *Cirsium arvense*, spear thistle *Cirsium vulgare*, curled dock *Rumex crispus*, broad-leaved dock *Rumex obtusifolius*, common nettle *Urtica dioica*, creeping buttercup *Ranunculus repens*, greater plantain *Plantago major*, white clover *Trifolium repens* and cow parsley *Anthriscus sylvestris*.
Footnote 4 – Assess this for distinct habitat parcel. If the distribution of invasive non-native species varies across the habitat, split into parcels, accordingly, applying a buffer zone around the invasive non-native species with a size relative to its risk of spread into the adjacent habitat, by applying professional judgement.
Footnote 5 – Wildlife and Countryside Act 1981 (as amended)

Native Scrub Mixture

4.5 The native scrub mix may take several years to establish however 3 or 4 of the following criteria must be achieved to gain the required 'Moderate' condition.

Table 15: Condition assessment tables for neutral grassland

Condition Sheet: SCRUB Habitat Type		
UKHab Habitat Type(s): All forms of scrub		
Condition Assessment Criteria		**Off site scrub habitat**
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).[1] - At least 80% of scrub is native, - There are at least three native woody species[2], - No single species comprises more than 75% of the cover (except hazel *Corylus avellana*, common juniper *Juniperus communis*, sea buckthorn *Hippophae rhamnoides* or box *Buxus sempervirens*, which can be up to 100% cover).	
B	Seedlings, saplings, young shrubs and mature (or ancient or veteran[3]) shrubs are all present.	
C	There is an absence of invasive non-native plant species[4] (as listed on Schedule 9 of WCA[5]) and species indicative of sub-optimal condition[8] 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 adjacent habitat.	.
E	There are clearings, glades or rides present within the scrub, providing sheltered edges.	
	Condition	**Moderate Required**
Condition Assessment Result		
Good	Passes 5 of 5 criteria	
Moderate	Passes 3 or 4 of 5 criteria	
Poor	Passes 2 or fewer criteria	

Footnote 1 – Professional judgement should be used alongside the UKHab description.
Footnote 2 – Native woody species as defined and listed in the Hedgerow Survey Handbook: DEFRA (2007) *Hedgerow Survey Handbook: A standard procedure for local surveys in the UK.* 2nd ed. [online]. Defra, London. PB1195. Available from: Hedgerow Survey Handbook (publishing.service.gov.uk).
Footnote 3 – See gov.uk standing advice on ancient and veteran species. Available from:
Keepers of time: ancient and native woodland and trees policy in England (publishing.service.gov.uk)
and
Ancient woodland, ancient trees and veteran trees: advice for making planning decisions - GOV.UK (www.gov.uk)
Footnote 4 – Assess this for each distinct habitat parcel. If the distribution of invasive non-native species varies across the habitat, split into parcels accordingly, applying a buffer zone around the invasive non-native species with a size relative to its risk of spread into adjacent habitat, using professional judgement.
Footnote 5 – Wildlife and Countryside Act 1981 (as amended).
Footnote 6 – Species indicative of suboptimal condition for this habitat type may include: non-native conifers, tree-of-heaven *Alianthus altissima*, holm oak *Quercus ilex*, European turkey oak *Quercus cerris*, cherry laurel *Prunus laurocerasus*,

snowberry *Symphoricarpos* spp., shallon *Gaultheria shallon*, American skunk cabbage *Lysichiton americanus*, buddleia *Buddleja* spp., cotoneaster *Cotoneaster* spp., Spanish bluebell *Hyacinthoides hispanica* and hybrid bluebells *Hyacinthoides x massartiana*. There may be additional relevant species local to the region and or site.

5.0 Management Matrix

5.1 A summary of annual maintenance operations during the management period is given below in terms of season and frequency.

5.2 Annual visual inspections will be required in order that operations can be adapted to respond to the needs of planting as it becomes more established and to respond to unpredictable events, such as extreme weather, which may require additional, specific actions and to keep an up-to-date record of maintenance requirements. During Years 4 to 15, the following general management considerations are observed, followed by specific considerations for specific planting types/site areas. Condition monitoring reports will also be fed back to the management company to ensure establishment and maintenance of newly created habitats to the required condition for BNG.

