









1.0 Site Preparation and Earthworks

- 1.1 Generally, all earthworks shall be executed in accordance with BS4428 'General Landscape Operations'.
- 1.2 Ground profiles to be left with smoothly flowing contours, free from localised depressions, high spots and abrupt angles.
- 1.3 Testing and analysis of existing site soils shall be undertaken to determine their suitability for re-use within the landscape scheme, and where possible, existing subsoil and topsoil shall be used. Should existing soils not be suitable for re-use horticulturally, subsoil and/or topsoil shall be imported, and shall comply with physical and chemical parameters set out in a separate, detailed specification.
- 1.4 A minimum depth of 600mm of viable rooting depth is required for trees, hedges and ornamental shrubs / grasses within all planting areas.

Within this, the depths of subsoil and topsoil layers should be as follows :

Type of Planting/Lawn	Topsoil Depth	Subsoil Depth
Tree pits	500mm	500mm
Shrub and Hedge Planting	300mm	300mm
Grass Areas	150mm	150mm

- 1.5 Cultivate topsoil to produce an even surface free from lumps and clods. Cultivation shall be to a minimum depth of:
- Planted areas: 300mm
 - Grass areas: 150mm
- 1.6 The need for ameliorants and fertilisers shall be reviewed by appropriate soil testing, prior to soil spreading or import.

2.0 Planting

- 2.1 Handling and transportation of all plants shall be carried out in accordance with Horticultural Trade Association's 'Plant Handling' recommendation (1987).
- 2.2 All planting operations shall be carried out in accordance with BS5236:1975; BS4043:1989, and BS4428:1989. Advanced nursery stock to BS5236:1975.
- 2.3 Trees : All trees shall be supplied in accordance with the plant schedules by named nurseries.

Tree planting backfill shall contain:

- 80% by volume : Topsoil
- 20% by volume : Mushroom Compost
- 3 kg/m³ : Enmag Fertilizer
- 1kg/m³ : Water Retaining Polymer Gel

Underground Guying : All semi-mature and multi stemmed trees (over 2.5 metres in height) are to be anchored using "Duckbill" anchoring kit. Watering tubes shall be supplied for all semi mature and extra heavy standard stock. To be 50mm diameter, black land flex perforated land drainage pipe with suitable rubber/plastic bung.

Tree pits in soft areas : Tree pits should be excavated to the following dimensions:

- Semi mature trees 20-35cm girth
And coniferous trees 1700mm square x 1000mm deep
- Multi-stemmed trees 1300mm square x 800mm deep

Tree pits in hard paved areas : Tree pits should be excavated to the following dimensions:

- 3.0 x 3.0 x 1.2 metre depth including 700mm soakaway/drainage layers at the base of the pit, and backfilled using structural tree soil

- 2.3 Shrubs, ornamental grasses and herbaceous perennials : All shrubs shall be supplied in accordance with the plant schedules by named nurseries. Planting pits to be excavated to allow a 75mm clearance around the edges of the root system. Sides and bottom of pits shall be loosened to relieve any compaction. Backfill for each plant to include 50g of SA1 Enmag.

Bark mulch shall consist of matured British conifer bark with an even particle size distribution between 5-35mm. The mulch to be Melcourt 'Ornamental Grade Bark Mulch' or similar approved, and a representative sample of the mulch shall be supplied for approval prior to delivery to site

- 2.5 Hedges : Plant in single or staggered rows of hedge plants as detailed in the Plant Schedules
- 2.6 Turfing : Turf to be Wildflower Turf Species Rich 26 or similar approved, supplied to BS3969. Pre-turfing fertiliser to be Fisons 'PS5' applied at a rate of 70g/m². The turves will be laid with half lapped joints and well butted up.

3.0 Watering

All tree pits and shrub beds shall be thoroughly watered prior to application of mulch and subsequent maintained in a moist condition. Watering rates shall be as follows:

- Advanced nursery stock trees 50 litres/tree
- Shrub areas 30 litres/m²

4.0 Maintenance

All shrub / ornamental grasses / herbaceous perennials, hedges and lawn areas to be maintained under installing contract for 12 months post Practical Completion, and all semi mature trees to be maintained under installing contract for 24 months post Practical Completion, to provide optimum conditions for plant and grass growth and to present a clean and tidy appearance. All deaths and failures are to be replaced at the first horticulturally sound opportunity.

Trees Specification List				
Variety	Overall Height/Girth cm	English Description	Clear Stem Feathered	Notes
Alnus glutinosa	20-25cm girth	Semi mature	Clear stemmed	Rootballed
Amelanchier canadensis	2.5-3m height	Multi stemmed	Multi stemmed	Rootballed. Umbrella form
Betula pendula	25-30cm girth	Semi mature	Clear stemmed	Rootballed
Betula pendula	5.5-6m height	Semi mature	Multi stemmed	Rootballed
Corylus colurna	20-25cm girth	Semi mature	Clear stemmed	Rootballed
Pinus nigra 'Austriaca'	3.5-4.0m height	Semi mature	Feathered	Rootballed
Prunus avium 'Plena'	20-25cm girth	Semi mature	Clear stemmed	Rootballed
Sorbus acuparia	3.5-4m height	Semi mature	Multi stemmed	Rootballed
Acer campestre 'streetwise'	25-30cm girth	Semi mature	Clear stemmed	Rootballed
Malus 'Evereste'	2.5-3m height	Semi mature	Multi stemmed	Rootballed

