

Specification for Soft and Hard Landscape Works.

All landscape works shall comply with BS 4428:1989.

Unless where otherwise specified:-

A. Setting Out

1. Planting shall be set out exactly as shown on the drawing and measured from existing fixed points. Curved beds shall be set out using radii scribed on the ground using two pointed stakes and a line between, or with site marker paint. The junction between convex and concave curves shall be cut to form a smooth and even flowing line. Check that all setting out conforms to the plan before cultivation and planting works are carried out. Failure to do so may result in rejection of the work by the landscape architect and may require amendment at the contractor's expense.
2. All planting beds shall be a minimum of 1 metre wide, except where there is insufficient space, due to the constraints of walls and path edgings and their foundations. With narrow beds between walls/fences and path edgings, ensure that the bed has space free from concrete footings before planting. If the bed is sealed with concrete, then the landscape contractor shall contact the site manager or landscape architect to determine if footings are excessive and can be reduced or else, the bed can be paved. The width of all beds will be checked by the inspecting landscape architect and where the width is not as drawn, the contractor shall re-cultivate them to the specified width at his own expense.

B. Ground Preparation.

1. Pre-planting herbicide application shall be applied by suitable spraying apparatus using an approved translocated systemic herbicide to manufacturer's instructions and 1997 Control of Pesticides Regulations and 2003 COSHH regulations on all beds, except those which are both weed free and are to receive geotextile sheet mulch. Spray immediately if any weeds are present. If none are showing, but there may be a delay before planting, or the area is to be seeded, spray after one month following cultivation, to allow dormant seed to germinate. All spraying shall be carried out by skilled and qualified operatives using protective clothing, in suitable weather (no wind) and any damage caused by spray drift, from incorrect usage or spillage, shall be rectified at the contractor's own cost. Repeat as necessary to ensure complete kill and rake off all dead material from site.
2. Carry out the following works to the existing topsoil on site to ensure it conforms to BS 3882:2015, being free from rocks larger than 50mm diameter, concrete, all roots, wire, brick, and have less than 20% clay. Allow for pre-application of herbicide as above. Fertilise with 100g per metre square of Fisons "Neutrocote" slow release fertiliser, in accordance with the manufacturer's instructions. For beds less than 5 metres in width, rotovate over thoroughly or machine rotovate soil to a depth of 300mm, ensuring that the subgrade and topsoil are completely broken up and free of stones, allowing any compaction. For beds greater than 5 metres in width, break up the subgrade and topsoil using a tractor mounted subsoiler or ripper at 500mm centres to a depth of 500mm, except where there are services, or within 10 metres of tree stems or 3 meters of existing hedges. Do not cultivate where services are encountered. Do not break up soil within the root protection zone of any retained tree. Refer to All About Trees Arboricultural Implications Assessment for further information.
3. Determine before submitting a tender, the extent of support from the site manager with ground preparation: ensure soil of all planting beds is graded to a level 65mm below adjacent grass or paved surfaces, (90mm below where agro-textile or mulch is not specified), within 10m 500mm of edges to ensure bark or wood chip mulches are retained. Where grass is proposed, then the soil level shall be flush (maximum 10mm "dip" never proud) of adjacent paved surfaces, to receive rain water run-off. The landscape contractor is responsible for ensuring that the final product conforms to the specification even where the developer and/or main contractor have failed to supply and spread topsoil to the recessed level. The landscape contractor shall allow for adjustment of levels, as specified above, including for re-grading subsoil and topsoil. Where beds are sloping, ensure that topsoil is graded to the specified levels before placement & grass surfaces within 400mm of the edges of the bed. This is to allow for sheet mulch and bark/or wood chip mulches to be flush with adjacent pavements and also to allow surface water to drain from paths on to planted areas.
4. For sloping areas to be turfed adjacent to paved areas, topsoil levels shall be graded flush with the finished paved surfaces (20mm below), to allow surface water to drain from pavements to soft areas. Soil of grass areas should therefore never be proud of paved areas. Soil levels more than 10 mm below pavement edges will cause mower damage on cutting.
5. Imported topsoil (where specified and sanctioned by the employer) for making up ground, shall conform to BS 3882: 2007, and be free from rocks (over 50mm diameter), concrete, roots, wire and brick, and have less than greater than 20% clay. Such soil shall be cultivated as set out above. Representative samples shall first be approved by the landscape architect before being supplied to site. No imported soil shall be supplied to site without a written instruction.