Table 16: Management Matrix

Operation	J	F	M	A	M	J	J	A	S	O	N	D
1. New Trees:												
Annual tree inspection, remedial pruning, as required;										✓		
Tree stake/guy adjustment/removal, and adjust rabbit protection;	✓											
removal of dead, diseased, and dying wood;										✓		
Formative pruning and trimming back from paths or roads;										✓	✓	
Adjustment of tree grilles;				✓						✓		
Remove fallen leaves;										✓		
Weeding and litter pick;	✓		✓	✓	✓	✓	✓	✓	✓	✓		✓
Defects replacements (first 3 years following planting);		✓									✓	
Self-sown tree removal by digging up or use of suitable herbicides;							✓					

Operation	J	F	M	A	M	J	J	A	S	O	N	D
2. Native Scrub/shrub Planting:												
Hand weeding around new planting, with spot treatments if necessary;			✓	✓	✓	✓	✓	✓	✓	✓		
Tree stake/guy adjustment/removal, and adjust any rabbit protection;	✓											
Replacement of dead or diseased new planting;		✓									✓	
Formative pruning;											✓	
3. New Hedgerows:												
Annual inspection - pruning as required (first 3 years following planting);											✓	
Pruning of hedgerows once in 3 years (Years 4-10);											✓	
Single species hedges - pruning as required	✓	✓									✓	✓
Weed and litter removal;			✓	✓	✓	✓	✓	✓	✓	✓	✓	
Check rabbit/deer protection, adjustments to ensure plants remain upright;		✓										
Defects replacements (first 3 years following planting).		✓									✓	
4. Wetland Grass areas (SuDS/Swales)												
Clearance and cutting down marginals, as required;		✓	✓									
Wetland grass: cutting, as specified, and litter removal, and removal of arisings (grass adjacent to ponds cur once every 2 years);							✓			✓		
Litter and debris removal;				✓								
Defects reinstatement (once annually) (either/or).		✓									✓	
5. Amenity Grass Areas												
Cutting and litter removal;				✓	✓	✓	✓	✓	✓	✓		
Removal of fallen leaves									✓	✓		
Maintain grass-free circle, as specified, around trees					✓		✓		✓			
Maintain grass and weed-free edges adjacent paths					✓							
Selective herbicide treatment as necessary to control weeds			✓	✓	✓	✓	✓	✓	✓	✓		
Scarification, spiking and top-dressing to ensure the ongoing health of the grass sward;					✓							

Operation	J	F	M	A	M	J	J	A	S	O	N	D
Defects reinstatement.				✓						✓		
6. Flowing Lawn within LEAP												
Cutting, as specified, and litter removal, and removal of arisings (Year 1and 2);			✓	✓	✓	✓	✓	✓	✓	✓		
Cutting, as specified, and litter removal, and removal of arisings (Year 3 onwards) early and late cut, with monthly mowing June - August			✓			✓	✓	✓				✓
Grass edge trimming to be undertaken every fortnight				✓	✓	✓	✓	✓	✓	✓		
Defects reinstatement (once annually) (either/or).				✓						✓		
7. Wildflower Grass:												
Cutting, as specified, and litter removal, and removal of arisings (Year 1and 2);				✓			✓			✓		
Cutting, as specified, and litter removal, and removal of arisings (Year 3 onwards) summer cut, in combination with an autumn **or** spring mowing;				✓			✓			✓		
Grass path cut to ensure the grass is no longer than 125mm;					✓		✓		✓			
Defects reinstatement (once annually) (either/or).			✓								✓	
8. Monitoring												
Tree inspections by arboriculturist									✓	✓		
Ecological monitoring years 2, 5, 10, 15, 20, 25 and 30					✓	✓	✓					
Note: '✓' where indicated, implies either/or for timing of specified management operation.												

6.0 Conclusions

6.1 This document has been put together to discharge section 6 (vi) of condition 4 with regards to a reserved matters application and Biodiversity Net Gain.

6.2 This report provides the details of the revised onsite BNG proposals. This report provides a management and maintenance plan and requirements to meet the required conditions for each proposed habitat. Habitats on site will be managed for 30years and the funding, management and monitoring mechanisms required have been detailed within this report.

6.3 It is considered that this report provides sufficient information to discharge the BNG requirements for condition 4. The proposals ensure that a net gain can be achieved through the use of onsite habitat creation and long-term management.

