

Native Parkland Trees

Botanical Name	Common Name	Height cm	Root Zone	Specification
Alnus glutinosa	Common Alder	250-300	RB	2x Std; clear stem 175-200cm; 3 brks
Betula pendula	Common Silver Birch	250-300	RB	2x Std; clear stem 175-200cm; 3 brks
Carpinus betulus	Common Hornbeam	250-300	RB	2x Std; clear stem 175-200cm; 3 brks
Larix decidua	Common Larch	80-100	RB	2x leader with laterals
Malus sylvestris	Common Crab Apple	350-425	RB	3x HS; clear stem 175-200cm; 5 brks
Prunus avium	Wild Cherry	250-300	RB	2x Std; clear stem 175-200cm; 3 brks
Quercus robur	Common Oak	250-300	RB	2x LS; clear stem 150-175cm; 3 brks
Sorbus aria	Whitebeam	250-300	RB	2x Std; clear stem 175-200cm; 3 brks
Sorbus aucuparia	Rowan	250-300	RB	2x Std; clear stem 175-200cm; 3 brks

Native Woodland and Understorey Mix

Botanical Name	Common Name	Height cm	Root Zone	Specification
Acer campestre	Common Maple	250-300	RB	2x Std; clear stem 175-200cm; 4 brks
Betula pendula	Common Silver Birch	250-300	RB	2x Std; clear stem 175-200cm; 3 brks
Carpinus betulus	Common Hornbeam	250-300	RB	2x Std; clear stem 175-200cm; 3 brks
Cornus sanguinea	Common Dogwood	40-60	B	1+1; Transplant - seed raised; branched; 2
Corylus avellana	Common Hazel	100-125	RB	Branched; 5 brks
Crataegus monogyna	Common Hawthorn	300-350	RB	2x SS; clear stem 175-200cm; 4 brks
Ilex aquifolium	Common Holly	80-100	RB	Leader with laterals
Malus sylvestris	Common Crab Apple	350-425	RB	3x HS; clear stem 175-200cm; 5 brks
Prunus padus	Bird Cherry	300-350	RB	2x SS; clear stem 175-200cm; 4 brks
Quercus robur	Common Oak	250-300	RB	2x LS; clear stem 150-175cm; 3 brks
Sorbus aucuparia	Rowan	250-300	RB	2x Std; clear stem 175-200cm; 3 brks
Tilia platyphyllos	Large-leaved Lime	250-300	RB	2x Std; clear stem 175-200cm; 3 brks
Viburnum opulus	Gelder Rose	30-40	B	1+1; Transplant - seed raised; branched; 2

Ornamental Mix (OM1)

Botanical Name	Common Name	Root Zone	Specification	per m²
Agastache 'Blue Fortune'	Giant Hyssop 'Blue Fortune'	2L	Full pot	1
Anthemis tinctoria 'E.C. Buxton'	Dyer's Chamomile 'E.C. Buxton'	2L	Full pot	3
Arbutus unedo	Strawberry Tree	3L	Branched; 3 brks	3
Brachyglottis monroi	Mono's Ragwort	3L	Branched; 4 brks	3
Calluna vulgaris	Scots Heather	2L	Bushy	6
Ceanothus thyrsiflorus repens	Creeping Blueblossom	3L	Bushy; 5 brks	3
Centaurea dealbata	Perennial Cornflower	3L	Full pot	4
Cirsium rivulare 'Atropurpureum'	Brook Thistle 'Atropurpureum'	3L	Full pot	3
Deutzia x hybrida 'Mont Rose'	Deutzia 'Mont Rose'	3L	Branched; 4 brks	3
Erica x darleyensis 'White Perfection'	Darley Dale Heath 'White Perfection'	2L	Bushy	6
Erica x darleyensis 'White Perfection'	Darley Dale Heath 'White Perfection'	3L	Bushy	5
Festuca glauca	Blue Fescue	5L	Full pot	3
Lavandula angustifolia	True Lavender	5L	Bushy; 5 brks	2
Lavatera 'Barnsley'	Mallow 'Barnsley'	3L	Full pot	3
Napeta cataria	Catnip	2L	Full pot	4
Prunus spinosa	Blackthorn	3L	Branched; 5 brks	2
Ribes sanguineum	Flowering Currant	3L	Branched; 3 brks	2
Salvia elegans 'Tangerine Sage'	Tangerine Sage	3L	Full pot	5
Sedum 'Purple Emperor'	Stoncrop 'Purple Emperor'	5-7.5L	Full pot	2
Verbascum chalcidii	Nettle-leaved Mullein	3L	Full pot	5