C. Planting

1. All planting must be carried out in accordance to the specification and schedule of quantities accompanying these drawings. Refer to the specification for the preparation of existing topsoil and required depths for planting, turfing, and standard trees, and also for maintenance requirements.
2. No substitutions will be accepted without the prior agreement of the inspecting landscape architect. The contractor shall replace at his own cost any stock size, species or variety of plant which has not been specified on the planting plan and schedule, unless prior agreement of a substitution by the landscape architect has been received. All plants shall be true to size specified in the schedule of plants and associated specifications (transplants, 10 pots are 15cm diameter and 15cm deep). All shrubs, (other than ground cover), shall be 400-600mm height and spread, or otherwise specified. All the pot size by the HTA National Plant Specification and be bushy, healthy, disease free stock, not pot bound, leggy or spindly. There should be a minimum of 5 breaks per shrub. This specification is the minimum standard required and any stock failing below this standard, in the sole opinion of the inspecting landscape architect, shall be lifted and replaced at the contractor's expense.
3. Refer to accompanying Landscape Management Plan for watering details.
4. Proposed large feathered or standard trees to be true to the species, variety and size as specified on the planting plan, to include 1.6m chestnut stake 600mm above ground and 1000mm below ground) and 1No.tie with spacing device positioned 25mm maximum from bud.
5. Turf to be of cultivated grade such as Rowlawn "Medallion", or other of similar quality and source, approved by the landscape architect. The contractor shall replace at once any turf rejected by the landscape architect at his own cost.
6. Self-clinging climbing shrubs or wall shrubs shall be trained to the wall/fence with heavy duty, plastic coated garden wire. Training wires shall be attached vertically to the wall/fence by means of 125mm long stainless steel eye screw fixings. Position 1No. at 250mm from ground, and 1No. 250mm from top of the wall/fence, and string the wire tightly between the fixings. Train the climber to the wire with plastic coated garden wire tags.
7. Twining varieties of climber shall be trained to walls/fences by mounting ready-made trellis panels 1.8 x 1.8m generally (but 1.8 x 0.6m for corners or where space is restricted). Include for adapting any panels for locations where walls or fences are lower than 1.8m. Fix trellis panels to the wall/fence using non rusting screws 125mm long (to be approved), incorporating 50mm cube wood spacing blocks to ensure that the panel is mounted sufficiently far from the wall/fence to allow twining of stems. Ensure that all timber is pressure impregnated with a non phyto-toxic preservative and then painted with a dark brown non phyto-toxic preservative wood stain such as Sadolin "Classic" walnut or similar and approved. Ensure that the trellis is not in contact with the ground. Train the climbing shrub to the trellis with plastic coated garden wire tags.
8. Climbers specified outside proposed shrub beds shall have specially prepared climber pits. Climber pits shall be 400mm x 400mm and 600mm deep (minimum size), and be backfilled with topsoil (from site - unless otherwise agreed). Ensure the face of the pit is thoroughly broken up and free draining before back filling with topsoil. Ensure no damage to foundations and services, and make good all structures and surfaces disturbed. Fertilise with 50g of Fisons "Neutrocote" slow release fertiliser. Water with 15 litres of water per climber pit.

