

Cowards Lane, Codicote

Biodiversity and Landscape Management Plan (LEMP)

CH034-002B
7 February 2024



for



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2 Project background, responsibilities and programme

2.1 Planning conditions

This LEMP document addresses the following planning conditions stipulated by The North Herts Council;

Outline Application 17/01464/1, Condition 15;

'Prior to the commencement of development and any landscaping works, a Biodiversity and Landscape Management Plan (Landscape Ecological Management Plan) which details how the ecological units will be delivered as the part of the development shall be submitted to and approved in writing by the Local Planning Authority. It should address the aspirations of NPPF in achieving over all net gain for biodiversity, along with details on how it is planned to incorporate biodiversity as part of the development scheme, how the habitats within the site boundary will be managed to maintain long term biodiversity objectives, and if possible who will have the management responsibilities. As such the plan shall include the following:

- aims and objectives of management
- existing and proposed features to be managed, including specific reference to improvements to retained hedgerows
- species composition of habitats to be enhanced and created
- a programme for implementation
- the body or organisation responsible for implementation of the plan, and
- monitoring and remedial measures of the plan

The plan shall be implemented in accordance with the approved details and the programme as approved and the measures shall be maintained and retained thereafter.'

Reserved Matters Application 23/00743/RM, condition 19;

'Prior to commencement of any above ground construction works an updated Management Strategy to reflect management details to include:

- Removal of cuttings in order to maintain species-rich grasslands
- Details of species-mix proposed for the planting species-rich wildflower grasslands.

Shall be submitted and approved in writing to the Local Planning Authority. The approved updated Management Strategy shall be complied with on site in perpetuity, unless otherwise agreed in writing by the Local Planning Authority.'

Reserved Matters Application 23/00743/RM, condition 20;

'Prior to commencement of any above ground construction works an updated plan to show species-specific features proposed across the site:

- integrated and free standing bird boxes (including swift boxes);
- integrated and free standing bat boxes;
- hedgehog holes
- reptile / amphibian hibernacula

Shall be submitted to and approved in writing by the Local Planning Authority. The approved details shall be implemented on site prior to occupation.'

2.2 Biodiversity Net Gain Project Type and Metric Revision Reference	On site. Metric Revision 3.1 Refer to 'Biodiversity Net Gain Design Stage Report', SES October 2024, Rev F
2.3 Responsible organisation for creating / enhancing the habitats	A landscape contractor to be appointed by Croudace Homes who shall also maintain and manage the habitats created for the first 12 months.
2.4 Responsible organisation for ongoing management and maintenance of the habitats	Following the initial 12 months, the contractor, as appointed by the management company, shall maintain the works in accordance with this plan. The management company is responsible for achieving the planned Biodiversity Net Gain targets. Management Responsibility Areas are shown on CH034-011 Management Responsibilities Plan which is included at Appendix B.
2.5 Habitats to be retained, created and enhanced	The habitats to be retained, created and enhanced are set out on CH034-001A LEMP Plan Drawing which is included at Appendix A. The habitats to be retained and enhanced include; • A 'line of trees' along the northern and north western site boundaries • 'Native species rich hedgerows' along various boundaries • An area of 'mixed scrub' along the southern site boundary

The habitats to be created include;

- 'Urban Trees'
- 'Hedge Ornamental Non-Native'
- 'Native Hedgerow'
- 'Developed Land, Sealed Surface / Built Linear Features / Artificial Unvegetated Unsealed Surface'
- 'Introduced Shrub'
- 'Mixed Scrub'
- 'Modified Grassland'
- 'Other Neutral Grassland'
- 'Vegetated Garden'

2.6 Timescales for actions & programme for implementation

The timescales and programme are subject to approvals and detailed resolution of a build programme. However, at the time of writing, the following is anticipated;

- Implementation stage; September 2024 – End 2026
- Management and maintenance during the defects liability period (12 months); potentially until the end of 2027
- Ongoing management and maintenance; from the End of 2027 for a period of 30 years

2.6.1 Monitoring requirements

The development of each habitat type comprising the BNG project must be monitored. Monitoring reports must be instructed by the management company and prepared by an Ecologist or other suitably experienced professional. The report should be produced annually from years 1-5 and

then every 5 years, with surveys completed between May and August. Details of the monitoring requirements are set out at section 5.

2.6.2 Funding

Management and maintenance during the first 12 months following implementation will be undertaken by the implementation contractor and funded by the developer. After the initial 12 months, an appointed Management Company will be set-up on behalf of future residents and land-owners by the lead developers for the Site and will be funded in the long-term by annual payments made by future occupiers of the Site.

The appointed Management Company structure should be set-up in such a way that funds are allocated for both the regular maintenance of the Site, in line with this report, and a capital works fund or 'sinking fund' created to allow for any identified remedial works to be undertaken, for example in areas where initial planting has failed to establish post 12 months' defects.

Once the exact details of the appointed Management Company are known, these details should be made available to the Local Authority, along with confirmation that the management company will be responsible for the management as set-out in this report.

2.7 Baseline & environmental information

2.7.1 Protected and notable species

Various legislation including The Wildlife and Countryside Acts makes it an offence to intentionally kill, injure or disturb a protected species or intentionally or recklessly damage any place a protected species uses for shelter or protection, including during the breeding or nesting seasons.

Details of the protected species deemed particularly relevant to the site can be found in the The 'Ecological Appraisal', May 2018, Landscape Planning Ltd', including Birds, Bats, Reptiles, Badgers and Newts.

Any tree or hedgerow works should be undertaken outside of the bird breeding season (generally March-September), or a nest search should be undertaken by an ecologist immediately prior to works commencing. Bird boxes are included as part of the development proposals.

The site has potential for foraging and commuting bats, and the oak tree on the north western site boundary has low potential as a bat roost. The development will include bat boxes for a number of species that are suitable for both roosting and hibernating.

The southern boundary sits adjacent to Hollards Farm Meadow Local Wildlife Site. (LWS). The mixed scrub habitat along the southern boundary is to be retained. Due to the presence of Roman Snail on adjoining land, (a protected species), should work to the mixed scrub be required, a survey for the presence of this species shall take place within the boundary habitat favored by this species and if required a license application made and issued before development begins.

2.7.2 Invasive non-native species

The 'Ecological Appraisal', May 2018, Landscape Planning Ltd found, a small stand of Japanese Knotweed (*Fallopia japonica*) within the rear boundary of a property adjoining the north western boundary.