Ornamental Mix (OM3)

Botanical Name	Common Name	Root Zone	Specification	per m²
Achillea millefolium	Yarrow	3L	Full pot	1
Aster ericoides 'Blue Star'	Heath Aster 'Blue Star'	2L	Full pot	4
Caryopteris x clandonensis	Bluebeard	3L	Branched; 4 brks	3
Ceanothus x virens 'Pugot Blue'	California Lilac 'Pugot Blue'	3L	Leader with laterals; 3 brks	2
Ceanothus thyrsiflorus 'Skylark'	Blueblossom 'Skylark'	3L	Caned; leader with laterals; 6 brks	1
Cistus x corbariensis	Hybrid Rock Rose	5-7.5L	Bushy; 6 brks	2
Erica x darleyensis 'White Perfection'	Darley Dale Heath 'White Perfection'	2L	Bushy	6
Erica erigena 'Irish Dusk'	Irish Heath 'Irish Dusk'	2L	Bushy	6
Helianthemum 'Jubilee'	Rock Rose 'Jubilee'	2L	Full pot	1
Hebeborus foetidus	Stinking Hellebore	3L	Full pot	3
Jasminum nudiflorum	Winter Jasmine	2L	Caned; several shoots; 3 brks	1
Lavandula angustifolia 'Hidcote'	Lavender 'Hidcote'	5L	Bushy; 7 brks	2
Origanum vulgare	Oregano	3L	Full pot	4
Philadelphus 'Manteau d'Hermine'	Mock Orange 'Manteau d'Hermine'	5-7.5L	Branched; 5 brks	2
Prunella x cistena	Purple-leaf Sand Cherry	3L	Bushy; 3 brks	3
Prunus laurocerasus	Cherry Laurel	5-7.5L	Bushy; 3 brks	1
Pulsatilla vulgaris	Pasque Flower	2L	Full pot	7
Thymus x citrodorus 'Bertram Anderson'	Lemon Thyme 'Bertram Anderson'	1L	Full pot	6
Verbena bonariensis	Argentine Vervain	5L	Full pot	3
Viburnum tinus	Laurestinus	3L	Bushy; 4 brks	3

Ornamental Mix (OM5)

Botanical Name	Common Name	Root Zone	Specification	per m²
Anemone hepuchensis 'September Charm'	Japanese Anemone 'September Charm'	5L	Full pot	3
Betonica officinalis	Betony	1L	Full pot; Sept to April planting; British native-	2
Caltha palustris	Marsh Marigold	3-4L	Full pot; Sept to April planting; British native-	3
Cerastostigma plumbaginoides	Dwarf Plumbago	3L	Full pot	3
Chamaemelum nobile	Lawn Chamomile	3L	Full pot	4
Cytisus scoparius	Common Broom	3L	Bushy; 7 brks	3
Erica cinerea	Bell Heather	2L	Bushy	6
Euphorbia x martinii	Martin's Spurge	3L	Full pot	3
Hebe 'Mrs Winder'	Shrubby Veronica 'Mrs Winder'	5L	Bushy; 5 brks	2
Kousa dogwood	Common Honey-suckle	2L	Caned; several shoots; 2 brks	1
Lythrum salicaria	Purple Loosestrife	3-4L	Full pot; Sept to April planting; British native-	4
Pieris japonica	Japanese Pieris	5L	Bushy; 4 brks	2
Ribes nigrum 'Ben Hope'	Blackcurrant 'Ben Hope'	3L	Bush; 3/5 shoots	1
Rosmarinus officinalis	Rosemary	5L	Bushy; 5 brks	2
Rosmarinus officinalis 'Miss Jessopp's Upright'	Rosemary 'Miss Jessopp's Upright'	5L	Bushy; 5 brks	2
Rosmarinus officinalis 'Prostratus'	Prostrate Rosemary	3L	Bushy; 4 brks	3
Thymus x citrodorus	Lemon Thyme	3L	Full pot	4