Appendix 1: Proposed Habitats

- Developed Land; Sealed Surface
- Developed Land; Sealed Surface (LEAP)
- Artificial Unvegetated; Unsealed Surface (Gravel Path)
- Vegetated Garden
- Introduced Shrub (LEAP)
- Introduced Shrub (Wider Site)
- Modified Grassland Moderate Condition
- Mixed Scrub
- Other Neutral Grassland (Enhanced from Modified) Moderate Condition
- Other Neutral Grassland (Flowering Lawn) Poor Condition
- Other Neutral Grassland Moderate Grassland
- Other Neutral Grassland Enhanced to Moderate Condition
- Other Neutral Grassland (SUDS wet Meadow) Moderate Condition
- Retained Hedgerow with Trees
- Retained Hedgerow
- Proposed Native Hedgerow
- Retained Rural Trees
- Proposed Urban Tree
- Red Line Boundary

ECOLOGY PARTNERSHIP

Title:Proposed Habitats
Site: Hook Meadow, Westegate
Surveyor: CJ
Client: Redrow
Drawing Date 10/12/2024

Appendix 2: Landscape Plans

A0 File Reference D3370-FAB-00-XX-DR-L-3000-3002.dwg Plot Date 9-Dec-24

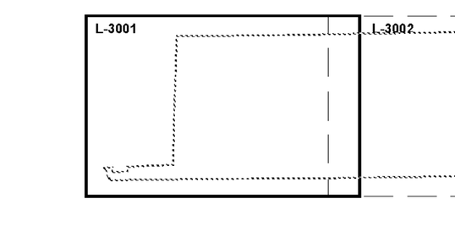
Revision	Date	Reason	Drawn	Checked
PL04	09.12.2024	Issued for Planning	pm	sg
P03	05.12.2024	Draft planning issue for comment	pm	sg
P02	29.11.2024	Draft planning issue for comment	pm	afs
PL03	31.07.2024	Amended to latest layout and to address Highways and Drainage consultee comments	pm	sg
PL02	17.07.2024	Revisions to western access	dg	sg
PL01	25.04.2024	Planning issue	sw	sg
P01	17.04.2024	Draft issue for comment	sw	sg

External References:

- J:\D3370 Meadow Way\05 CAD\01 Autocad\M2 - Models\XREF\D3370-FAB-00-XX-M2-A-0001-Arch Site Layout.dwg
- J:\D3370 Meadow Way\05 CAD\01 Autocad\M2 - Models\XREF\D3370-FAB-00-XX-M2-C-0001-Drainage.dwg
- J:\D3370 Meadow Way\05 CAD\01 Autocad\M2 - Models\XREF\D3370-FAB-00-XX-M2-C-0002-Approved Access.dwg
- J:\D3370 Meadow Way\05 CAD\01 Autocad\M2 - Models\XREF\D3370-FAB-00-XX-M2-G-0001-OS Data.dwg
- J:\D3370 Meadow Way\05 CAD\01 Autocad\M2 - Models\XREF\D3370-FAB-00-XX-M2-G-0002-Location Plan_Redline.dwg
- J:\D3370 Meadow Way\05 CAD\01 Autocad\M2 - Models\XREF\D3370-FAB-00-XX-M2-G-0003-Topo Survey.dwg
- J:\D3370 Meadow Way\05 CAD\01 Autocad\M2 - Models\XREF\D3370-FAB-00-XX-M2-G-0004-Tree Survey.dwg
- J:\D3370 Meadow Way\05 CAD\01 Autocad\M2 - Models\D3370-FAB-00-XX-M2-L-0001 Landscape Base.dwg
- J:\D3370 Meadow Way\05 CAD\01 Autocad\M2 - Models\D3370-FAB-00-XX-M2-L-0002 Legend and Spec.dwg
- J:\D3370 Meadow Way\05 CAD\01 Autocad\M2 - Models\D3370-FAB-00-XX-M2-L-2000 Hard Landscape.dwg
- J:\D3370 Meadow Way\05 CAD\01 Autocad\M2 - Models\D3370-FAB-00-XX-M2-L-3000 Soft Landscape.dwg

Notes:
Refer to fabrik drawing D3370-00-XX-L-2001 to 2002 for Detailed Hard Landscape Plans