The management plan for all habitats whether existing, enhanced or created requires the removal of invasive non-native species as listed on Schedule 9 of WCA)

3 Aims and objectives of management

3.1 Management aims and objectives

The primary objectives are;

- To deliver the planned net gain in biodiversity (as set out in 'Biodiversity Net Gain Design Stage Report' (Southern Ecological Solutions, October 2024, Rev F), through the retention, enhancement and creation of landscape and ecological features.
- To provide a wide range of habitats for the potential benefit of a diverse range of species including bats, hedgehogs, birds, reptiles, amphibians and invertebrates
- To provide specific faunal enhancements including bird and bat boxes
- To integrate SuDS in open space areas as ecological features

3.2 Summary of Habitats and Condition Targets

The table below provides a summary of the habitats shown on the LEMP Plan Drawing included at Appendix A, and the condition target to be achieved through the management period.

4 Existing and proposed features to be managed

The vast majority of the existing baseline habitat at the site is modified grassland in poor condition.

4.1 Habitats to be created

Target Habitat Type	Parcel / Feature Refs	Baseline Condition	Targeted Condition	Years to Targeted Condition	Condition Assessment Targets	Comments
Hedge - ornamental non-native	1	-	Poor	1	-	Generally front garden boundaries
Native hedgerow	2	-	Poor	1	A2,B1,B2,D1,D2	Central green space
Urban tree	4	-	Moderate	27	1,4,6	New trees / new orchard trees
Mixed Scrub	8	-	Moderate	5	1,3,4	Along the western site boundary
Introduced shrub	10	-	Poor	1	-	Ornamental planting and climbers
Other neutral grassland	11	-	Moderate	5	1,2,4,5	Aquatic reed planting
Other neutral grassland	12	-	Moderate	5	1,2,4,5	Long native grassland meadow
Other neutral grassland	13	-	Moderate	5	1,2,4,5	Wet long native grassland meadow in SuDS areas
Modified Grassland	9 & 14	-	Moderate	4	1,2,3,6,7	Amenity grass
Vegetated garden	15	-	-	-	-	Rear gardens
Developed land; sealed surface	16	-	-	-	-	Roads and footpaths

4.2 Habitats to be retained and their baseline condition

Baseline Habitat Type	Parcel / Feature Refs	Baseline Condition	Condition Assessment Targets	Comments
Native species-rich hedgerow with trees	3	Good	Maintain existing condition	Along the eastern and north western site boundaries
Line of trees	5	Moderate	Maintain existing condition	Along the north western site boundary (overhanging from gardens)
Line of trees	6	Poor	Maintain existing condition	Along the northern site boundary
Mixed Scrub	7	Good	Maintain existing condition	Along the southern site boundary

4.2.1 Management specifications for retained habitats

Existing vegetation is to be protected with fencing during construction to BS5837 as shown on the Tree Protection and Removal Plan included at Appendix F.

Existing Retained Trees (Lines of trees / native species-rich hedgerow with trees)		J	F	M	A	M	J	J	A	S	O	N	D
Carry out an annual tree safety survey by a licenced arborist or more frequently if needed in the event of damaging storms. Dead wood, ivy and cavities should be retained where possible, unless they present a health and safety risk. Any resulting tree works must be carried out to BS3998. Any works to trees overhanging the site; ie in private ownership require consultation with their owners.										✓			
Existing Hedgerows and Existing Mixed Scrub (Native, species rich hedgerows with trees)		J	F	M	A	M	J	J	A	S	O	N	D
Remove non-native, invasive species.										✓			
Allow the hedgerow to develop in size and maturity; prune back growth overhanging roads, footpaths or service access strips.										✓			

4.2.2 Specific improvements to retained hedgerows

The retained hedgerows and lines of trees along the site boundaries will be set in areas of long native meadow grassland (other neutral grassland), including swales and SuDS basins. These grassland habitats are complementary to species rich hedgerows and lines of trees. Both habitats have potential benefits to birds, foraging / commuting bats and a range of other wildlife. The existing hedgerows and trees will be allowed to develop into the grassland area. The grassland is also planted with a range of native tree species.

5 Creation, enhancement and management targets and prescriptions including species composition

5.1 Other neutral grasslands

Parcel 11 Aquatic reed planting, **Target; Moderate.** Must pass 3, 4 or 5 of the criteria.

Parcel 12 Long native meadow grassland & Parcel 13 Wet native meadow grassland

Condition Assessment Criteria	Parcel 11, 12 & 13 Targeted?	Creation Approach	Enhancement Approach	Management Approach
1 The appearance and composition of the vegetation closely matches characteristics of the specific grassland habitat type (see UKHab definition). Wildflowers, sedges and indicator species for the specific grassland habitat type are very clearly and easily visible throughout the sward. NB - This criterion is essential for achieving moderate condition for non-acid grassland types only.	Yes	The seed mixture for Native Meadow Grassland and the specification for its implementation is appropriate for the creation of a good example of this habitat type.	-	The maintenance specifications for Long Native meadow grassland allow only an annual cut, to a height no less than 15cm including the removal of arisings from the sward to encourage native species diversity, to prevent nutrient build up in the soils (and to protect any reptiles present).
2 Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20 per cent is more than 7 cm) creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.	No	-	-	
3 Cover of bare ground between 1% and 5%, including localised areas, for example,	No	-	-	

Condition Assessment Criteria		Parcel 11, 12 & 13 Targeted?	Creation Approach	Enhancement Approach	Management Approach
	rabbit warrens.				
4	Cover of bracken Pteridium aquilinum less than 20% and cover of scrub (including bramble) less than 5%.	Yes	-	-	The maintenance specifications require the removal of bracken and bramble.
5	There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981). Combined cover of species indicative of sub-optimal condition ¹ 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.	Yes	-	-	The maintenance specifications require the removal of invasive non-native species (as listed on Schedule 9 of WCA).
6	There are greater than 9 species per metre squared. NB - This criterion is essential for achieving good condition (non-acid grassland types only).	No	-	-	The maintenance specifications for native meadow grassland allow only an annual cut, to a height no less than 15cm including the removal of arisings from the sward to encourage native species diversity, to prevent nutrient build up in the soils (and to protect any reptiles present). This should promote a diverse sward of at least 9 species per m2.

5.1.1 Management Methods for Other Neutral Grasslands

Action	Relevant Parcels	Timing	Prescriptions
Reinstate any areas of failed planting	11, 12 & 13	Between November and end of April in periods of mild and damp weather.	Carry out reinstatement (where needed) to the original specification. Remove failed vegetation, rotavate ground to 15cm depth, rake to a fine tilth and sow seed in line with the specifications given on the planting plans. Water with fine spray without dislodging or washing away seed.
Remove non-native, invasive weeds	11, 12 & 13	Monthly between April and November	Dig out non-native invasive weeds including root including Bracken and Bramble. Use herbicide only as a last resort.
Cut	11,12,13	Once in September	Cut long native meadow grassland by hand to a height of 15cm, after flowering. Rake up and remove arisings from sward. Contribute arisings to hibernacula or remove from site to composting facility.