Native Hedgerow (Mixed)

Botanical Name	Common Name	Root Zone	Specification	per m²
Acer campestre	Common Maple	B	1+1; Transplant - seed raised	1
Cornus sanguinea	Common Dogwood	B	1+1; Transplant - seed raised; branched; 2 brks	3
Corylus avellana	Common Hazel	B	1+2; Transplant - seed raised; branched; 3 brks	3
Crataegus monogyna	Common Hawthorn	B	1+1; Transplant - seed raised	1
Ligustrum vulgare	Common Privet	B	0/1; Cutting; branched; 2 brks	3
Rhamnus frangula	Alder Buckthorn	B	1+1; Transplant - seed raised; leader with	3
Rosa canina	Dog Rose	B	1+0; Seeding; branched	3
Ulmus glabra	Wych Elm	B	1+0; Seeding	1
Viburnum opulus	Gelder Rose	B	1+2; Transplant - seed raised; branched; 3 brks	2

Bulbs

Botanical Name	Common Name	Root Zone	Specification	per m²
Allium sphaerocephalon	Round-headed Leek	1L	Full pot	1
Allium ursinum	Wild Garlic	1L	Full pot	1
Anemone nemorosa	Wood Anemone	1L	Full pot; Sept to April planting; British native-	1
Carrissa quinquifida	Quamash	1.5-2L	Full pot	1
Colchicum autumnale	Autumn Crocus	B	Grade 18/20	1
Crocus speciosus	Bieberstein's Crocus	B	Grade 5/6	1
Crocus tommasinianus	Early Crocus	B	Grade 5/7	1
Eranthis hyemalis	Winter Aconite	1.5-2L	Full pot	1
Fritillaria meleagris	Snake's Head Fritillary	B	Grade 5/6	1
Galanthus nivalis	Common Snowdrop	B	Grade 5/6; in the green	1
Hyacinthoides non-scripta	English Bluebell	B	Grade 8/9; in the green	1
Narcissus ovalaris	Tenby Daffodil	B	Grade 8/10	1

KEY:

B = Bare-rooted and bagged
brk = Minimum number of breaks or shoots
D = diameter or spread
L = Container size in litres
RB = Root-balled
Sept to April = optimum planting period; suspend when soil frostbound or waterlogged
1+0 = 1 year seedling not transplanted
1+1 = 2 year seedling transplanted after the first year
1+2 = 3 year seedling transplanted after the first year
0/1 = 1 year cutting not transplanted
2x = Number of times transplanted e.g. twice
LS = Light Standard
Std = Standard
SS = Selected Standard