Container Grown Shrubs, Herbaceous Perennials and Ornamental Grasses Specification List						
Variety	Pot Size	Height/Spread	Habit	Min no of breaks in lower third	Planting Density per m ²	Notes
Cornus 'Mid Winter Fire'	3L	45-60cm	Branched	8	3	
Cornus 'Flaviramea'	3L	45-60cm	Branched	8	3	
Prunus 'Zabeliana'	3L	30-45cm	Branched	8	4	
Prunus 'Iusticanica'	3L	30-45cm	Branched	8	4	
Hebe 'Pluto of Golden Esk'	3L	20-30cm	Bushy		5	
Dryopteris filix-mas	3L	25-35cm			6	Full pot
Asplenium scolopendrium	3L	25-35cm			6	Full pot
Carex pendula	3L	30cm +	Bushy		4	Well rooted clump
Luzula nivea	3L	10-25cm			5	Full pot
Persicaria affinis 'Darjeeling Red'	3L	20cm+			6	Full pot
Calamagrostis 'Waldenbuch'	2L	30cm +			5	Well rooted clump
Miscanthus 'Starlight'	3L	30cm +	Bushy		4	Well rooted clump
Carex testacea	3L	30cm +	Bushy		6	Well rooted clump
Liriope muscari 'Big Blue'	3L	20-30cm			as shown	Full pot
Euphorbia robbiae	3L	20-30cm			as shown	Full pot

Container Grown Shrubs, Herbaceous Perennials and Ornamental Grasses Specification List						
Variety	Pot Size	Height/Spread	Habit	Min no of breaks in lower third	Planting Density per m ²	Notes
Digitalis purpurea	3L	30cm+			as shown	Fuill pot
Kniphofia 'Percy's Pride'	3L	30cm+			as shown	Fuill pot
Verbena bonariensis	3L	30-45cm			as shown	Fuill pot
Sanguisorba officianalis 'Tanna'	3L	20cm+			as shown	Fuill pot
Rudbeckia fulgida 'Goldsturm'	3L	30cm+			as shown	Fuill pot
Verbena 'Lollipop'	3L	20cm+			as shown	Fuill pot

Hedging Stock Specification List						
VARIETY	SIZE / FORM	HEIGHT/ SPREAD cm	HABIT	MINIMUM NO. OF BREAKS IN LOWER THIRD	PLANTING DENSITY per linear metre	NOTES
Carpinus betulus	10L pot	2m tall cut to 1.5m	Bushy	8	4 / linear metre in a double staggered row	Well feathered to base
Hedging Stock Specification List - Native species hedgerow						
VARIETY	SIZE / FORM	HEIGHT/ SPREAD cm	HABIT	MINIMUM NO. OF BREAKS IN LOWER THIRD	PLANTING DENSITY 5 plants per linear metre	NOTES
Acer campestre	5L pot	1.2 metre height	Branched	8	20%	Double staggered row
Corylus avellana	5L pot	1.2 metre height	Branched	8	15%	Double staggered row
Crataegus monogyna	5L pot	1.2 metre height	Branched	8	20%	Double staggered row
Ilex aquifolium	5L pot	1.2 metre height	Branched	8	10%	Double staggered row
Prunus spinosa	5L pot	1.2 metre height	Branched	8	15%	Double staggered row
Rosa canina	5L pot	1.2 metre height	Branched	8	5%	Double staggered row
Viburnum opulus	5L pot	1.2 metre height	Branched	8	5%	Double staggered row

VEGETATION MAINTENANCE AND MANAGEMENT SCHEDULE ONE YEAR

Operation	Annual frequency of operation	Month											
		Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Newly planted trees													
Formative pruning	1X												
Adjust tree ties, replace as necessary	1X												
Weed control around base of trees	1X												
Apply fertiliser													
Firming													
Check stakes and guys, and re-tighten / replace / remove as necessary	2X												
Watering as necessary	12X												
Tree replacements when required	1X												
Pest and disease control (when required)													
Wildflower Meadow - following the first year only													
Cutting and remove arisings	2X												
Strimming where required, to occur at each cut	2X												
Replacement as necessary													

VEGETATION MAINTENANCE AND MANAGEMENT SCHEDULE ONE YEAR

Operation	Annual frequency of operation	Month											
		Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Newly planted hedges, ornamental grasses and herbaceous perennials													
Prune (exact timing dependent on species)	2X												
Pruning of herbaceous perennials	monthly												
Apply fertiliser	1X												
Weed control (spot treatment and / or hand weeding)	as required												
Re-mulch	1X												
Watering as necessary	as required												
Trim hedges (exact timing dependent on species)	1X												
Pest and disease control (when required)	as required												
Replacements where necessary	1X												
Thinning as necessary	1X												
Grass Verges													
Mowing	20-24X												
Weed control (using approved herbicide)	as required												
Strimming and / or edging with edging shears (to borders and road edges) to occur at each cut	20-24X												
Fertiliser	2X												
Aeration (every 3 years)													
Scarifying	2X												
Rolling of formal lawns	1X												
Reinstatement as necessary	as required												