SPECIFICATION NOTES - REFER ALSO TO THE MEASURED WORKS SCHEDULE:

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 length of cord, or a hose or 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 1metre 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 discuss how the concrete can be cut out 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:- Apply by suitable spraying apparatus, an approved translocated" systemic herbicide to the manufacturer's instructions and to 1997 Control of Pesticides Regulations and 2003 COSHH regulations on all beds, except those which are both weed free and are to receive agrotextile sheet mulch. Spray immediately if any weeds are present. If none are showing, but there is a history of weed growth in the area is to be seeded, spray later 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 3882:2007 being free from rocks larger than 50m diameter, concrete, all roots, wire, brick, and have less than 20% clay. Allow for pre-application of herbicide as above, fertilise with 70g per meter square of Growmore and 35g per meter square fertilizer in accordance with the manufacturer's instructions. For beds less than 5 meters in width, fork over thoroughly or machine rotovate soil to a depth of 300mm, ensuring that the subgrade and topsoil are completely broken up and free draining, relieving any compaction. For beds greater than 5 metres in width, break up the subgrade and topsoil using a tractor mounted subsoiler, working to a depth of 300mm to a depth of 500mm,except where there are services, or within 10 meters of tree stems or 3 meters of existing hedges. Do not rip areas where roots greater than 10mm diameter are encountered.

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 smooth, even surface, free from pot holes, paved surfaces, (90mm below where agro-textile set mulch is not specified), within 400-600mm of edges to ensure bark or wood chip mulches are retained. Where grass is proposed, then the soil level shall be flush (maximum 10mm below - but never proud) of adjacent paved surfaces, to receive rain water run off. The landscape contractor is responsible for ensuring that the final soil levels are flush, 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 below pavement & grass surfaces within 400mm of the edges of beds, to allow for the edging of bark mulch and bark or wood chip mulch so that mulch does not spill out on to 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 pavement level (or up to 10mm 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 shrub beds, hedging, 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 once at his own cost any stock size, species or variety of plant which has not been specified on the planting plan and a schedule of quantities, unless on a substitution by the landscape architect has been received. All plants shall be true to size specified in the schedule of plants and associated notes. (3L pots are 19cm diameter and 15cm deep). All shrubs, (other than ground cover), shall be 400-600mm height and spread, or otherwise specified for the pot size by the HTA National Plant Specification and be bushy, healthy, disease free stock, with a minimum of 3 breaks per shrub. All stock should be a minimum of 3 breaks per shrub. This specification is the minimum standard required and any stock falling below this standard, in the sole opinion of the inspecting landscape architect,shall be lifted and replaced at the contractor's expense.

3. All shrubs, herbaceous plants, whips and transplants shall be watered in on planting, with 20 litres per square metre. Trees shall be watered in with 25 litres per tree position. Water thereafter during the contract period at weekly intervals with 30 litres of water.

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 x 50mm diameter hardwood stakes driven 600mm below ground level and 1No. sackcloth tie with spacing device to be positioned 25mm maximum from the top of the post.

5. Turf to be of cultivated grade such as Rowtawn "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, with "S" drawn after the climber name, 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 rawl plugs and No. 8 gauge, fixings. Stainless No. at 2m centres around, 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, with "T" drawn after the climber's name (on specially prepared pits or general shrub beds) shall be trained to wall/as fences by mounting mesh made from 1.6m x 50mm diagonally mesh 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 1.6m. Fix trellis panels to the wall/ fences 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. Fix to 50 x 50mm posts pre-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.

D) Mulch

1. When specified by the additional specification notes on this plan, supply and spread suitable biodegradable sheet mulch over planting beds, previously, cultivated, graded and fertilized topsoil before planting, and peg down at a minimum of 500mm centres, (300mm at edges) and beds less than 1000mm wide. Ensure that sufficient is essential to prevent loss of material becoming exposed. Refer to the specification for biodegradable sheet mulch on plan.

2. Following planting supply and spread evenly Millcourt Industries "Chippits of Brandon" to a depth of 50mm. (75mm if no sheet mulch is used). Over all shrub beds. Topdressing of bark shall be not 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:- A) General landscape operations (excluding hard surfaces) - BS 4428:1989. B) Trees, in relation to construction- BS 5837: 2012 and BS 8545:1999 . BS 3998:2010 (recommendations for tree work). Tree Inspection Manual of Arboricultural Association - Standard Conditions of Contract and Specifications of Tree Works 1996. C) Nursery stock in accordance with latest horticultural trade association nursery stock specification entitled "National Plant Specification" Reference shall conform to: -BS 8545 : 2014 Trees from Nursery to Independence in the Landscape. -BS 3936-1 : 1992 Nursery Stock - Specification for trees and shrubs. -BS 3936-2 : 1990 Nursery Stock - Specification for roses. • AMD 9628. -BS 3936-3 : 2007 Nursery stock- Specification - forest trees. -BS 3936-9 : 1998 Nursery stock - Specification forbulbs, corms and tubers. -BS 3936-10 : 1990 Nursery Stock- Specification for ground cover shrubs. - CPSE Committee for Plant Establishment. Handling and establishing landscape plants (1995). Part 3, paragraphs 9.7. to 9.9. D) Glossary for Landscape Works BS 4428 : 1989. E) Turf : BS 3969:1998- recommendations for turf for general purposes. F) Seeding : EEC Regulations 1974. Use Blue labelled certified varieties to EC purity and germination regulations. When requested, submit an officia seed Testing Station certificate of germination, purity and compositions of mix. G) Topsoil : BS 3882: 2007 H) Pesticides: Control of Pesticides Regulations 1997,The Health and Safety at Work Act 1974; the COSHH Regulation 2003, the product COSHH sheet Water Resources Act 1991 and Water Resources (amended 2000; Control of Pollution Act 1974; Hedgerow ACT 1997, Wildlife and Countryside Act 1981; Countryside and Rights of way Act 2000.