Street Trees

Botanical Name	Common Name	Height cm	Root Zone	Specification
Acer campestre 'Streetwise'	Field Maple 'Streetwise'	250-300	RB	2x Std; clear stem 175-200cm; 3 brks
Acer griseum	Paper-bark Maple	150-175	RB	2x branched; 3 brks
Acer platanoides	Norway Maple	300-350	RB	2x SS; clear stem 175-200cm; 4 brks
Alnus incana	Grey Alder	250-300	RB	2x Std; clear stem 175-200cm; 3 brks
Amelanchier lamarckii	Juneberry	250-300	RB	2x LS; clear stem 150-175cm; 3 brks
Arbutus unedo	Strawberry Tree	250-300	RB	3x branched; clear stem 100-125cm; 3 brks
Carpinus betulus	Common Hornbeam	250-300	RB	2x Std; clear stem 175-200cm; 3 brks
Catalpa bignonioides	Indian Bean Tree	250-300	RB	2x Std; clear stem 175-200cm; 3 brks
Cornus dogwood	Kousa Dogwood	100-125	B	Branched; 5 brks
Crataegus laevigata	Midland Hawthorn	30-40	B	1+0; Seeding
Hamamelis x intermedia 'Arnold	Witch Hazel 'Arnold Promise'	60-80	RB	Branched; 3 brks
Koeleruteria paniculata	Golden Rain Tree	250-300	RB	2x LS; clear stem 150-175cm; 3 brks
Malus 'John Downie'	Crab Apple 'John Downie'	250-300	RB	2x Std; clear stem 175-200cm; 3 brks
Prunus 'Accolade'	Flowering Cherry 'Accolade'	250-300	RB	2x Std; clear stem 175-200cm; 3 brks
Prunus avium	Wild Cherry	250-300	RB	2x Std; clear stem 175-200cm; 3 brks
Prunus 'Kanzan'	Japanese Cherry 'Kanzan'	250-300	RB	2x Std; clear stem 175-200cm; 3 brks
Pyrus communis	Common Pear	250-300	RB	2x Std; clear stem 175-200cm; 3 brks
Sorbus aucuparia 'Fastigiata'	Fastigiata Rowan	250-300	RB	2x Std; clear stem 175-200cm; 3 brks
Sorbus aucuparia 'Streetwise'	Rowan 'Streetwise'	250-300	RB	2x Std; clear stem 175-200cm; 3 brks

Ornamental Mix (OM2)

Botanical Name	Common Name	Root Zone	Specification	per m²
Bergenia 'Bressingham White'	Elephant's Ears 'Bressingham	5L	Full pot	3
Calliandra bodinieri 'Profusion'	Beauty Berry 'Profusion'	3L	Branched; 2 brks	2
Campanula latiflora 'Loddon Anna'	Milly Bellflower 'Loddon Anna'	3L	Full pot	4
Cornus mas	Cornelian Cherry	3L	Branched; 4 brks	1
Cornus sanguinea	Common Dogwood	2L	Branched; 3 brks	3
Escallonia 'Iveyi'	Escallonia 'Iveyi'	5L	Bushy; 5 brks	2
Euonymus europaeus	Common Spindle Tree	3L	Branched; 4 brks	2
Geranium x oxonianum 'Wargrave Pink'	French Cranesbill 'Wargrave	5L	Full pot	3
Lavandula 'Grosso'	Lavender 'Grosso'	3L	Bushy; 7 brks	2
Lonicera fragrantissima	Winter Honeysuckle	3L	Branched; 5 brks	2
Pimpinella saxifraga	Burnet Saxifrage	1L	Full pot; Sept to April planting; British native-	2
Potentilla fruticosa 'Elizabeth'	Shrubby Cinquefoil 'Elizabeth'	5-7.5L	Bushy; 5 brks	2
Ribes rubrum 'Jonkhoeer van Tets'	Redcurrant 'Jonkhoeer van Tets'	3L	Bush; 3/5 shoots	1
Rubus idaeus 'Goldsturm'	Black-eyed Susan 'Goldsturm'	5L	Full pot	2
Salvia nemorosa 'Caradonna'	Balkan Clary 'Caradonna'	5L	Full pot	2
Skimmia japonica	Japanese Skimmia	5L	Bushy; 4 brks	3
Viburnum opulus	Gelder Rose	3L	Branched; 4 brks	2
Weigela 'Victoria'	Weigela 'Victoria'	3L	Branched; 4 brks	3

Ornamental Mix (OM4)