Location Plan



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Project: Hook Meadows, Westergate
Client: Redrow Southern Counties
Drawing Title: Detailed Soft Landscape Plan - Sheet 1 of 2
Purpose of Issue: Issued for Planning Approval
Drawn By: sw
Checked By: sg
Drawn Scale: 1:200 @ A0
Date of First Issue: apr | 2024
Drawing Number: D3370-FAB-00-XX-DR-L-3001
Revision: PL04

ARUN DISTRICT COUNCIL AL/137/24/RES

A0 File Reference D3370-FAB-00-XX-DR-L-3000-3002.dwg Plot Date 10-Dec-24

Refer to D3370-FAB-00-XX-DR-L-3001

MEADOW WAY

PROPOSED SuDS BASIN. refer to Engineer's details

PROPOSED SuDS SWALE - refer to Engineer's details

PROPOSED PLAY AREA - refer to D3370-FAB-00-XX-DR-L-2003 for details

Elec SS

Plot 01 PG
Plot 02 PG
Plot 03 PG
Plot 04 PG
Plot 06 PG
Plot 07 PG
Plot 08 PG
Plot 09 PG
Plot 10 PG
Plot 11 PG
Plot 12 PG
Plot 13 PG
Plot 14 PG
Plot 15 PG
Plot 16 PG
Plot 25 PG
Plot 26 PG
Plot 75 PG
Plot 76 PG
Plot 77 PG
Plot 78 PG
Plot 79 PG
Plot 80 PG

2 No. Betula pendula 10-12cmg 300-350cm
2 No. Acer campestre 14-16cmg 350-400cm
1 No. Quercus robur 10-12cmg 300-350cm
1 No. Populus tremula 18-20cmg 425-600cm
1 No. Prunus padus 14-16cmg 400-450cm
1 No. Alnus glutinosa 14-16cm 400-450cm
2 No. Betula pubescens (Multi-Stemmed) 300-350cm
1 No. Betula pubescens (Multi-Stemmed) 300-350cm
2 No. Hedera helix 'Green Ripple' 40-60cm 2L
2 No. Betula utilis 'Jacquemontii' 10-12cmg 300-350cm
1 No. Pyrus calleryana 'Chanticleer' 14-16cm 400-450cm
1 No. Acer campestre 'Streetwise' 14-16cm 400-450cm
1 No. Gleditsia triacanthos 'Sunburst' 10-12cmg 300-350cm
2 No. Malus domestica 'Cox's Orange Pippin' 10-12cmg 300-350cm
2 No. Malus domestica 'Discovery' 8-10cmg 250-300cm
1 No. Ulmus 'New Horizon' 14-16cmg 450-500cm
1 No. Liquidambar styraciflua 20-25cmg 500-550cm
1 No. Acer x freemanii 'Jeffersred' 18-20cmg 450-500cm
1 No. Prunus 'Accolade' 14-16cmg 400-450cm
1 No. Acer campestre (m. stem) 300-350cm

Scrub Mix
55 No. Cornus sericea 'Flaviramea' 15% 80-80cm
19 No. Cotinus coggygria 'Royal Purple' 5% 30-40cm 3L
37 No. Hydrangea quercifolia 'Snow Queen' 10% 30-40cm 2L
19 No. Mahonia x media 'Winter Sun' 5% 20-30cm 3L
55 No. Nandina domestica 15% 20-30cm 2L
37 No. Philadelphus 'Belle Etoile' 10% 30-40cm 2L
37 No. Potentilla fruticosa 'Abbotswood' 10% 2L
37 No. Ribes sanguineum 'Pulborough Scarlet' 10% 40-60cm 2L
19 No. Rosa glauca 5% 40-60cm 2L
37 No. Viburnum carlcephalum 10% 30-40cm 3L
Total = 370 No.

Native Hedgerow Mix
27 No. Acer campestre 10% 80-100cm
53 No. Corylus avellana 20% 80-100cm
79 No. Crataegus monogyna 30% 80-100cm
14 No. Cornus sanguinea 5% 80-100cm
27 No. Rubus fruticosus 10%
27 No. Sambucus nigra 10% 80-100cm
27 No. Viburnum opulus 10% 80-100cm
Total = 267 No.

