

Plant specification and schedule

Project: Reserved Matters Application for residential development at Harras Moor, Whitehaven

Client: Site Evolution Limited

Document no: 03

Revisions	Date	Notes
0	22.04.2021	original document
1	20.12.2021	updated following planners and consultee review
2	23.12.2021	numbers added

The below description of plant material and soft landscape operations is for the purpose of planning application **only**, and is not a substitute for the more detailed specification which would be required for the purpose of commercially tendering, implementing, establishing and maintaining a soft landscape contract.

Schedules and specification

Individual Trees										
see planting plan for locations					RB = Rootballed BR = bare root and bagged C x = Container grown and size Px = Pot and diameter					Totals for each species
Latin and common name	Form or habit	Age	Height (cm)	Girth (cm)	Root protection and size	Number of breaks or branches	% of mix	Planting density / m ²		
Acer pseudoplatanus (Sycamore)	Standard	2x	8 to 10	250-300	BR	n/a	n/a	n/a	6	
Alnus glutinosa (Common Alder)	Standard	2x	8 to 10	250-300	BR	n/a	n/a	n/a	4	
Amelanchier lamarckii (Snowy Mespilus)	Standard	2x	8 to 10	250-300	BR	n/a	n/a	n/a	17	
Amelanchier obelisk 'Alnifolia'	Standard	2x	8 to 10	250-300	BR	n/a	n/a	n/a	7	
Betula pendula (Silver Birch)	Standard	2x	8 to 10	250-300	BR	n/a	n/a	n/a	15	
Betula utilis var Jaquemontii (white stemmed birch)	Feathered Tree	2x	n/a	150-175	BR	n/a	n/a	n/a	6	
Carpinus betulus 'Fastigiata' (Hornbeam)	Standard	2x	8 to 10	250-300	BR	n/a	n/a	n/a	13	
Corylus avellana (Hazel)	Feathered Tree	2x	n/a	150-175	BR	n/a	n/a	n/a	3	
Crataegus laevigata 'Plena'	Standard	2x	8 to 10	250-300	BR	n/a	n/a	n/a	4	
Crataegus persimilis Prunifolia (Broadleaf cockspur thorn)	Standard	2x	8 to 10	250-300	BR	n/a	n/a	n/a	4	
Ilex aquifolium (Holly)	-	-	60 - 90		C7	3 to 6	n/a	n/a	21	
Ilex Silver Queen clipped balls (clipped holly)	-	-	60 - 90		C7	3 to 6	n/a	n/a	6	
Pinus sylvestris (Scots Pine)	-	-	n/a	40-60	BR	n/a	n/a	n/a	4	
Prunus avium (Wild Cherry)	Standard	2x	8 to 10	250-300	BR	n/a	n/a	n/a	8	
Prunus padus (Bird cherry)	Standard	2x	8 to 10	250-300	BR	n/a	n/a	n/a	13	
Prunus Spire (Hillier's Spire) (fastigiata)	Standard	2x	8 to 10	250-300	BR	n/a	n/a	n/a	10	
Pyrus calleryana 'Chanticleer' (Callery pear 'Chanticleer')	Standard	2x	8 to 10	250-300	BR	n/a	n/a	n/a	3	
Quercus petraea (Sessile Oak)	Standard	2x	8 to 10	250-300	BR	n/a	n/a	n/a	2	
Salix cinerea (Grey Willow)	Standard	2x	8 to 10	250-300	BR	n/a	n/a	n/a	2	
Sorbus aria Lutescens (Whitebeam Lutescens)	Standard	2x	8 to 10	250-300	BR	n/a	n/a	n/a	10	
Sorbus aucuparia (Rowan)	Standard	2x	8 to 10	250-300	BR	n/a	n/a	n/a	14	
Sorbus aucuparia 'Streetwise' (fastigiata Rowan)	Standard	2x	8 to 10	250-300	BR	n/a	n/a	n/a	9	
Sorbus intermedia (Swedish Whitebeam)	Standard	2x	8 to 10	250-300	BR	n/a	n/a	n/a	7	
Sorbus vilmorinii (Vilmorins Rowan)	Standard	2x	8 to 10	250-300	BR	n/a	n/a	n/a	5	
Total									193	

Avenue Shrub specification

see planting plan for locations
See table below for numbers for each bed

RB = Rootballed
BR = bare root and bagged
C x = Container grown and size Px = Pot and diameter