5.1.2 Species list for Parcel 11; Aquatic Reed Planting

Botanical Name	Common Name	Root Zone	Specification
Butomus umbellatus	Flowering Rush	1L	Full pot; June to Sept planting; British native-origin
Caltha palustris	Marsh Marigold	1L	Full pot; British native origin
Carex acutiformis	Lesser Pond Sedge	1L	Full pot; Sept to April planting; British native-origin
Carex pendula	Pendulous Sedge	1L	Full pot; ; British native-origin
Eleocharis palustris	Common Spike Rush	0.5L	Full pot; June to Sept planting; British native-origin
Iris pseudacorus	Yellow Flag Iris	1L	Full pot; British native origin
Juncus acutiflorus	Sharp-flowered Rush	1L	Full pot; Sept to April planting; British native-origin

5.1.3 Species list for Parcel 12; Long Native Grassland Meadow

Refer to Appendix C (EM1 Basic General Purpose Meadow Mixture)

5.1.4 Species list for Parcel 13; Wet Long Native Grassland Meadow in SuDS areas

Refer to Appendix D (EP1 Pond Edge Mixture)

5.2 Modified grassland

Parcel 14; Amenity grass

Target; Moderate; Passes 4 or 5 of 7 criteria including passing essential criterion 1

Parcel 9; Amenity grass in LEAP

Target; Poor; Passes 0, 1, 2 or 3 of 7 criteria; or 4, 5 or 6 of criteria but failing criterion 1

Condition Assessment Criteria	Parcel 9 Targeted?	Parcel 14 Targeted?	Creation Approach	Enhancement Approach	Management Approach
1 There must be 6-8 species per m2. If a grassland has 9 or more species per m2 it should be classified as a medium distinctiveness grassland type. NB – this criterion is essential for achieving moderate condition.	No	Yes	Parcel 9 Amenity Grass does not have a diverse seed mix (rolawn medallion tur). Parcel 14 Species rich amenity grass does comprise a diverse species mix	-	The mowing regime is specified to promote a diverse sward.
2 Sward height is varied (at least 20% of the sward is less than 7cm and at least 20% is more than 7cm) creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.	Yes	Yes			The mowing regime frequency will allow a varied sward height
3 Some scattered scrub (including bramble) may be present, but scrub accounts for less than 20% of total grassland area. Note – patches of shrubs with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.	Yes	Yes			Scrub will not be allowed to develop in amenity grass areas

Condition Assessment Criteria	Parcel 9 Targeted?	Parcel 14 Targeted?	Creation Approach	Enhancement Approach	Management Approach
4 Physical damage is evident in less than 5% of total grassland area Examples of physical damage include excessive poaching, damage from machinery use or storage, erosion caused by high levels of access, or any other damaging management activities.	No	Yes			
5 Cover of bare ground between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens.)	No	No			
6 Cover of bracken <i>Pteridium aquilinum</i> less than 20%.	Yes	Yes			The mowing regime will not allow bracken to establish in amenity grass areas
7 There is an absence of invasive non-native species (as listed on Schedule 9 of WCA).	Yes	Yes			Invasive, non-native weeds will be removed by hand.

5.2.1 Management Methods for Parcel 9 & 14; Amenity Grass

Action	Relevant Parcels	Timing	Prescriptions
Reinstate any areas of failed planting	14	Between November and end of April in periods of mild and damp weather.	Carry out reinstatement (where needed) to the original specification. Remove failed vegetation, rotavate ground to 15cm depth, rake to a fine tilth and return (or re-seed) in line with the specifications given on the planting plans. Water with fine spray without dislodging or washing away seed.
Remove non-native, invasive weeds	14	Monthly between April and November	Dig out non-native invasive weeds including root. Use herbicide only as a last resort.
Cut	14	Once in April Fortnightly between May and September Once in October	Cut to a height of 5cm and edge with a strimmer. Remove all arisings.

5.2.2 Species Information for Parcel 9; Amenity Grass in LEAP

Rolawn medallion turf comprises 25% Dwarf Perennial Ryegrass, 30% Slender Creeping Red Fescue and 45% Strong Creeping Red Fescue.

5.2.3 Information for Parcel 14; Species Rich Amenity Grass

Refer to Appendix E (EL1 Flowering Lawn Mixture)

5.3 Hedgerow

Parcel 1; Hedge – ornamental, non-native

Target; Poor; Condition Target N/A

Parcel 2; Native hedgerow

Target; Moderate.

No more than 4 failures in total; AND Does not fail both attributes in more than one functional group (e.g. fails attributes A1, A2, B1 & C2 = Moderate condition).

Condition Assessment Criteria / Attributes		Parcel 2 Targeted?	Creation Approach	Enhancement Approach	Management Approach
A1	Height >1.5m average along length.	No	-	-	-
A2	Width >1.5m average along length.	Yes	The pre-formed hedge is around 70cm wide on planting.	-	The native hedge will be managed to achieve a width of >1.5m along its length
B1	Gap – hedge base Gap between ground and base of canopy <0.5m for >90% of length.	Yes	The gap between base and canopy is less than 30cm on planting	-	Native hedge will be managed to minimise the gap between the ground and the base of the hedge canopy so that it is <0.5m. Pruning will stimulate lateral growth at low level. Any gaps that can not be rectified through formative pruning will be gapped up with replacement pre-formed hedge units
B2	Gap – hedgerow canopy continuity Gaps make up <10% of total length; and no canopy gaps >5m.	Yes	Pre-formed hedge forms a continuous canopy	-	Native hedge will be maintained for gap continuity. Any gaps that can not be managed with formative pruning will be gapped up with replacement pre-formed

Condition Assessment Criteria / Attributes		Parcel 2 Targeted?	Creation Approach	Enhancement Approach	Management Approach
					hedge units.
C1	Undisturbed ground and perennial vegetation >1m width of undisturbed ground with perennial herbaceous vegetation for >90% of length: - measured from outer edge of hedgerow, and - is present on one side of the hedge (at least)	No	The hedge is set in amenity grassland.	-	-
C2	Undesirable perennial vegetation. Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground	Yes	-	-	
D1	Invasive and neophyte species >90% of the hedgerow and undisturbed ground is free of invasive non-native plant species (including those listed on Schedule 9 of WCA) and recently introduced species.	Yes	Invasive and neophyte species will be removed from the ground including root on planting.	-	The maintenance schedules require the removal of invasive, non-native species .
D2	Current damage >90% of the hedgerow or undisturbed ground is free of damage caused by human activities.	Yes	-	-	The maintenance requires protection of existing landscape features during works and the replacement of any dead or dying planting.
E1	Tree class (applicable to hedgerows with trees only) There is more than one age-class (or morphology) of tree present (for	-	-	-	-