Native Scrub Mix
70 No. Acer campestre 10% 80-100cm
139 No. Corylus avellana 20% 80-100cm
70 No. Crataegus monogyna 10% 80-100cm
70 No. Prunus spinosa 10% 80-100cm
70 No. Rosa canina 10% 80-cm
35 No. Rubus fruticosus 5%
35 No. Sambucus nigra 5% 80-100cm
7 No. Viburnum lantana 5% 80-80cm
35 No. Viburnum opulus 5% 80-100cm
Total = 697 No.

* Scrub mix to be planted in single species groups of 5-10 plants

Native Scrub Mix
8 No. Acer campestre 10% 80-100cm
16 No. Corylus avellana 20% 80-100cm
16 No. Crataegus monogyna 30% 80-100cm
8 No. Prunus spinosa 10% 80-100cm
8 No. Rosa canina 10% 60-80cm
3 No. Rubus fruticosus 5%
8 No. Sambucus nigra 10% 80-100cm
3 No. Viburnum lantana 5% 80-80cm
3 No. Viburnum opulus 5% 80-100cm
Total = 97 No.

* Scrub mix to be planted in single species groups of 2-8 plants

Play Area Mix 1
12 No. Achillea filipendulina 'Cloth of Gold' 10% C3
17 No. Calamagrostis brachytricha 15% C3
7 No. Carnarosa kicthiliai subsp. kochiliea 6% C3
7 No. Chasmanthium latifolium 'River Mist' 6% C3
8 No. Miscanthus sinensis 'Abundance' 5% C3
8 No. Molinia caerulea arundinacea 'Skyracer' 5% C3
12 No. Pennisetum alopecuroides 10% C3
12 No. Rudbeckia fulgida 'Goldsturm' 10% C3
8 No. Thalictrum lucidum 7% C3
17 No. Sesleria autumnalis 15% C3
Total = 118 No.

* Scrub mix to be planted in single species groups of 4-8 plants

Play Area Mix 2
7 No. Anthriscla bilbersamonotsena 'Hubricoli' 8% C3
13 No. Deschampsia cespitosa 'Goldschleier' 15% C3
7 No. Hylrangea quercifolia 'Fee Wee' 5% C3
7 No. Libertia grandiflora 8% C3
13 No. Miscanthus sinensis 'Graciliimus' 15% C3
7 No. Nepeta x faassenii 'Walkers Low' 4% C3
8 No. Persicaria bistorta 'Superba' 10% C3
7 No. Pittosporum tenuifolium 'Tom Thumb' 8% C3
9 No. Salvia nemorosa 'Rosenwein' 10% C3
7 No. Sedum 'Atlantis Joy' 8% C3
4 No. Symphyotrl 'Stroughgrunt White' 5% C3
4 No. Veronicastrum virginicum 'Temptation' 4% C3
Total = 94 No.

* Scrub mix to be planted in single species groups of 4-8 plants

Play Area Mix 3
28 No. Achillea filipendulina 'Cloth of Gold' 10% C3
28 No. Calamagrostis brachytricha 15% C3
31 No. Carnarosa kicthiliai subsp. kochiliea 6% C3
31 No. Ceanothus thyrsiflorus var repens 12% C3
13 No. Miscanthus sinensis 'Abundance' 5% C3
13 No. Molinia caerulea arundinacea 'Skyracer' 5% C3
28 No. Pennisetum alopecuroides 10% C3
28 No. Rudbeckia fulgida 'Goldsturm' 10% C3
18 No. Thalictrum lucidum 7% C3
28 No. Sesleria autumnalis 15% C3
Total = 257 No.

* Scrub mix to be planted in single species groups of 8-12 plants

Play Area Mix 4
10 No. Achillea filipendulina 'Cloth of Gold' 10% C3
15 No. Calamagrostis brachytricha 15% C3
8 No. Carnarosa kicthiliai subsp. kochiliea 6% C3
12 No. Ceanothus thyrsiflorus var repens 12% C3
5 No. Miscanthus sinensis 'Abundance' 5% C3
5 No. Molinia caerulea arundinacea 'Skyracer' 5% C3
15 No. Pilkonts rosiolana 15% C3
10 No. Rudbeckia fulgida 'Goldsturm' 10% C3
7 No. Thalictrum lucidum 7% C3
15 No. Sesleria autumnalis 15% C3
Total = 132 No.