D. Mulch

1. When specified by the additional specification notes on this plan, supply and spread agrotextile "Weedtrap Fabric" sheet mulch over planting beds, previously, cultivated, graded and fertilized topsoil before planting, and peg down with Weedtrap pegs at a minimum of 500mm centres, (300mm at edges) and beds less than 1m wide. Pegging this densely is essential to prevent flaps of material becoming exposed. Refer to the specification for "Weedtrap Fabric" sheet mulch on plan.
2. Following planting supply and spread evenly Melcourt Industries "Rustic Biomulch" to a depth of 50mm, (75mm if no sheet mulch specified), over all planted areas. Finished mulch levels shall be no higher than 15mm below pavement or grass levels to avoid any spillage onto pavements or lawns. N.B. no substitution of mulch type will be acceptable. It is essential to have a no-fines, large particled, brown wood chip to reduce weed growth, reduce wind blow and prevent rapid break down.

E. BS Codes

1. All workmanship and materials shall conform to the following codes:-
   - General landscape operations (excluding hard surfaces) - BS 4428:1989.
   - Trees in relation to construction- BS 5837:2012.
   - BS 3998:2010 (recommendations for tree works) unless otherwise specified.
   - Arboricultural Association - GN 8 Framework for tree work contracts - standard conditions of contract and specification for tree works 2008.
   - BS 8545:2014 Trees: from nursery to independence in the landscape. Recommendations
   - Nursery stock in accordance with latest horticultural trade association nursery stock specification entitled "National Plant Specification 2001 ".
   - Turf - BS 3969:1998 -recommendations for turf for general purposes.
   - Seeding - EEC Regulations 1974. Use blue labelled certified varieties to EC purity and germination requirements. When requested, submit an official seed Testing Station Certificate of germination, purity and composition.
   - Topsoil - BS 3882:2007
   - Pesticides. Control of Pesticides Regulations 1997; The Health and Safety at Work Act 1974; the COSHH Regulation 2003, the product COSHH sheet Water Supply (Water Quality) Regulations amended 1991;Control of Pollution Act 1974; Hedgerow ACT 1997; Wildlife and Countryside Act 1981.

F. General Notes for the Developer.

1. Tree Protection
   - Please refer to All About Trees' tree protection information. No digging to take place within the root protection zones of protected trees.
2. Ground Work
   - Soil levels for shrub beds and grass areas should have any compacted subgrade thoroughly broken up by machine before instructing the ground worker to spread topsoil or the landscape contractor to commence work or the beds will become waterlogged in wet weather and the plants and turf.
   - Top soil spread from on site should be to the following minimum depths:- Shrub beds: 350mm. Grass areas 150mm. allow for excavation of 415mm of the subgrade for shrub beds to leave beds 65mm below finished pavement or grass areas in order to receive sheet and bark mulch, (90mm below where sheet mulch is not to be used). Tree pits will be as per BS 8545:2014. Top soil shall be spread for grass areas flush with any areas of paving and after settlement, the soil level should be no greater than 10mm below paved areas to allow for turf. For areas to be grass seeded, the soil level shall be flush with any finished paved surfaces after settlement (or to a maximum of 5mm below) to allow for rain water to drain onto side surfaces. Settlement shall be no greater than the tolerances given or problems will be encountered with mowing (the blades in danger of touching concrete edgings) or where soil is proud of pavements, then drainage problems will be encountered.
   - Existing topsoil and imported soil shall conform to BS 3882:2007., and be free from compaction, rocks/bricks greater than 50mm diameter, concrete, wire, roots, debris, oil, cement and builders rubble. Soil shall have a clay content of less than 20%.