Latin and common name	Form or habit	Age	Height (cm)	Girth (cm)	Root protection and size	Number of breaks or branches	% of mix	Planting density / m ²
GROUND COVER PLANTS								n/a
Cotoneaster dammeri			20 - 30		C1	3 to 5	n/a	5
Cotoneaster procumbens Queen of Carpets			20 - 30		C1	3 to 5	n/a	5
Euonymus fortunei 'Darts Blanket'			20 - 30		C1	3 to 5	n/a	5
Hedera colchica Dentata Variegata (Variegated Ivy)			20 - 30		C1	3 to 5	n/a	5
Viburnum davidii			20 - 30		C1	3 to 5	n/a	5
Vinca major (Periwinkle)							n/a	5
MEDIUM HEIGHT PLANTS								
Choisya ternata (Mexican Orange Blossom)			40 - 60		C5	3 to 6	n/a	4
Euonymus fortunei 'Silver Queen'			40 - 60		C5	3 to 6	n/a	4
Loncicera ligustrina var yunnanensis "Maigrun"			40 - 60		C5	3 to 6	n/a	4
Prunus laurocerasus "Otto Luyken" Cherry Laurel "Otto Luyken"			40 - 60		C5	3 to 6	n/a	4
TALLER PLANTS								
Cotoneaster franchetii			40 - 60		C5	3 to 6	n/a	3
Escallonia lveyi AGM (White flowered escallonia)			40 - 60		C5	3 to 6	n/a	3
Griselinia littoralis (New Zealand Broadleaf)			40 - 60		C5	3 to 6	n/a	3
Pinus mugo (dwarf pine)			40 - 60		C5	3 to 6	n/a	3
Prunus lusitanica (Portugese Laurel)			40 - 60		C5	3 to 6	n/a	3
Viburnum tinus "Eve Price"			40 - 60		C5	3 to 6	n/a	3

Avenue Shrub schedule

Species	Bed reference																				Total
	A1	A2	A3	A4	A5	A6 & 9	A7 & 8	A10	A11	A12 & 13	A14	A15, 16, & 19	A17 & 18	A20 & 21	A22	A23	A24	A25, 26 & 27	A28 & 29	A30	
GROUND COVER PLANTS																					
Cotoneaster dammeri	40		30					25	25	15				40							175
Cotoneaster procumbens Queen of Carpets		40				80							25							75	220
Euonymus fortunei 'Darts Blanket'				30		50															80
Hedera colchica Dentata Variegata (Variegated Ivy)					40					15											55
Viburnum davidii					20		25					25									70
MEDIUM HEIGHT PLANTS																					
Choisya ternata (Mexican Orange Blossom)						70					30				20						120
Euonymus fortunei 'Silver Queen'					40		25					25		50		30	30	150			350
Loncicera ligustrina var yunnanensis "Maigrun"		40								30				80		40				75	265
Prunus laurocerasus "Otto Luyken" Cherry Laurel "Otto Luyken"	40				40			25	25			25							150		305
TALLER PLANTS																					
Cotoneaster franchetii															75						75
Escallonia lveyi AGM (White flowered escallonia)															80		60			50	190
Griselinia littoralis (New Zealand Broadleaf)															75						75
Pinus mugo (dwarf pine)															30						30
Prunus lusitanica (Portugese Laurel)																	100				100
Viburnum tinus "Eve Price"															75						75

Edge Shrub and Scrub mix specification

see planting plan for locations
See table below for numbers for each bed

RB = Rootballed
BR = bare root and bagged
C x = Container grown and size Px = Pot and diameter

Latin and common name	Form or habit	Age	Height (cm)	Girth (cm)	Root protection and size	Number of breaks or branches	% of mix	Planting density / m ² (where appropriate)
Buddleja davidii (Butterfly Bush)	Transplant	1+1	n/a	40-60	cell grown		10%	0.5
Cornus sanguinea (Common Dogwood)	Transplant	1+1	n/a	40-60	cell grown		10%	0.5
Corylus avellana (common hazel)	Transplant	1+1	n/a	40-60	cell grown		10%	0.5
Cotoneaster franchetii				40 - 45	3L		5%	0.5
Ilex aquifolium (holly)	-	-	n/a	40-60	3L		10%	0.5
Lonicera periclymenum (Honeysuckle)	-	-	n/a	20-30	1L		5%	0.5
Prunus spinosa (blackthorn)	Transplant	1+1	n/a	40-60	cell grown		10%	0.5
Rosa canina (Dog Rose)	Transplant	1+1	n/a	30-40	BR		10%	0.5
bramble)	Transplant	1+1	n/a	30-40	BR		10%	0.5
Salix caprea (goat willow)	Transplant	1+1	n/a	40-60	cell grown		10%	0.5
Sambucus nigra (Elder)	Transplant	1+1	n/a	40-60	cell grown		5%	0.5
Viburnum opulus (guelder rose)	Transplant	1+1	n/a	40-60	BR		5%	0.5

