

Phase 2B SANG Planting Schedule

Tree Planting

Species	Form	Girth cm	Height (cm)	Clear Stem (cm)	Root Condition
Acer campestre	EHS	14-16	425-600	Min. 200	RB
Alnus glutinosa	EHS	14-16	400-450	Min 200	RB
Betula pubescens	EHS	14-16	400-450	175-200	RB
Carpinus betulus	EHS	14-16	425-600	Min. 200	RB
Castanea sativa	EHS	14-16	400-450	175-200	RB
Corylus avellana (ms)	Multi-Stem	-	250-300	-	RB
Fagus sylvatica	EHS	14-16	425-600	Min. 200	RB
Malus sylvestris	EHS	14-16	425-600	Min. 200	RB
Populus nigra betulifolia	EHS	14-16	425-600	175-200	RB
Populus tremula	EHS	14-16	425-600	175-200	RB
Prunus avium	EHS	14-16	425-600	Min. 200	RB
Quercus robur	EHS	14-16	400-450	175-200	RB
Salix alba	EHS	18-20	450-500	Min 200	RB
Salix caprea	EHS	14-16	400-450	175-200	RB
Salix purpurea	Feathered	-	200-250	-	B
Sorbus aucuparia	EHS	14-16	425-600	Min. 200	RB
Sorbus torminalis	EHS	14-16	400-450	Min 200	RB
Tilia cordata	EHS	14-16	400-450	175-200	RB
Ulmus 'New Horizon'	EHS	14-16	400-450	175-200	RB

Orchard Tree Planting

Species	Form	Girth cm	Height (cm)	Clear Stem	Root Condition
Malus 'Breedon Pippin'	Half Standard	6-8cm	150-200	175-200	B
Malus 'Charles Ross'	Standard	8-10cm	200-250	175-200	B
Malus 'John Downie'	EHS	14-16	425-600	175-200	B
Malus 'Millers Seedling'	Standard	8-10cm	200-250	175-200	B
Pyrus communis 'Stinking Bishop'	Half Standard	6-8cm	150-200	175-200	B
Pyrus communis 'Williams'	Half Standard	6-8cm	150-200	175-200	B
Pyrus communis 'Winter Nellis'	Half Standard	6-8cm	150-200	175-200	B

Woodland Edge Mix – to be planted at 1.5m spacing (0.44/m²)

Species	Mix Percentage %	Height (cm)	Form	Root Condition
Corylus avellana	20	60-80	Branched	B
Crataegus monogyna	20	60-80	Branched	B
Frangula alnus	20	60-80	Leader with laterals	B
Ilex aquifolium	10	60-80	Leader with laterals	3L C
Prunus spinosa	5	60-80	Branched	B
Rhamnus cathartica	10	60-80	Leader with laterals	B
Ribes uva-crispa	5	30-40	Branched	B
Rosa arvensis	5	40-60	Branched	B
Rosa canina	5	40-60	Branched	B
Viburnum opulus	10	60-80	Branched	B

Woodland Mix – to be planted at 2m spacing (0.25/m²)

Species	Mix Percentage %	Height (cm)	Form	Root Condition
Acer campestre	10	250-300	Feathered	B
Corylus avellana	10	60-80	Branched	B
Crataegus monogyna	10	40-60	Seedling	B
Populus tremula	10	40-60	Seedling	B
Prunus avium	7.5	40-60	Transplant	B
Quercus robur	10	125-150	Transplant	B
Quercus robur	5	250-300	Feathered	15L C
Sorbus aucuparia	10	250-300	Standard	B
Sorbus torminalis	10	200-250	Feathered	B
Tilia cordata	7.5	200-250	Feathered	B
Viburnum opulus	10	80-100	Branched	B

Native Hedgerow Mix – to be planted at 5/linear m, to be planted in double staggered rows, 500mm apart, at 400m centres

Species	Mix Percentage %	Height (cm)	Form	Root Condition
Acer campestre	15	60-80	Whip/Feather	2L C
Corylus avellana	20	100-125	Branched	RB
Crataegus monogyna	20	60-80	Seedling	B
Frangula alnus	5	60-80	Leader with laterals	B
Malus sylvestris	10	60-80	Transplant	B
Prunus spinosa	5	60-80	Branched	B
Rhamnus cathartica	10	60-80	Leader with laterals	B
Rosa canina	5	60-80	Branched	B
Salix caprea	5	60-80	Branched	B
Ulex europaeus	5	30-40	Bushy	3L