3. Hardworks
   - Hard works, unless otherwise agreed, shall be carried out by the developer or main contractor. All materials and workmanship shall be in accordance with the construction details and the layout plan.
   - All paths and edgings shall be set out properly to lines and radii, with all curves scribed on the ground using pointed pegs and string or bye marker paint, achieving flowing natural arcs. Setting out shall be agreed with the landscape contractor and subsequently the landscape architect.
   - Hard surfaces shall be constructed after suitable base courses have been laid, taking full account of local site conditions, soft spots and substrate. The indicative depths of base courses are minimum depths assuming suitable substrate conditions.
   - All metalwork shall be finished hot dipped galvanized in accordance with BS EN ISO1460. The galvanizer shall be responsible for the thorough removal of all galvanizing smuts (tetting) to the complete satisfaction of the Landscape Architect. The decorating contractor shall prepare the galvanized surface by washing with detergent and water and scrubbing with a scouring pad until all dirt, grease, white rust & sulphates have been removed & then allowed to dry thoroughly. Supply and paint 'Icosit 6630' from Sika Ltd (tel. 01707 374444) applied with a turkhead brush strictly in accordance with the manufacturer's instructions. COSH regulations and the product COSHH sheet. Apply 2No. coats of paint with a dry film thickness of 100 microns per coat. Apply paint only when galvanized surface is thoroughly dry at temperatures above five degrees Celsius and in any event above the current dew point temperature. Paint work will be subject to inspection by experts and if found wanting, shall be stripped off, re-prepared and painted entirely at the decorating contractors own cost.
   - All wood work to use ACQ water based wood preservative applied by vacuum pressure by Permawood or other similar and approved company . The timber shall then be stained with 3No. coats of Sadolin 'Classic,' colour 'Walnut' strictly in accordance with the manufacturer's instructions, COSHH Regulations 2003 and product COSHH sheet.

Full Planting Schedule

Grass

Abb	Name	Form	Age	Cont	Height	Root	Wks	Cnt	Qty
Fes Gla	Festuca rubra 'Glauca'					B	1		252
									62

Herbaceous

Abb	Name	Form	Age	Cont	Height	Root	Wks	Cnt	Qty
Cor can	Cornus canadensis			30-40cm		C		N.	52
Iris Cra	Iris cristata 'Crawfordiana'					C		N.	67
Phl fru	Phlomis fruticosa				40-60cm	C		N.	40
									159

Shrub

Abb	Name	Form	Age	Cont	Height	Root	Wks	Cnt	Qty
Ber Nan	Berberis thunbergii 'Bristol Ruby'			30-40cm		C	1		252
Box sem	Buxus sempervirens			40-60cm		C		N.	64
Cha lau	Choisya ternata			40-60cm		C		N.	52
Cot ave	Cotinus averia		1/1	80-100cm		B	2		256
Euo Eme	Euonymus fortunei 'Emerald Gaiety'			30-40cm(D)		C	3	N.	6
Euo Gai	Euonymus fortunei 'Emerald Gaiety'			30-40cm(D)		C	3	N.	7
Euo Cat	Euonymus fortunei 'Emerald Gaiety'			30-40cm(D)		C	3	N.	372
Euo Gol	Euonymus fortunei 'Emerald Gaiety'			30-40cm(D)		C	3	N.	52
Euo Col	Euonymus fortunei 'Emerald n Gold'			30-40cm(D)		C	3	N.	52
Hb MB	Hebe 'Midsummer Beauty'			40-50cm		C	13	10L	18
Heb Beau	Hebe 'Midsummer Beauty'			40-50cm		C	13	10L	1
Heb Pag	Hebe pinguifolia 'Pagei'			30-40cm(D)		C	3	N.	133
Hyp hal	Hebe 'Hally'			30-40cm		C	1	2.5L	256
Hyp cal	Hypericum calycinum			20-25cm		C	2	N.	42
Hyp hid	Hypericum patulum 'Hidcote'			40-60cm		C	7	10L	3
Il alle aqu	Ilex aquifolium			40-60cm		C	3	N.	52
Ilr aqu	Ilex aquifolium			40-60cm		C	3	N.	146
Lav ang	Lavandula angustifolia 'Hidcote'			40-60cm		C	3	N.	445
Lig vul	Ligustrum vulgare		1/1	40-60cm		B	3		59
Lon per	Lonicera periclymenum			40-60cm		B	3		64
Fe Fa	Fenc Nodsuna 'Fungii Fiana'			60-80cm		C	12	15L	24
Hyd Et	Hydrdia hortnsia 'Etudnett'			30-40cm(D)		C	3	N.	32
Po lus	Prunus lusitanica			60-80cm		C	4	5-7.5L	638
Po Lus	Prunus laurocerasus 'Otto Luyken'			30-40cm		C	3	N.	256
Pu Ot	Prunus laurocerasus 'Otto Luyken'			40-60cm		C	4	N.	13
Pru lau	Prunus laurina			40-60cm		B	2		585
Ros can	Rosa canina		1/1	40-50cm		B	2		59
Ros luc	Rosmarinus officinalis 'Miss Jessopp's Upright'			40-60cm		C	3	N.	6
Sal ser	Salix lanata			40-50cm		13	N.		47
Sa Rub	Sambucus racemosa 'Plumosa Aurea'			40-60cm		C	3	N.	64
Spi Wat	Spiraea bumalda 'Anthony Waterer'			40-50cm		C	3	N.	54
Spi arg	Spiraea arguta			60-80cm		C	3	15L	19
Vib dav	Viburnum davidii			30-40cm		C	4	N.	382
Vib dav	Viburnum davidii			40-60cm		C	4	N.	85
Vib Pri	Viburnum tinus 'Eve Price'			30-40cm		C	4	N.	1952
Vin Var	Vinca major 'Variegata'			15-20cm		C		N.	18
Vin Var	Vinca major 'Variegata'			30-40cm		C		N.	64
									5271