Botanical Name	Common Name	Root Zone	Specification	per m²
Ajuga reptans 'Catlin's Giant'	Bugle 'Catlin's Giant'	2L	Full pot	6
Camellia japonica	Common Camellia	5-7.5L	Leader with laterals; 3 brks	2
Cephalaria gigantea	Giant Scabious	0.5L	Full pot	5
Cornus alba 'Sibirica'	Westernbriar Dogwood	5L	Branched; 4 brks	1
Digitaria purpurea	Foxglove	3L	Full pot; Sept to April planting; British native-	1
Dipsacus fullonum	Wild Teasel	1L	Full pot; Sept to April planting; British native-	2
Filipendula ulmaria	Meadowsweet	3L	Full pot; Sept to April planting; British native-	4
Foeniculum vulgare	Fennel	2L	Full pot	4
Garrya elliptica	Silk-tassel Bush	3L	Leader with laterals; 3 brks	3
Geranium renardii	Geranium	3L	Full pot	5
Hebeborus argutifolius	Corsican Hellebore	5-7.5L	Full pot	2
Mahonia x media 'Charity'	Mahonia x media 'Charity'	5-7.5L	Bushy; 2 brks	1
Osmanthus x burkwoodii	Burkwood Osmanthus	5-7.5L	Bushy; 5 brks	2
Persicaria alexandricae 'Firetail'	Red Bistort 'Firetail'	3L	Full pot	3
Prunus laurocerasus	Cherry Laurel	3L	Bushy; 3 brks	2
Pulmonaria rubra 'Redstart'	Lungwort 'Redstart'	3L	Full pot	5
Rhamnus cathartica	Common Buckthorn	2L	Leader with laterals; 3 brks	2
Rosa arvensis	Field Rose	3L	Branched; 5 brks	2
Salix lanata	Woolly Willow	2L	Branched; 2 brks	4
Sarcococca confusa	a Sweet Box	5L	Bushy; 6 brks	3
Vaccinium corymbosum 'Bluecrop'	Blueberry 'Bluecrop'	1.5-2L	Bushy; 4 brks	1

Ornamental Mix (OM6)

Botanical Name	Common Name	Root Zone	Specification	per m²
Berberis thunbergii	Japanese Barberry	3L	Branched; 5 brks	2
Brachyglottis 'Sunshine'	Shrub Ragwort 'Sunshine'	5-7.5L	Branched; 6 brks	1
Brunnera macrophylla	Siberian Bugloss	2L	Full pot	3
Cornus stolonifera 'Flaviramea'	Yellow-stemmed Dogwood	3L	Branched; 4 brks	2
Euphrasia corollata	Purple Corollifera	5L	Full pot	5
Echinops bannaticus	Blue Globe Thistle	3L	Full pot	3
Eleaegnus x ebbingei	an Oleaster	3L	Branched; 3 brks	2
Erica carnea 'Springwood Pink'	Alpine Heath 'Springwood Pink'	3L	Bushy	5
Hebeborus foetidus	Stinking Hellebore	3L	Full pot	3
Hydrangea macrophylla 'Blue Wave'	Hydrangea 'Blue Wave'	5L	Branched; 5 brks	2
Ligustrum vulgare	Common Privet	2L	Branched; 3 brks	2
Mahonia aquifolium	Oregon Grape	2L	Branched; 2 brks	4
Organum vulgare	Oregano	3L	Full pot	4
Phlox paniculata 'David'	Perennial Phlox 'David'	3L	Full pot	3
Phlox subulata 'David'	Phlox subulata 'David'	5L	Branched; 5 brks	2
Primula veris	Common Primula	3L	Full pot	5
Salix hastata 'Wehrhahnii'	Halberd Willow 'Wehrhahnii'	2L	Branched; 2 brks	4
Sambucus racemosa 'Plumosa Aurea'	Golden Cut-leaf Elder	3L	Branched; 3 brks	2
Sarcococca humilis	Dwarf Sweet Box	5L	Bushy; 6 brks	3
Symplytrum officinale	Common Comfrey	3L	Full pot	2