Condition Assessment Criteria / Attributes		Parcel 2 Targeted?	Creation Approach	Enhancement Approach	Management Approach
	example: young, mature, veteran and or ancient), and there is on average at least one mature, ancient or veteran tree present per 20 – 50m of hedgerow.				
E2	E2. Tree health (applicable to hedgerows with trees only) At least 95% of hedgerow trees are in a healthy condition (excluding veteran features valuable for wildlife). There is little or no evidence of an adverse impact on tree health by damage from livestock or wild animals, pests or diseases, or human activity.	-	-	-	-

5.3.1 Management methods for Parcel 1 Hedge – ornamental, non native and Parcel 2; Native hedgerow

Action	Relevant Parcels	Timing	Prescriptions
Reinstate any areas of failed planting	2	Between November and end of March in periods of mild and damp weather.	Carry out reinstatement (where needed) to the original specification. Remove failed vegetation, rotavate ground to 30cm depth, replace planting in line with the specifications given on the planting plans.
Remove non-native, invasive weeds	2	Monthly between April and November	Dig out non-native invasive weeds including root. Use herbicide only as a last resort. Top up horticultural bark mulch to 5cm depth.
Prune	2	Once in September	Maintain native hedge at 1m height and 1.6m wide . Maintain ornamental, non native hedge at 1m height and no wider than 1m. Hedges should be pruned back to prevent over-growth of surrounding paths and hard landscape areas. Formative pruning should facilitate branching from ground level to minimise gaps at the base of the hedge.

5.3.2 Species information for Parcel 1 Hedge – ornamental, non native and Parcel 2; Native Hedgerow

PREFORMED HEDGEROW

Abbrev	Botanical Name	Common Name	Height (cm)	Root Zone	Specification
PFH1	Carpinus betulus	Hornbeam	60-80	T	Refer to Landscape Specification for Planting Works
PFH2	Ligustrum Ovalifolium	Privet	60-80	T	Refer to Landscape Specification for Planting Works
PFH3	Euonymus japonicus 'Jean Hugues'	Japanese Spindle	60-80	T	Refer to Landscape Specification for Planting Works

5.4 Urban trees

Parcel 4; New orchard trees and new trees
Target; Moderate
 Passes 3 or 4 of 6 criteria

Condition Assessment Criteria		Parcel 4 Targeted?	Creation Approach	Enhancement Approach	Management Approach
1	The tree is a native species (or more than 70% within the block are native species).	Yes	Over 70% of the trees specified are Native species. Native tree species have been specified where possible and particularly around the site boundaries, however the urban nature of the development benefits from cultivars and non-native species.	-	Any replacement planting must be carried out to the original specification.
2	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	No	-	-	-
3	The tree is mature or veteran (or more than 50% within the block are mature).	No	-	-	-
4	There is little or no evidence of an adverse impact on tree health by anthropogenic activities such as vandalism or	Yes	The planting specification requires quality tree stock grown to nursery standards and is checked for pests	-	The maintenance requires protection of existing landscape features during works and the replacement of any dead or dying

	herbicide use. There is no current regular pruning regime so the trees retain >75% of expected canopy for their age range and height.		and diseases prior to planting.		planting. Strimming is not allowed in close proximity to trees and herbicides / pesticides may only be used as a last resort. There is no regular pruning regime so trees should retain 75% of expected canopy for their age range and height.
5	Micro-habitats for birds, mammals and insects are present e.g. presence of deadwood, cavities, ivy or loose bark	No	-	-	-
6	More than 20% of the tree canopy area is oversailing vegetation beneath.	Yes	Where possible, tree planting is located in soft landscape areas with vegetation beneath.	-	Overall, 20% of tree canopy should be oversailing vegetation by the end of the 30 year management period.

5.4.1 Management methods for Parcel 4 Urban trees

Action	Relevant Parcels	Timing	Prescriptions		
Reinstate any failed trees	2	Between November and end of March in periods of mild and damp weather.	Carry out reinstatement (where needed) to the original specification. Remove failed vegetation, rotavate ground to 30cm depth, replace planting in line with the specifications given on the planting plans.		
Remove non-native, invasive weeds	2	Monthly between April and November	Dig out non-native invasive weeds including root. Use herbicide only as a last resort. Top up horticultural bark mulch to 5cm depth.		
Stakes and ties	2	Once in September, or more frequently if needed, for example due to stormy weather	Re-firm stakes and ties annually for the first 2 years. Remove stakes and ties in year 3. Check stakes and ties in any month after storm weather.		
Prune	2	Once in September, if needed	Carry out formative pruning in the first few years after planting, if necessary, in accordance with BS3998; Recommendations for Tree Work		

5.4.2 Species information for Parcel 4 Urban trees

STREET TREES

Abbrev	Qty	Botanical Name	Common Name	Girth/Dia (cm)	Height (cm)	Root Zone	Specification
ACW	6	Acer campestre 'William Caldwell'	Field Maple	14-16	400-450	RB	HS; 3x; large feathered; 7 brks
ACA	6	Acer cappadocium 'Aureum'	Golden Cappadocian Maple	14-16	400-450	RB	EHS; clear stem min 200cm; 5 brks
AGR	3	Ameiandier x grandiflora 'Robin Hill'	Snowy Mespilus	12-14	350-425	RB	HS; clear stem 175-200cm; 5 brks
BPF	2	Betula pendula 'Fastigiata'	Silver Birch	12-14	300-425	RB	HS; clear stem 175-200cm; 5 brks
CBF	9	Carpinus betulus 'Frans Fontaine'	Hornbeam	12-14	350-425	RB	HS; clear stem 175-200cm; 5 brks
LSF	6	Liquidambar styraciflua 'Fastigiata'	Sweet Gum	12-14	300-425	RB	HS; 3x; clear stem min 200cm; 5 brks
PSS	3	Prunus serrulata 'Sunset Boulevard'	Japanese Cherry	12-14	350-425	RB	HS; clear stem 175-200cm; 5 brks
SAC	2	Sorbus aucuparia 'Cardinal Royal'	Rowan	16-18	400-450	RB	EHS; clear stem min. 200cm