GENERAL NOTES FOR THE DEVELOPER.

A) Tree protection

1. Any existing trees to be retained, are the responsibility of the main contractor on site who shall take all necessary protective measures set out in BS 5837:2012 to ensure no damage to stems or roots, to prevent compaction from vehicles or storage of materials, contamination of soil from spillages, scorching from fires and instability or stress from changes of soil level. The landscape contractor is however responsible for ensuring that no plant, plant materials or labour are cause of any damage to existing trees, and like the employer, the landscape contractor shall replace at once any tree damaged on site, supplying and planting a tree of the same species and size, at his own cost. Protection barriers will comprise a scaffold framework in accordance with Figure 2 of BS5837:2012 to BS 8.2.

The framework will consist of vertical and horizontal scaffolds with vertical tubes spaced at no more than 3m intervals and driven into the ground. Weld mesh (Heras or similar) panels will be securely fixed on to this framework with wire or scaffold clamps. Tubes will be driven into the ground to a minimum depth of 600mm. Supporting struts will be fixed to the inside of the barrier to ensure maximum rigidity.

B) Ground work

1. Soil levels: 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 of the landscape contractor to commence work or the beds will become waterlogged in wet weather and the plants and turf will die.

2. Top soil spread from on site should be to the following minimum depths:- Shrub beds: 300mm. 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 dug by the landscape contractor to 150mm below finished 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 soft surfaces. Settlement shall be no greater than the specified depths of topsoil. If rock is encountered with mower (the blades in danger of touching concrete edgings) or where soil is proud of pavements, then drainage problems will be encountered.

3. Existing topsoil and imported soil shall conform to BS 3882:2007, and be free from compaction, rocks/bricks greater than 50mm diameter, concrete, tins, roots, debris, clay, cement and rubble. Soil shall have a clay content of less than 20%.

C) Hardworks

1. Hard works, unless otherwise agreed, shall be carried out by the developer or main contractor, and all materials and workmanship shall be in accordance with the construction details and the layout plan.

2. 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 site marker/ paint, achieving flowing natural arcs. Setting out shall be agreed with the landscape contractor and subsequently the landscape architect.

3. 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.

4. All metalwork shall be finished hot dipped galvanized in accordance with BS EN ISO:1461. The galvanizer shall be responsible for the thorough removal of all welding scale and flux residues 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 Cosat 6630 from Sika Ltd (tel. 01707 394444) applied with a turkshead brush strictly in accordance with the manufacturer's instructions, COSHH 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 a hold point will be placed by the Architect to prevent and applied entirely at the decorating contractors own cost.

5. 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 2No. coats of Sadolin Classic, colour "Walnut" strictly in accordance with the manufacturers instructions, COSHH regulations 2003 and product COSHH sheet.

HEALTH AND SAFETY RISK ASSESSMENT

This Risk Assessment has 2 purposes:
1. To identify any significant hazards related to design work by Jones Blake Associates. A significant hazard being defined as a foreseeable hazard which is not likely to be obvious to a competent contractor or other designer or unusual or difficult to manage effectively. This is to accord with Regulation 13 (Requirements of the Designer) of the CDM Regulations 1994 (amended 2007).
2. To identify some potential hazards which though not related to design work by Jones Blake Associates, may be more apparent to a Landscape/Arboricultural Consultant than others.
The following list is not exhaustive and a certain level of Health and Safety management is assumed (reference to Management of Health and Safety at Work Regs 1999. Provision and Use of Work Equipment Regs 1998; Personal Protective Equipment at Works Regs 2002; Manual Handling Operations Regs 1992 etc).