Edge Shrub and Scrub mix Schedule

	Bed reference																					
	E1	E2	E3	E4	E5	E6	E7	E8 & E9	E10	E11	E12	E13	E14	E15								
Buddleja davidii (Butterfly Bush)		10	5	10	5							5									35	
Cornus sanguinea (Common Dogwood)	5		5		10	10	10	10	10	20			5								85	
Corylus avellana (common hazel)							10	5	5	20		5	5	10							60	
Cotoneaster franchetii		10	5	10			10	10	10	20		5	5	10							95	
Ilex aquifolium (holly)	5		5		10		10	10	10	20	15										85	
Lonicera periclymenum (Honeysuckle)												5									5	
Prunus spinosa (blackthorn)								10	10	20		5									55	
Rosa canina (Dog Rose)								10	5	10	20	5									50	
Salix caprea (goat willow)								10	5	10	20										45	
Sambucus nigra (Elder)							10	5	10	20											45	
Viburnum opulus (guelder rose)		10	5	10		10	10	10	5	20		5									85	
	10	30	25	30	25	20	90	70	80	180	20	30	15	20	0	0	0	0	0	0	0	645

Bulbs

see planting plan for locations

Latin and common name	Form	Age	Girth (cm)	Height (cm)	Root or pot size	% of mix	Planting density / m ²	Totals for each species
Galanthus nivalis (Snowdrop)					4 - 5 cm	n/a	n/a	500
Narcissi pseudonarcissus (native Daffodil)					12 - 16 cm	n/a	n/a	500
						n/a	n/a	
						n/a	n/a	
Total								1000

Wildflower grass

Local provenance wildlife seed from Cumbrian Wildflowers, Great Orton, Carlisle, in accordance with soil samples and their advice

Wetland species

Local provenance plant plugs from Cumbrian Wildflowers, Great Orton, Carlisle, in accordance with soil samples and their advice

Establishment regime

Year 1 establishment (seeding and planting year)

Carry out planting between November and March

Plant trees in prepared pits backfilled with topsoil, fertiliser and soil conditioner, in accordance with manufacturer’s recommendations. Do not use peat-based products.

Protect new hedging along garden frontages with chestnut pale fencing to the road-side of hedge

Protect shrubs with shelters and stakes

Support and protect trees with double stakes and ties

Protect hedgerows from cattle with stock proof fence

Provide shelter and prevent short-cuts for road-side hedges with geotextile fence line to a height of 750mm to windward side or side which is more vulnerable to traffic

Use chestnut pale fence in order to prevent short cuts across new planting

Sow grass seed or lay turf on prepared bed during correct climatic conditions, and mow as necessary to achieve thick sward no higher 75mm

Sow seed in Spring or early Autumn when the soil is warm, in correct climatic and weather conditions, and mow as necessary to achieve thick sward no higher 75mm

Lay turf on prepared bed during correct climatic conditions, and mow as necessary to achieve thick sward no higher 75mm

Sow wildflower seed on prepared bed from which any topsoil has been removed and allow to grow, flower and shed seed before any cut, in accordance with supplier’s instructions.

Years 1 – 5, each year (maintenance)

Keep grass short around bases of trees with mowing and / or mulch mats, as appropriate

Inspect tree ties, stakes and shelters / guards; loosen and remove as necessary with all being removed by year 5.

Trim hedgerow annually during correct season to obtain a dense, semi-formal shaped hedgerow of the same height as adjacent existing hedgerows.

Trim hedges annually during correct season to obtain a dense, formal shaped hedge of 1.2m ultimate height.

Prune and lay hedgerows as necessary once a year to develop dense, evenly shaped hedgerow

Replace any trees or shrubs which are dead or failing to thrive in the winter of each year.

Mow amenity grass areas as required to ensure sward does not exceed 50mm.