NATIVE TREES

Abbrev	Qty	Botanical Name	Common Name	Girth/Dia (cm)	Height (cm)	Root Zone	Specification
AC	16	Acer campestre	Field Maple	12-14	350-425	RB	HS; clear stem 175-200cm; 5 brks
AG	5	Alnus glutinosa	Alder	12-14	350-425	RB	HS; clear stem 175-200cm; 5 brks
BP	28	Betula pendula	Silver Birch	12-14	350-425	RB	HS; clear stem 175-200cm; 5 brks
MBP	4	Betula pendula (Multi-Stem)	Silver Birch		400-450	RB	4x; Multi-stem; bushy; 3 stems minimum
BU	5	Betula pubescens	Downy Birch	12-14	350-425	RB	HS; clear stem 175-200cm; 5 brks
CB	1	Carpinus betulus	Hornbeam	12-14	350-425	RB	HS; clear stem 175-200cm; 5 brks
MS	5	Malus sylvestris	Crab Apple	12-14	350-425	RB	HS; clear stem 175-200cm; 5 brks
PA	3	Prunus avium	Wild Cherry	12-14	350-425	RB	HS; clear stem 175-200cm; 5 brks
QR	1	Quercus robur	Oak	12-14	350-425	RB	HS; clear stem 175-200cm; 5 brks
SO	6	Sorbus aria	Whitebeam	12-14	350-425	RB	HS; clear stem 175-200cm; 5 brks
ST	2	Sorbus torminalis	Wild Service Tree	12-14	350-425	RB	HS; clear stem 175-200cm; 5 brks

ORCHARD TREES

Abbrev	Qty	Botanical Name	Common Name	Girth/Dia (cm)	Height (cm)	Root Zone	Specification
MD	4	Malus domestica 'Discovery'	Crab Apple 'Discovery'	14-16	400-450	RB	EHS; 3x; Clear Stem; 5 brks; RS M106 or M25
PCC	6	Pyrus communis 'Conference'	Pear 'Conference'	14-16	400-450	RB	EHS; 3x; Clear Stem 175-200; 5 brks

5.5 Mixed scrub

Parcel 8 Mixed scrub

Target; Moderate; Passes 3 or 4 of 5 criteria

Parcel 9 Mixed scrub

Target; Moderate; Passes 3 or 4 of 5 criteria

	Condition assessment criteria	Parcel 8 Targeted?	Creation approach	Enhancement Approach	Management Approach
1	Habitat is representative of UKHab description (where in its natural range). There are at least three woody species, with no one species comprising more than 75% of the cover (except common juniper, sea buckthorn or box, which can be up to 100% cover).	Yes	The scrub planting mix is native and diverse	-	Maintain scrub so that no single species dominates and so that there are at least three native woody species.
2	There is good age range – all of the following are present; seedlings, young shrubs and mature shrubs.	No	-	-	-
3	There is an absence of invasive non-native species (as listed on Schedule 9 of WCA) and species indicative of suboptimal condition make up less than 5% of ground cover.	Yes	Remove any invasive non-natives at implementation stage	-	The maintenance schedules require the removal of non-native invasive species.
4	The scrub has a well-developed edge with scattered scrub and tall grassland and or forbs present between the scrub and adjacent habitat.	Yes	-	-	Allow the development of tall grasses and forbs at the habitat edge
5	There are clearings, glades or rides present within the scrub, providing sheltered edges.	No	-	-	-

5.5.1 Management methods for Parcels 8 and 9; Mixed scrub

Action	Relevant Parcels	Timing	Prescriptions
Reinstate any failed planting	8 & 9	Between November and end of March in periods of mild and damp weather.	Carry out reinstatement (where needed) to the original specification. Remove failed vegetation, rotavate ground to 30cm depth, replace planting in line with the specifications given on the planting plans.
Remove non-native, invasive weeds	8 & 9	Monthly between April and November	Dig out non-native invasive weeds including root. Use herbicide only as a last resort. Top up weed suppressing bark mulch to 5cm depth for the first 2 years. Thereafter the ground should not be mulched.
Stakes and rabbit guards	8 & 9	Once in September, or more frequently if needed, for example due to stormy weather	Remove stakes and rabbit guards in year 3, or once the plants have become established and put on 50cm of healthy growth.
Prune	8 & 9	Once in September, if needed	Carry out formative pruning in the first few years after planting, if necessary, in accordance with BS3998; Recommendations for Tree Work
Manage species mix	8 & 9	Once annually in November from year 3	Review the rate of growth and dominance of different species in the habitat. No one single species must dominate and there must be at least 3 woody species present. Dominant species that are repressing the diversity of the scrub may be coppiced to ground level. Should replanting of less dominant species be required, refer to the original specifications on the planting plans.

5.5.2 Species information for Parcels 8 and 9; Mixed scrub

NATIVE SCRUB MIX (NSM); *Planted at a density of 3 plants per m2, with rabbit guards. Species equally distributed throughout beds.*

Mix %	Qty	Botanical Name	Common Name	Height (cm)	Root Zone	Specification
15	258	Acer campestre	Common Maple	60-80	B	1+1; Transplant - seed raised
10	172	Cornus sanguinea	Common Dogwood	40-60	B	1+1; Transplant - seed raised
15	258	Corylus avellana	Common Hazel	60-80	B	1+2; Transplant - Seed Raised; 3 brks
15	258	Sambucus nigra	Common Elder	60-80	B	1+2; Transplant - Seed Raised; 3 brks
10	172	Malus sylvestris	Crab Apple	60-80	B	1+1; Transplant - seed raised
10	172	Lonicera periclymenum	Honeysuckle	60-80	B	1+1; Transplant - seed raised :BR
5	86	Salix caprea	Goat Willow	60-80	B	0/1; Cutting; branched; 2 brks
10	172	Buxus sempervirens	Common Box	60-80	RB	Bushy; 10 brks
10	172	Viburnum opulus	Guellder Rose	60-80	B	1+2; Transplant - seed raised : 3 brks

6 Monitoring methods and intervals

6.1 Monitoring methods

Habitat Type	Monitoring Methods	Monitoring Interval and Timing
Hedgerow	Assess the structure and dimensions of the hedgerow noting its width, the gap between ground and canopy and the presence of any gaps.	Annually from years 1-5, then every 5 years. Surveys to be completed between May and August
Urban tree	Record the number of native vs non native trees. Record the health of trees, enlisting an arborist if required. Record the canopy size of the tree in relation to its size class.	Annually from years 1-5, then every 5 years. Surveys to be completed between May and August
Mixed Scrub	Assess the extent, structure & species composition of the scrub and the number of woody species. Identify non-native, invasive species.	Annually from years 1-5, then every 5 years. Surveys to be completed between May and August
Grasslands	Undertake quadrat sampling to identify the habitat type that is establishing and then number of species per m2. Estimate percentage of bare ground, bramble and bracken cover. Collect a botanical species list across grassland to check against target species list	Annually from years 1-5, then every 5 years. Surveys to be completed between May and August

6.2 Annual Monitoring Reports

The management company will undertake an annual survey of the site, to ensure that all areas are being managed as specified, and with appropriate progress towards the Biodiversity Net Gain Habitat Condition Targets listed above. An independent ecologist or other suitably qualified person shall be appointed to carry out the survey. The survey will result in an annual BNG Monitoring Report in accordance with templates supplied by Natural England / DEFRA and including;

- A summary of progress made since implementation, and since the previous review
- A record of site wide successes and challenges
- Details of progress towards each individual habitat condition and their targets
- Conclusions setting out details of actions required for the next monitoring period to continue successfully
- Details of any adaptations required to the management plan targets and prescriptions.