Native Shrub Planting – to be planted at 2/m²

Species	Mix Percentage %	Height (cm)	Age	Form	Root Condition
Corylus avellana	20	60-80	1+2	Branched	3L C
Crataegus monogyna	35	60-80	1+1	Branched	B
Frangula alnus	10	60-80	1+1	Branched	B
Ilex aquifolium	10	60-80	-	Leader with Laterals	3L C
Prunus spinosa	5	60-80	1+1	Branched	B
Rosa arvensis	5	60-80	1+1	Branched	3L C
Rosa canina	5	40-60	1+1	Branched	B
Viburnum opulus	10	60-80	1+2	Branched	B

Defensible Shrub Planting to SuDS Feature – to be planted at 4/m²

Species	Mix Percentage %	Height (cm)	Age	Form	Root Condition
Berberis darwinii	30	60-80	-	Bushy; 8 breaks	B
Crataegus monogyna*	40	60-80	1+1	Branched	B
Ilex aquifolium	10	60-80	1+1	Leader w/ laterals	7.5L
Prunus spinosa	15	60-80	1+1	Branched	B
Rosa arvensis	5	60-80	1+1	Branched	B

*Denotes species suitable for seasonal immersion within the attenuation basins. Species marked with * are to be planted along the lower slopes of the basins.

Native Scrub Planting (Wet)– to be planted at 1/m²

Species	Mix Percentage %	Height (cm)	Age	Form	Root Condition
Crataegus monogyna	25	60-80	1+1	Branched	B
Frangula alnus	15	60-80	1+1	Branched	B
Salix cinerea	10	60-80	0+1	Branched	B
Salix purpurea	20	60-80	0+1	Branched	B
Salix viminalis	10	60-80	0+1	Branched	B
Viburnum opulus	20	60-80	1+2	Branched	B

Other Neutral Grassland (wildflower meadow)

Emorsgate Seed Mix EM3 – Special General Purpose Meadow Mixture (sown at 4g/m²)

%	Latin Name	Common Name
Wildflowers		
0.5	Achillea millefolium	Yarrow
0.6	Betonica officinalis	Betony
2.5	Centaurea nigra	Common Knapweed
0.8	Centaurea scabiosa	Greater Knapweed
1	Daucus carota	Wild Carrot
0.6	Filipendula ulmaria	Meadowsweet
0.6	Galium album	Hedge Bedstraw
2	Galium verum	Lady's Bedstraw
0.4	Knautia arvensis	Field Scabious
0.3	Leontodon hispidus	Rough Hawkbit
0.6	Leucanthemum vulgare	Oxeye Daisy
0.5	Lotus corniculatus	Birdsfoot Trefoil
0.1	Origanum vulgare	Wild Marjoram
0.5	Plantago media	Hoary Plantain
1	Poterium sanguisorba	Salad Burnet
0.4	Primula veris	Cowslip
2	Prunella vulgaris	Selfheal
2.5	Ranunculus acris	Meadow Buttercup
1	Rhinanthus minor	Yellow Rattle
0.6	Rumex acetosa	Common Sorrel
1.2	Silene dioica	Red Campion
0.2	Silene flos-cuculi	Ragged Robin
0.1	Trifolium pratense	Wild Red Clover
20		
Grasses		
8	Agrostis capillaris	Common Bent
40	Cynosurus cristatus	Crested Dogstail
28	Festuca rubra	Slender-creeping Red-fescue
4	Phleum bertolonii	Smaller Cat's-tail
80		

Purple Moor Grass and Rush Pasture

Emorsgate Seed Mix EM8 –Meadow Mixture for Wetlands (Mixture to be sown at a rate of 4g/m2.