Exact wildflower maintenance regime for wildflower areas to be determined in consultation with seed supplier.

Cut wildflower area only once a year, at end of summer / early autumn when flowering is over.

Leave grass and stems on ground for two weeks afterwards, to allow seed to fall, then remove the grass and stem, to prevent them from enriching the soil (which would allow common grasses to out-compete the wildflowers).

Water trees, hedgerows, hedges and shrubs if drought conditions occur.

Inspect and maintain all fencing, paying attention to stock proof fencing

Remove chestnut pale fencing once threat of shortcuts through beds or damage from vehicles is passed

Suggested ongoing maintenance operations

Amenity grass: continue to keep grass short around bases of trees with regular mowing

Wildflower grass: continue to prevent common grass from out-competing wildflowers, following above techniques.

Hedgerows: regular trimming to ensure dense, neat shape, laying as required

Hedges: regular trimming to ensure dense, neat shape

Shrubs: regular trimming to remove damaged or diseased branches, maintain desired shape and size / height, and to avoid over-crowding

Trees: prune as necessary to maintain good shape and to avoid disease, overcrowding, or low canopies

Shrub and scrub blocks: thin as necessary to ensure views to water remains unobstructed in many places, while keeping an inhospitable dense cover of foliage (safety)

ORCHARD

Year 1 establishment (planting year)

Purchase unfeathered maidens (maiden whips) with good root system and sturdy stems.

Carry out planting between November and March.

Plant trees in prepared pits backfilled with topsoil, fertiliser and soil conditioner, in accordance with manufacturer’s recommendations.

Protect feathered maidens with shelters and stakes.

Winter Year 1 formative pruning

Undertake pruning when tree is dormant (usually between November and early March).

Always use sharp secateurs to make pruning cuts, above, and sloping away from nearest bud.

In order to stimulate production of strong vigorous shoots (from which primary branches can be selected), prune branches to a bud which is approximately 75cm above ground level, leaving three or four healthy buds below the cut.

Should any fruit develop in this year, remove it as soon as it becomes visible, so that the tree’s energy is directed towards healthy tree growth.

Winter Year 2 formative pruning

If a strong, central topmost shoot has developed, and is too vertical and dominant, prune to just above the next lowest wider-angled side branch.

Select the best three to five shoots to begin to form the main framework of branches.

The aim is to create a “goblet” shaped structure. Shorten these selected branches by half, with the cut being just above an outward facing bud – this will help encourage the goblet shape. If any branches are growing horizontally, prune to an upward-facing bud to further encourage a goblet shape.

Remove all remaining lower branches, with a cut close to the main stem.

If the tree is growing well, allow one or two fruit to develop. If growth is slow, remove the fruit as soon as it becomes visible.

Winter Year 3 formative pruning

Shorten the previous year’s growth on main stems (primary branches) by approximately 1/3, with the cut being above a healthy outward-facing bud.

Leave a framework of 8 to 10 side branches which will form the permanent framework of the fruit tree.

Only remove side branches arising from the main stem if they are misplaced, or crossing each-other (risking rubbing and disease), or if they are growing inwards towards the centre of the tree.

Thin any crowded branches.

Should any strongly upright shoots be developing at the top of the tree, also remove these.

For fruit-forming in this and subsequent years, ensure the fruits are not crowded or rubbing against each-other, by removing as necessary to allow air, light and sunlight in to them, and to avoid rubbing.

Guidance for winter pruning in subsequent years

Firstly, remove any branches that are crossing, rubbing, damaged, dead or diseased.

Then, in order to encourage the development of new branches and maintain a good shape, shorten previous year’s growth on each main (primary) branch by approximately one third, with the cut being just above a bud which faces in the desired direction (usually outward-facing).

Only remove young lateral branches if they are becoming crowded.

Remove any strong shoots which are growing towards the centre of the tree.

Years 1 – 5, general maintenance of the orchard area, each year

Keep grass short around bases of trees with mowing, herbicides and / or mulch mats, as appropriate

Inspect tree ties, stakes and shelters / guards; loosen and remove as necessary with all being removed by year 5. .

Water trees if drought conditions occur.

Inspect and maintain stock proof fencing.

Replace any trees and shrubs which are dead or failing to thrive in the winter of each year.

Guidance for ongoing maintenance operations in subsequent years

grass: keep grass short around bases of trees with regular mowing

Continue to water trees in times of drought.