7 Other maintenance prescriptions

7.1 General Maintenance Items

7.1.1 Record keeping and reporting

An activity register shall be maintained in accordance with the Natural England 'Biodiversity Net Gain Habitat Monitoring Template' and on every visit by the contractor shall be collated on a six monthly basis and submitted to the management company for review, as will a habitat management and monitoring plan report in line with the Natural England / DEFRA template.

7.1.2 Replacement planting

Any trees or plants which within 10 years of planting are removed or become seriously damaged or diseased shall be replaced in the next planting season with others of similar size and species, unless the Local Planning Authority gives written consent to any variation.

7.1.3 Pesticides, herbicides and maintenance of Invasive, non-native plant species

Chemical applications, for example of herbicides or pesticides should be avoided, except as a last resort. They should never be used in SuDS areas. The contractor shall ensure that any chemicals used are HSE approved and that their application is undertaken by trained operatives in accordance with the manufacturer's recommendations and the COSHH regulations. Trained operatives must have the appropriate NPTC certificates. The 'Code of Practice for the safe use of Pesticides for Non-Agricultural Purposes' will be observed where applicable. The use of any chemicals shall be noted on the record sheets as outlined above.

Invasive, non-native plant species (as listed on Schedule 9 of the Wildlife and Countryside Act) will be dug out and removed from site.

The contractor shall notify the management company of any pests or diseases and shall provide a

suitable strategy for treatment to be agreed with the client. Should mammalian pests become a significant problem on site, proposals for their control / eradication should be submitted for approval.

7.1.4 Health and Safety and Protection from Damage

The contractor shall protect buildings, property, hard surfaces and soft landscape from damage during maintenance operations, for example with the use of tarpaulins or protective fencing and shall be responsible for the health and safety of their operatives and the public during works.

7.1.5 Watering

The contractor shall ensure that a suitable water supply is available to carry out the installation, management and maintenance operations. In the event of water restrictions (e.g. drought), the contractor will be responsible for submitting proposals to the management company for an alternative source of water e.g. use of a trailer mounted bowser. All plantings shall be watered as necessary to ensure successful establishment and healthy growth.

7.1.6 Other

The contractor shall ensure that the site is left in clean, tidy and safe state following maintenance operations. All arisings shall be removed from site, except for those used to top up log piles.

The contractor shall advise the management company (at the earliest opportunity) of all trees and other plants found to be dead, dying or vandalised and replacements carried out in the next available planting season.

Chipping and shredding is not permitted on site without prior consent.

7.2 Maintenance methods for elements without BNG management targets

MAINTENANCE ACTIONS		SCHEDULE; TIMING OF WORKS											
Ornamental Shrub and Herbaceous Planting Beds, and Climbers (Introduced Shrub)		J	F	M	A	M	J	J	A	S	O	N	D
Maintain weed free by hand weeding. Remove all arisings.				✓		✓		✓		✓	✓		
Prune back shrubs and plants during the growing season to prevent encroachment on to adjacent areas. Remove all arisings.				✓		✓		✓		✓	✓		
Check climbers during growing season and re-tie as required.						✓					✓		
Check plants for damage and condition. Remove plants that are dead or dying.				✓		✓		✓		✓			
Pruning of shrubs is to be carried out to prevent overhanging of hard landscape areas and with consideration of the species and their position. Replace any failed plants to the original specification.													
Top up mulch to 5 cm depth				✓		✓		✓		✓			
Watering (All soft landscape)		J	F	M	A	M	J	J	A	S	O	N	D
Water newly planted trees, shrubs and grasslands as needed in the first year after planting in sufficient quantities and frequency to ensure successful establishment. Ensure full depth of topsoil is saturated with each watering.		As needed to ensure successful establishment and healthy growth depending on climatic conditions											
Attenuation Basins and Swales (in accordance with CIRIA SUDS Manual Guidance), including wet long native meadow grassland		J	F	M	A	M	J	J	A	S	O	N	D
Inspect inlets, outlets and overflows for blockages and clear if required		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Inspect banksides, structures, pipework etc for evidence of physical damage		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Inspect inlets and facility surface for silt accumulation. Establish appropriate silt removal frequencies.		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Check any penstocks and other mechanical devices		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Remove sediment from inlets, outlets, forebay and main basin when required											✓		
Realignment of rip-rap		As Required											
Erosion Repair		As Required											

MAINTENANCE ACTIONS		SCHEDULE; TIMING OF WORKS													
Re-level uneven surfaces		As Required													
Repair / rehabilitation of inlets, outlets and overflows		As Required													
Cut wet native meadow grassland in accordance with 'Long native meadow grassland' as shown above.															✓
Removal of leaf litter		J	F	M	A	M	J	J	J	A	S	O	N	D	
Leaf litter is to be raked up from grass areas and hard standing. Arisings to be used to contribute to hibernacula or spread in a thin layer beneath mature trees and scrub on the site boundary.		✓										✓	✓	✓	✓
Hard Landscape Surfacing, Fencing and Walling		J	F	M	A	M	J	J	J	A	S	O	N	D	
Paths, patios, roads and paved areas are to be swept monthly and arisings removed at each visit.		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Carry out repairs to hard surfaces, fencing and walling (to the build specification) to ensure they are free draining and without trip hazards					✓								✓		
Remove graffiti					✓					✓					
Remove weeds by hand or apply an approved herbicide to the manufacturer's recommendations including health and safety guidance.					✓				✓			✓			
Site Furniture and Play Area		J	F	M	A	M	J	J	J	A	S	O	N	D	
Inspect furniture in accordance with RoSPA best practice including fixings and checking for sharp edges. Repair or replace as needed.		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Play Area Installation Inspection		At completion													
New playground equipment including fencing, seating, and signage will be carefully checked for compliance with specifications and installation procedures before being accepted.															
Play Area Routine Inspection		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Undertake monthly to check for faults and wear affecting safety. Results should be recorded for all elements; equipment, fencing, gates, seating, signage and surfacing against the following criteria; Does the equipment appear structurally good and is it firm in its foundations?															