Ornamental Hedge (Native single species)

Botanical Name	Common Name	Root Zone	Specification	per m²
Cornus betulus	Common Hornbeam	B	1+1; Transplant - seed raised	1
Ligustrum vulgare	Common Privet	B	0/1; Cutting; branched; 2 brks	3

PLANTING NOTES

General

- Plant material shall be in accordance with the National Plant Specification. Plant handling and planting operations shall follow the guidelines in HTA Handling and Establishing Landscape Plants', Parts I-III.
- Imported topsoil (if required) shall meet BS 3882 Multipurpose Grade standards and be sourced from an approved supplier. Existing topsoil for re-use must contain no more than 35% clay and at least 5% organic matter, with a pH range of 5.5-8.5. It must also be free from perennial weeds, weed seeds, and contaminants, with a maximum stone content of 20% (>20mm particle size) and individual stones no larger than 50mm in any dimension. Ameliorate or screen existing topsoil as necessary to meet these specifications.
- Soil conditioner: Apply a 75mm depth of sanitized and stabilized compost conforming to BSI PAS 100. Incorporate into the topsoil to a minimum depth of 150mm during cultivation. Compost must be certified by the Compost Association or sourced from an approved supplier.
- Mulch all planting beds with matured coniferous bark (5-35mm particle size) to a minimum depth of 75mm over weed-free soil after planting and watering operations.

Existing Features

- Protect existing grassland areas retained on site from damage during construction. Re-seed any bare or disturbed areas after works are complete.
- Protect all retained trees in accordance with BS5837 (2012) during construction works.

Tree Planting

- Tree pits in soft landscape areas:
 - Multi-stem and standard: 1200mm diameter x 600mm depth.
 - Standard (selected) and feathered: 600mm diameter x 600mm depth.
 - Whips/Transplants: Pits 150mm wider and 75mm deeper than root spread.
- Support trees with 2 x 75mm diameter stakes, cut 600mm above ground level, and 2 x adjustable tree ties.
- All tree pits to be backfilled with excavated topsoil and compost, mixed with slow-release fertiliser, quantity in accordance with manufacturer's recommendations, and firmed in.
- Install rabbit protection for all whips and transplants using spiral HDPE guards 0.6m high x 50mm diameter (or larger, to suit girth). Secure guards with 900mm bamboo canes inserted 300mm below ground. Protection must allow natural tree movement and unrestricted growth.
- Fit all street trees with aeration/watering pipes and inlets.

Mixed Native Hedgerow Planting

- Prepare a 0.5m wide x 0.3m deep weed-free trench (or larger as required to accommodate root spread). Fork over and 'rip' the trench base and sides to improve drainage before backfilling. Use an appropriate mix of excavated topsoil and compost if necessary (Compost Association certified or from an approved supplier). Work by hand near existing trees or hedgerows. Avoid herbicide application.

- For existing hedgerows: Fill gaps >0.5m with bare-root transplants and container-grown shrubs planted at 0.5m centres. Hand dig carefully to avoid damaging roots >2.5cm in diameter.

- For new hedgerows: Plant shrubs at 0.5m centres. Transplants shall be notch-planted, while container-grown shrubs shall be pit-planted in pits 150mm wider than the root spread. Ensure the root collar sits at ground level after planting and firming.

Install rabbit protection as follows:

- Transplants, cuttings, seedlings: Photodegradable PP tube guards (0.6m high x 50mm diameter or greater, to suit girth), supported by 900mm bamboo stakes.
- Container-grown shrubs: Recycled HDPE photodegradable mesh guards (0.6m high x 150-180mm diameter or greater, to suit girth), supported by 900mm timber stakes.

Planting Beds and Ornamental Hedges

- Incorporate 75mm of sanitized and stabilized compost (