%	Latin Name	Common Name
Wildflowers (20%)		
2	Achillea millefolium	Yarrow
0.6	Agrimonia eupatoria	Agrimony
3.6	Centaurea nigra	Common Knapweed
1	Filipendula ularia	Meadowsweet
2	Galium verum	Lady's Bedstraw
0.2	Geum rivale	Water avens
0.5	Lathyrus pratensis	Meadow Vetchling
0.1	Leontodon hispidus	Rough Hawkbit
1.2	Leucanthemum vulgare	Oxeye Daisy (Moon Daisy)
0.1	Lotus corniculatus	Birdsfoot Trefoil
0.4	Lotus pendunculatus	Greater Birdsfoot Trefoil
3.2	Plantago lanceolata	Ribwort Plantain
0.2	Primula veris	Cowslip
0.1	Prunella vulgaris	Selfheal
0.4	Ranunculus acris	Meadow Buttercup
1.4	Rhinanthus minor	Yellow Rattle
1.2	Rumex acetosa	Common Sorrel
1	Sanguisorba officinalis	Great Burnet
0.3	Silene flos-cuculi	Ragged Robin
0.1	Succisa pratensis	Devil's-bit Scabious
0.4	Vicia cracca	Tufted Vetch
Grasses (80%)		
4	Agrostis capillaris	Common Bent (w)
4	Anthoxanthum odoratum	Sweet Vernal-grass (w)
2	Carex divulsa ssp divulsa	Grey Sedge (w)
38.4	Cynosurus cristatus	Crested Dogstail
1.6	Deschampsia cespitosa	Tufted Hair-grass (w)
20	Festuca rubra	Red Fescue
4	Hordeum secalinum	Meadow Barley (w)
8	Poa trivialis	Rough-stalked Meadowgrass
2.4	Schedonorus arundinaceus	Tall Fescue

Soft Rush – To be planted 3/m²

Latin Name	Common Name
Juncus effusus	Soft Rush

River Enhancements

Pre-planted coir rolls (planted at 6m²)

Latin Name	Common Name
Phragmites australis	Norfolk reed
Phalaris arundinacea	Reed canary grass
Glyceria maxima	Reed sweet grass
Iris pseudacorus	Yellow Flag
Lythrum salicaria	Purple Loosestrife
Carex riparia	Greater pond sedge
Carex acutiformis	Lesser pond sedge
Juncus effusus	Soft rush

Other Neutral Grassland (Long Grass)

Emorsgate EG1 General Purpose Meadow Grass Mixture (sown at 5g/m2)

%	Species	Common Name
10	Agrostis capillaris	Common Bent
35	Cynosurus cristatus	Crested Dogstail
30	Festuca rubra	Red Fescue
5	Phleum bertolonii	Smaller Cat's-tail
20	Poa pratensis	Smooth-stalked Meadow-grass

Other Neutral Grassland (Flowering Lawn with bulb planting)

EMORSGATE EM2 STANDARD GENERAL PURPOSE MEADOW MIXTURE

Example seed mix (exact mix to be specified by ecologist to suit site conditions) containing species that characteristic of traditional meadows across a wide range of soil types.

Mixture to be sown at a rate of 4g/m2.

%	Latin Name	Common Name
Wildflowers (15%)		
0.75	Achillea millefolium	Yarrow
0.3	Agrimonia eupatoria	Agrimony
1.5	Centaurea nigra	Common Knapweed
0.9	Daucus carota	Wild Carrot
1.5	Galium verum	Lady's Bedstraw
0.45	Knautia arvensis	Field Scabious
1.27	Leucanthemum vulgare	Oxeye Daisy
1.8	Malva moschata	Muck Mallow
1.8	Plantago lanceolata	Ribwort Plantain
0.9	Poterium sanguisorba ssp sanguisorba	Salad Burnet
0.3	Primula veris	Cowslip
0.75	Ranunculus acris	Meadow Buttercup
0.98	Rhinanthus minor	Yellow Rattle
0.3	Rumex acetosa	Common Sorrel
1.5	Silene dioica	Red Campion
Grasses (85%)		
8.5	Agrostis capillaris	Common Bent (w)
29.75	Cynosurus cristatus	Crested Dogstail
25.5	Festuca rubra	Red-Fescue
4.25	Phleum bertolonii	Smaller Cat's-tail (w)
17	Poa pratensis	Smooth-Stalked Meadow-grass

Bulb Planting – to be planted at 10/m2

Species	Bulb Size
Fritillaria meleagris	
Galanthus nivalis	Grade 4/5
Leucojum aestivum	

Refer to NBS Hard and Soft Landscape Specification P19-0052_63 for further details