MAINTENANCE ACTIONS	SCHEDULE, TIMING OF WORKS											
Is there any evidence of damage caused by vandalism? Are there any sharp protrusions in the equipment or the safety surface? Are there any foreign objects, such as broken glass, needles etc... present? If loose fill safety surfacing is being used, does it require topping up? Does the safety surface look in good condition? Damaged / worn equipment or parts of equipment must be repaired or replaced and the public excluded from any areas presenting a health and safety risk. Graffiti must be removed.												
Play area annual inspection The play area will undergo an independent annual inspection undertaken in accordance with EN1176, Part 7, to include the whole play area site including pathways, fences and furniture, as well as the fixed play equipment and safety surfacing. The surfacing should be subject to an impact absorbency test. This should be carried out by a specialist not connected with the playground operator or manager. Checks must be made for vandalism, minor and major wear, and structural soundness. Such inspections are offered by insurance companies, playground equipment manufacturers, commercial companies and safety organisations, such as RoSPA. A report must be submitted including a checklist of all items with notes, including a risk assessment of any non complying items and a list of measures required to maintain their level of safety and performance. Results of the following questions must be recorded for all elements; - Are any of the fixings (nuts, bolts, screws) loose? - Are any of the fixings missing? - Are any of the parts worn? - Does the moving part fixing point require lubrication?	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

MAINTENANCE ACTIONS		SCHEDULE, TIMING OF WORKS													
- Are the foundations of the equipment secure and firm? - Are the foundations of the equipment protruding from the surrounding surface? - Are any parts of the equipment loose that were once secure? - Have any parts of the equipment started to rot or rust? - Have any parts of the equipment been damaged by vandalism? - Have previously hidden sections of timber now become exposed? Damaged / worn equipment or parts of equipment must be repaired or replaced. The public must be excluded from any items presenting a health and safety risk. Graffiti must be removed.															
Faunal enhancements		J	F	M	A	M	J	J	A	S	O	N	D		
Bird and bat boxes in trees should be checked on an annual basis in October, and refixed or replaced as necessary											✓				
Hibernacula should be topped up in August									✓						

8 Faunal Enhancements

Bird & Bat Boxes and Hedgehog friendly fencing locations are shown on the LEMP Plan at appendix A.



Pro-uk, Visible Build in Swift Box



Schwegler 2F General Purpose Bat Box



Schwegler 1SP Sparrow Terrace



ibstock bat brick A



Jackson's Hedgehog Gravel Board

9 Appendices

- Appendix A; LEMP Plan Drawing
- Appendix B; Management Responsibility Areas
- Appendix C; Species list for Long Native Meadow Grassland (Emorsgate EM1)
- Appendix D; Species list for Wet Long Native Meadow Grassland (Emorsgate EP1)
- Appendix E; Species list for Species Rich Amenity Grassland (Emorsgate EL1)
- Appendix F; Hibernacula detail
- Appendix F; Tree Protection and Removal Plan
- Appendix G; Jackson's Hedgehog Gravel Board (refer to LEMP Plan)

Habitats to be managed (and parcel numbers)

EXISTING TREES AND HEDGES

Native species-rich hedgerow with trees (3)

Line of Trees (5 & 6)

Mixed Scrub (7)

NEW TREES AND HEDGES

Urban Trees (4)

New trees

New Orchard trees

Hedge - ornamental non-native (1)

Native hedgerow (2)

Introduced shrub (10)

Ornamental planting

Climbing plants

NEW SCRUB

Mixed Scrub (8)

NEW GRASSLANDS

Modified Grassland (14) (Amenity Grass)

Modified Grassland (9) (Amenity Grass in LEAP)

Other Neutral Grassland (12) (Long Native Meadow Grassland)

Other Neutral Grassland (13) (Wet Long Native Meadow Grassland in SubS)

Other Neutral Grassland (11) (Aquatic Reed Planting)

OTHER

Vegetated Garden (15) (Rear Gardens)

Pro-uk, Visible Build in Swift Box

Schwiegler 2F General Purpose Bat Box

Schwiegler 1SP Sparrow Terrace

ibstock bat brick A

Hibernacula

Timber fencing as specified by Croudace, with Jackson's Hedgehog Gravel Board (or equal and approved)

Site Boundary

Refer to CH034-002 LEMP Document



Cowards Lane, Codicote
LEMP PLAN DRAWING
CH034-001 B
03/02/24 - MW - 1:250@A0

ilex
Landscape Architects

for

croudacegroup
LANDSCAPE ARCHITECTS





- Public Highway
- Management Company
- Housing Association
- Site Boundary

Refer to CH034-002 LEMP Document



Cowards Lane, Codicote
MANAGEMENT RESPONSIBILITY
AREAS
CH034-0011
05/11/24 - MW

ilex
Landscape Architects

for

croudacegroup



EM1 Basic General Purpose Meadow Mixture

Minimum Quantity: 100g

Maximum Quantity: 50,000g

- £ / 100g : £14.00
- £ / 1,000g : £42.00
- £ / 10,000g : £386.00
- £ / 100,000g : £3,550.00

Quantity (grams)	Subtotal
------------------	----------

100g	£14.0000
------	----------

100



Add to basket

Description Composition

Composition

EM1 is a complete mix composed of 10% native wild flowers and 90% slow growing grasses (by weight). The flower and grass components are also available to order separately as EM1F for the flower component and EG1 for the grass component.

Wild flowers 10%

0.30% *Achillea millefolium* – Yarrow

1.60% *Centaurea nigra* – Common Knapweed

1.60% *Leucanthemum vulgare* – Oxeye Daisy

1.60% *Malva moschata* – Musk Mallow

1.60% *Plantago lanceolata* – Ribwort Plantain

1.60% *Poterium sanguisorba ssp sanguisorba* – Salad Burnet

0.70% *Ranunculus acris* – Meadow Buttercup

0.50% *Rhinanthus minor* – Yellow Rattle

0.50% *Daucus carota* – Wild Carrot

Grasses 90%

9.00% *Agrostis capillaris* – Common Bent

31.50% *Cynosurus cristatus* – Crested Dogstail

27.00% *Festuca rubra* – Red Fescue

4.50% *Phleum bertolonii* – Smaller Cat's-tail

18.00% *Poa pratensis* – Smooth-stalked Meadow-grass

EMORSGATE SEEDS

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Wild Flower Species
Wild Grasses, Sedges And Rushes
Amenity And Agricultural Cultivars
Complete Mixtures
Wild Flower Only Mixtures
Grass Only Mixtures



EP1 Pond Edge Mixture

Minimum Quantity: 100g

Maximum Quantity: 20,000g

- £ / 100g : £14.00
- £ / 1,000g : £98.00
- £ / 10,000g : £902.00
- £ / 100,000g : £8,300.00

Quantity (grams)	Subtotal
100g	£14.0000
100	Add to basket

Description Composition

Suggested Sowing Rates

40kg/ha 16kg/acre 4g/m²

Description

Pond edge mixture EP1 contains wild flowers and grasses suitable for sowing at the wet margins of ponds, streams and ditches.