* Scrub mix to be planted in single species groups of 4-8 plants

Native Hedgerow Mix
14 No. Acer campestre 10% 80-100cm
28 No. Corylus avellana 20% 80-100cm
42 No. Crataegus monogyna 30% 80-100cm
14 No. Prunus spinosa 10% 80-100cm
14 No. Rubus fruticosus 10%
14 No. Sambucus nigra 10% 80-100cm
14 No. Viburnum opulus 10% 80-100cm
Total = 137 No.

Native Hedgerow Mix
12 No. Acer campestre 10% 80-100cm
23 No. Corylus avellana 20% 80-100cm
34 No. Crataegus monogyna 30% 80-100cm
12 No. Prunus spinosa 10% 80-100cm
12 No. Rubus fruticosus 10%
12 No. Sambucus nigra 10% 80-100cm
12 No. Viburnum opulus 10% 80-100cm
Total = 117 No.

* Scrub mix to be planted in single species groups of 5-8 plants

Native Scrub Mix
2 No. Acer campestre 10% 80-100cm
4 No. Corylus avellana 20% 80-100cm
4 No. Crataegus monogyna 30% 80-100cm
2 No. Prunus spinosa 10% 80-100cm
2 No. Rosa canina 10% 60-80cm
1 No. Rubus fruticosus 5%
2 No. Sambucus nigra 10% 80-100cm
1 No. Viburnum lantana 5% 80-80cm
1 No. Viburnum opulus 5% 80-100cm
Total = 17 No.

* Scrub mix to be planted in single species groups of 2-8 plants

Notes:
Refer to fabrik drawing D3370-00-XX-L-2001 to 2002 for Detailed Hard Landscape Plans

Location Plan

0 1 2.5 5 7.5 10 15 20m
1:200

Revision	Date	Reason	Drawn	Checked
PL04	09.12.2024	Issued for Planning	pm	hj
PR3	05.12.2024	Draft planning issue for comment	pm	hj
PL03	01.07.2024	Issued for Planning Approval	pm	hj
PL02	31.07.2024	Amended to latest layout and to address Highways and Drainage consultee comments	pm	hj
PL01	29.04.2024	Planning Issue	sw	hj
P01	17.04.2024	Draft issue for comment	sw	hj

External References
- J:\D3370 Meadow Way\05 CAD\01 Autocad\M2 - Models\WIP\D3370-FAB-00-XX-M2-A-0001-Arch Site Layout.dwg
- J:\D3370 Meadow Way\05 CAD\01 Autocad\M2 - Models\WIP\D3370-FAB-00-XX-M2-C-0001-Drainage.dwg
- J:\D3370 Meadow Way\05 CAD\01 Autocad\M2 - Models\WIP\D3370-FAB-00-XX-M2-C-0002-Drainage Areas.dwg
- J:\D3370 Meadow Way\05 CAD\01 Autocad\M2 - Models\WIP\D3370-FAB-00-XX-M2-G-0002-OS Cells.dwg
- J:\D3370 Meadow Way\05 CAD\01 Autocad\M2 - Models\WIP\D3370-FAB-00-XX-M2-G-0002-Location Plan_Redline.dwg
- J:\D3370 Meadow Way\05 CAD\01 Autocad\M2 - Models\WIP\D3370-FAB-00-XX-M2-G-0003-Site Plan.dwg
- J:\D3370 Meadow Way\05 CAD\01 Autocad\M2 - Models\WIP\D3370-FAB-00-XX-M2-G-0004-Tree Survey.dwg
- J:\D3370 Meadow Way\05 CAD\01 Autocad\M2 - Models\D3370-FAB-00-XX-M2-L-0001-Landscape Base.dwg
- J:\D3370 Meadow Way\05 CAD\01 Autocad\M2 - Models\D3370-FAB-00-XX-M2-L-2000-Hard Landscape.dwg
- J:\D3370 Meadow Way\05 CAD\01 Autocad\M2 - Models\D3370-FAB-00-XX-M2-L-2000-Soft Landscape.dwg

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Project: Meadow Way, Westergate
Client: Redrow Southern Counties
Drawing Title: Detailed Soft Landscape Plan - Sheet 2 of 2
Purpose of Issue: Issued for Planning Approval
Drawn By: sw
Checked By: sg
Drawn Scale: 1:200 @ A0
Date of First Issue: apr | 2024
Drawing Number: D3370-FAB-00-XX-DR-L-3002
Revision: PL04

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Issue 2 for December 24 Submission: 10/12/2024