ITEM	RISK LEVEL	HAZARD/RISK
EXCAVATION, CONSTRUCTION, COMPACTION AND SOIL PREPARATION NEAR EXISTING TREES BOTH ON AND OFF THE SITE	MEDIUM	HAZARD TO SAFETY OF WORKERS, USERS OF ADJACENT LAND AND FUTURE USERS OF THE SITE BY DAMAGED TREES
WORKING NEAR OR ADJACENT TO OVERHEAD/UNDERGROUND SERVICES	HIGH	DAMAGE TO SERVICES AND HAZARD TO SAFETY OF WORKERS
NATIVE HEDGES, POISONOUS AND THORNY PLANTS IN PROXIMITY TO PUBLIC ENTRANCES	LOW	HAZARD TO SAFETY OF PEDESTRIANS
USE OF PESTICIDES, HERBICIDES AND FERTILIZERS	MEDIUM/HIGH	HAZARD TO SAFETY OF OPERATIVES, GENERAL PUBLIC AND THEIR PETS
USE OF LOOSE MATERIALS SUCH AS GRAVEL AND BARK MULCH ADJACENT TO PATHS AND ROADS	LOW	HAZARD TO USERS OF THE SITE IF BLOWN OR STUPLACED ON TO ROADS OR PATHS. IT COULD BECOME A POSSILBLE SKID HAZARD TO VEHICLES
WORKING ON SLOPING GROUND	MEDIUM	HAZARD TO SAFETY OF WORKERS
WORKING ON OR ADJACENT TO THE HIGHWAY	HIGH	HAZARD TO SAFETY OF WORKERS AND HIGHWAY USERS
WORKING NEAR A WATERCOURSE	MEDIUM	HAZARD TO SAFETY OF WORKERS AND POLLUTION OF WATERCOURSE BY HERBICIDES, PESTICIDES AND OTHER WASTE.
CONSTRUCTION OF PLAY AREAS	MEDIUM	HAZARD TO SAFETY OF PLAY AREA USERS

All list of JBA Consultancy Services Ltd Approved Landscape Contractors is available on request.

SPECIFICATION FOR "COVERTEX" SHEET MULCH FOR GRAVEL AREAS

INTRODUCTION

"COVERTEX" is a woven black polypropelene fabric, 102g/m2 which is manufactured in Ultraviolet resistant (black) form. This product is available from Hy-Tex U.K. Ltd., PO Box 97, Adlington, Ashford, Kent, TN25 7EX. Telephone (01233) 720097.

SPECIFICATION

1. Prepare ground to ensure it is even and firm. For any planted or seeded patches and areas the soil shall be lighting and evenly consolidated.
N.B. Ensure that the finished soil level is even at least 55mm below adjacent pavement or grass levels to receive sheet mulch and gravel. For planting beds ensure that soil levels are 55mm below pavements or grass areas within 600mm of beds edges, on the remainder can these are 50mm.
2. Place "Covertex" sheet mulch over soil to be planted. Unroll materials, placing in overlapping rows (overlap to be no less than 50mm).
3. Bury 200mm flap of material (from the back – see diagram below) at the extreme edge of the planting bed, or nail to concrete haunch of path edging with masonary nails @ 1m centres
4. Secure material in position by hammering in 300mm metal pegs at 500mm centres. (300mm centres @ non buried edges) Metal hoops for pegging are available from Vytex Ltd.
5. Place any specimen plants on beds in intended positions.
6. Cut the fabric with slssors in "+" shape for each plant position, 400mm across.
7. Pit plant the specimen plants, holding back the flaps of fabric, and carefully replace around the stem. Spread topsoil under sheet if friable. Remove all compacted topsoil clods from site, ensure no soil is left on top of sheet.
8. Once all the plants are planted, cover the fabric all over with 40mm of clean, washed, cream/buff coloured gravel, 20mm square.
9. Finally, water the plants thoroughly ensuring that each plant receives 2 gallons of water. If the soil is dry or in warm weather conditions, otherwise apply 25L/m2.

INSET:– LAYING SHEET MULCH FOR GRAVEL AREAS

NB DO NOT USE HYTEX FABRIC ON SLOPES GREATER THAN 1:4 WITHOUT THE USE OF GRAVEL BOARDS AT 1 – 1.5m CENTRES ALONG THE CONTOURS TO RETAIN THE GRAVEL.

SPECIFICATION FOR HEDGE PLANTING

SPECIFICATION FOR ORNAMENTAL HEDGE PLANTING – LARGE GROWING SPECIES e.g. Viburnum tinus,

Hedges containing large ornamental species shall be planted in a single straight row at a density of 3 plants per linear metre. The row shall be placed in the centre of the bed. Hedge plants to be 3L container grown stock, 400–600mm height and spread unless otherwise stated.

SPECIFICATION FOR ORNAMENTAL HEDGE PLANTING – MEDIUM GROWING SPECIES e.g. Lavera 'Maygreen'

Hedges containing small ornamental species shall be planted in a single straight row at a density of 3 plants per linear metre. The row shall be placed in the centre of the bed. Hedge plants to be 3L container grown stock, 300–400mm height and spread unless otherwise stated.

NB. Hedges adjacent to gravel areas shall have the cultivated strip separated from gravel by a timber edge 75 x 25mm of ACQ treated timber stained with 3No. coats of Sadolin 'Classic' colour 'Walnut' (dark brown wood stain) according to specification.

GENERAL NOTES

- ALL DIMENSIONS IN MILLIMETRES
- DO NOT SCALE OFF THIS DRAWING
- ALL DIMENSIONS TO BE CHECKED ON SITE

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