Ground Preparation

Endeavour to select ground that is not highly fertile and does not have a problem with perennial weeds. Good preparation is essential to success so aim to control weeds and produce a good seed bed before sowing. To prepare a seed bed, first remove weeds using repeated cultivation. Then cultivate to bury the surface vegetation and harrow or rake to produce a medium tilth.

Sowing

Sowings on ground prone to winter flooding are safest either in late summer or in spring once the land has drained. Most plants need time to grow mature enough to withstand flooding. The seed must be surface sown and can be applied by machine or broadcast by hand. To get an even distribution and avoid running out divide the seed into two or more parts and sow in overlapping sections. Do not incorporate or cover the seed.

First Year Management

In the first year, annual weed growth may be cut back to encourage the development of a good perennial ground cover. Establishment on sites prone to flooding may be patchy and may take several years to fully colonise.

Management Once Established

The habitat value of pond edge sowings is enhanced if there are a variety of vegetation structures from dense tussock stands to bare and recently colonised mud. Management of these wetland areas should therefore aim to create variation with minimum disturbance to animal populations.

Variation in structure can be achieved by cutting back and removing short sections of vegetation every 2-3 years in rotation. In ditches, cut out sections and /or work from one bank each year. With ponds, remove vegetation as a wedge, like removing a slice of cake. Dense stands of single species (eg yellow iris) may benefit from selective thinning. Vegetation removal causes the least disruption to wildlife when carried out between September and November. On larger sites light grazing by cattle or horses in late summer can be used and is less disruptive than mechanical clearance. Machines and heavy equipment should be used with care on wet sites to avoid damage to soil and vegetation.

Wet grassland which only occasionally or seasonally floods can be managed as meadow or grassland. In marginal wetland zones the water levels in the soil are never more than 50cm below the surface, but only occasionally submerge the plants growing there. New ponds constructed with liners often have very narrow margins (less than 1 metre wide) unless wider, gently shelving edges are designed in from the outset. Embankments away from the water's edge are often well drained. These are best seeded with a meadow mixture appropriate to the soil type. Establishment of emergent pond vegetation (eg reeds) and other aquatic plants is best achieved using plants.

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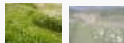
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EL1 Flowering Lawn Mixture

Minimum Quantity: 100g

Maximum Quantity: 10,000g

- £ / 100g : £12.00
- £ / 1,000g : £70.00
- £ / 10,000g : £630.00
- £ / 100,000g : —

Quantity (grams)	Subtotal
100g	£12.0000
100	Add to basket

[Description](#) [Composition](#)

Composition

EL1 is a mixture containing 20% wild flowers and 80% meadow grasses. EL1F and EG1 are available to purchase separately.

Wild Flowers – 20%

1.00% *Achillea millefolium* – Yarrow

1.00% *Anthyllis vulneraria* – Kidney Vetch

0.40% *Betonica officinalis* – Betony

1.50% *Centurea nigra* – Common Knapweed

0.40% *Galium album* – Hedge Bedstraw

1.50% *Galium verum* – Lady's Bedstraw

0.40% *Knautia arvensis* – Field Scabious

0.40% *Leontodon hispidus* – Rough Hawkbit

1.00% *Leucanthemum vulgare* – Oxeye Daisy

0.60% *Lotus corniculatus* – Birdsfoot Trefoil

1.00% *Medicago lupulina* – Black Medick

0.40% *Plantago lanceolata* – Ribwort Plantain

2.00% *Plantago media* – Hoary Plantain

2.00% *Primula veris* – Cowslip

0.40% *Prunella vulgaris* – Selfheal

0.40% *Ranunculus acris* – Meadow Buttercup

1.60% *Ranunculus bulbosus* – Bulbous Buttercup

4.00% *Trifolium repens* – White Clover (ag)

Grasses – 80%

8.00% *Agrostis capillaris* – Common Bent

28.00% *Cynosurus cristatus* – Crested Dogtail

24.00% *Festuca rubra* – Red Fescue

4.00% *Phleum bertolonii* – Smaller Cat's-tail

16.00% *Poa pratensis* – Smooth-stalked Meadow-grass

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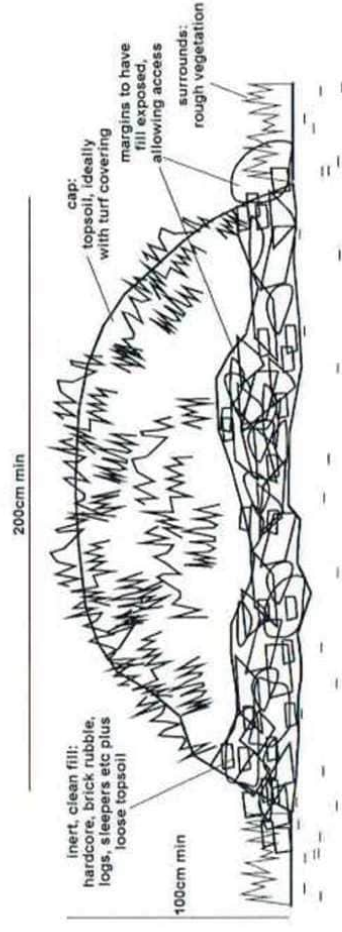
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Hibernaculum detail

Vegetation prunings and cuttings may be added to hibernacula. Hibernacula should not exceed 1m in height and 3m in width. A typical example is shown opposite. At least 80% of the brash pile should be made up with hardwood prunings rather than softwood or long grassland cuttings.

Suggested hibernaculum design

This design mimics artificial and natural conditions in which great crested newts have frequently been found overwintering. Dimensions should not be below 2m length x 1m width x 1m height. The illustrated design would be suitable for locating on an impermeable substrate. On free-draining substrates, the design is largely similar but the bulk of the fill is sited in an excavated depression in the ground. Hibernacula should ideally be positioned across a site, both close to and distant from breeding ponds, always in suitable terrestrial habitat and above the flood-line.



Source: English Nature (2001) *Great Crested Newt Mitigation Guidelines*, Peterborough.