Tree

Abb	Name	Form	Age	Cont	Height	Root	Wks	Cnt	Qty
Acr cam	Acer campestre		1/1	175-200cm		B			107
Acr pl	Acer campestre 'Streetwise'	Standard (Heavy)	3x	12-14cm	350-425cm	RB	35		6
Cra mon	Crtus plutnnia		1/1		175-200cm	B			3
Ilex ab	Ilexda pulexcens	Feathered	2x		175-200cm	B	5		4
Ilex aqui	Ilexus aniloula	Feathered/Specimen	12/		175-200cm	B			1
Bet Dal	Betula pendula 'Dalecarlica'	Standard (Heavy)	3x	12-14cm	350-425cm	RB	76		5
Bet alu	Betula jacquemontii	Standard (Heavy)	3x	12-14cm	350-425cm	RB			5
Car bet	Carpinus betulus	Transplant (semi-mature)	12/		600-800cm	B			198
Car Fas	Carpinus betulus 'Fastigiata Frans Fontaine	Standard (Extra Heavy)	3x	12-14cm	450-475cm	RB	85		3
Cra mon	Crataegus monogyna		1/1		60-80cm	B			1782
Cra lut	Crtus plutnnia	Feathered	2x		175-200cm	B	3		3
Fag syl	Fagus sylvatica	Standard (Heavy)	12/		60-80cm	C		15L	149
Ilex aqu	Ilex aquifolium 'J.C. van Tol'	Standard (Heavy)	3x	12-14cm	350-425cm	RB	54		2
Mal flo	Malus 'Red Sentinel'	Standard (Heavy)	3x	12-14cm	350-425cm	RB	54		2
Mal syl	Malus sylvestris		1/1		60-80cm	B			59
Pru pi	Prunus padus	Whip	2x		175-200cm	B	3		2
Pru pa	Prunus padus	Feathered	2x		175-200cm	B	5		2
Pru Aut	Prunus subhirtella 'Autumnalis'	Standard (Heavy)	3x	12-14cm	350-425cm	RB	35		19
Pru Pa	Prunus avium 'Plena'	Standard (Heavy)	3x	12-14cm	350-425cm	RB	54		2
Pru Sub	Prunus subhirtella 'Autumnalis'	Standard (Heavy)	3x	12-14cm	350-425cm	RB	56		1
Pyr Cha	Pyrus calleryana 'Chanticleer'	Standard (Heavy)	3x	12-14cm	350-425cm	RB	54		2
Sor Lut	Sorbus aria 'Lutescens'	Standard (Selected)	3x	12-14cm	350-425cm	RB	37		19
									460
									6055

TheLakesGB.com (PH)