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 rigid cordage on the ground using bamboo canes to control the curves. Mark with chalk/sawdust 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 1m 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 lifted. The bed can be paved with a suitable slab, if required by the client, by instructing the landscape architect and where the width is not so 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 operation, an approved translocated herbicide (glyphosate) at 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 sprotsville 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. If spraying should be carried out by skilled and certificated operatives and protective clothing used 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 make 'off' all dead material from site.

2. Carry out the following works to the existing topsoil on site to ensure it conforms to BS 3882:1994, being free from rocks larger than 50m diameter, concrete, all rocks, wire, bricks, and have less than 20% clay. Allow for pre-application of herbicide as above. Fertilise with 100g per meter square of Fisons "Neutrocote" slow release fertilizer, in accordance with the manufacturers instructions. For beds less than 5 metres in width, fork over existing topsoil to a depth of 300mm, to a minimum of 150mm incorporating the fertiliser and topsoil are completely broken up and free draining, removing 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 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 preservation ensure soil of all planting beds is graded to a level 50mm below adjacent grass or paved surfaces. (50mm below where agro-textile soil 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 surfaces). Where new trees are planted, the landscape contractor shall be 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 levels. 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 grouted to the specified levels below pavement & grass surfaces. Ensure that the slope of the bed does not exceed 1:8 in 1.0m 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 walls/ fences using non rusting screws 150mm long (to be approved), incorporating 50mm cube wood spacing blocks to ensure that the panel is retained sufficiently far from the wall/ fence to allow for air circulation. 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 in the climbing shrub to the trellis with plastic coated garden wire tags.

B. Climbers specified outside proposed shrub beds shall have specially prepared climber pits. Climber pits shall be 450m x 450m and 600mm deep (minimum size), and be backfilled with topsoil from the excavated planting ground. Ensure the base of the pit is thoroughly broken up and free draining before backfilling with topsoil/manure. If no damage to foundations and services, and note good all structures and surfaces disturbed. Fertilise with 50g of Fisons "Neutrocote" slow release fertilizer. Water with 15 litres of water per climber pit.

B) Mulch

1. When specified by the additional specification notes on this plan, supply and spread sprotsville "Weedstop Fabric" sheet mulch over planting beds, previously cultivated, graded and fertilized topsoil before planting and pegging with Weedstop pegs at a minimum of 300m centres, (200m at angles and ends) not less than 14 no. Pegging this density is essential to prevent flaps of material becoming exposed. Refer to the specification for "Weedstop Fabric" sheet mulch on plan.

2. Following planting supply and spread evenly "Melcourt Industries "Rustic Bismullin" to a depth of 50mm. (75mm if no sheet mulch specified) over all planted areas. Finished mulch levels shall be no higher than 10mm below pavement or grass levels to avoid any spillage onto pavements or lawns. N.B. no substitution of mulch type will be permissible. Ensure all beds have a neutral/slightly alkaline soil. Use wood chip to reduce weed growth, reduce wind blow and prevent rapid break down.

D) 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: 1991 and BS 5489:1992.
BS 3998:1989 (recommendations for tree works) unless otherwise specified.
Arboricultural Association - Standard Conditions of Contract and Specifications of Tree Works 1996.
C) Nursery stock in accordance with the latest horticultural trade association publication "National Plant Specification 2001" and "National Specification 2001" Plants shall conform to:-
-BS 3936-1: 1992 Nursery Stock - Specification for trees and shrubs.
-BS 3969 A21 1990 Nursery Stock - Specification for roses - AMD 6028.
-BS 3936-4: 1984 Nursery Stock - Specification for forest trees.
-BS 3936-5: 1985 Nursery Stock - Specification for poplars and willows.
-BS 3936-9 : 1989 Nursery stock - Specification for conifers, cores and tubers.
-BS 4043: 1989 Transplant spade - Specification for transplanting spade.
-CPSE Committee for Plant Establishment, Handling and establishing landscape plants 1996, Part 3, paragraphs 6.2 to 6.6.
D) Glossary for Landscape Works - BS 3975 Pt 4 1966.
E) Turf - BS 3969:1998- recommendations for turf for general purposes.
F) Seeding - EEC Regulations 1974. Use blue labelled certified varieties to EC 90 Pesticides: Control of Pesticides Regulations 1997 The Pesticides Safety Act 1974; the COSHH Regulation 2003; the Groundwater Regulations 2003; the Water Supply (Water Quality) Regulations amended 1999; the Control of Pollution Act 1974; Hedgerow Act 1997; Wildlife and Countryside Act 1981.

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 have all necessary protective measures set out in BS 5837:1991 to ensure no damage to stems or roots, to prevent compaction of soil/ground by machinery, materials, contamination of soil/ground by toxic substances, scorching from fires and instability or stress from changes of soil level. The landscape contractor is however responsible for ensuring that neither 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. Suitable protective measures shall be erected around trees in the form of a rigid timber or scaffolding firmly positioned no closer to the trunk than the drip line of the tree's canopy.

B) Ground work

1. Soil levels: soil levels for shrub beds and grass areas should have any compacted subgrade thoroughly broken up and free draining. Instruct 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 will die.

2. Top soil spread from on site should be to the following minimum depths -
Shrub beds 250mm.
Grass areas 150m.
allowing for a maximum of 45mm of the above for finished beds to lower beds below adjacent finished pavement or grass areas in order to receive sheet and bark mulch, 150mm below where sheet mulch is not to be used).
Tree pits will be dug by the landscape contractor. 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 shall be left flush with any paved surfaces finish with any lawn areas (up to a maximum of 5mm below) to allow for rain water to drain onto soft 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.

3. Existing topsoil and imported soil shall conform to BS 3882:1994, and be tested for suitability for landscaping purposes not less than 150mm below concrete, free from roots, debris, silt, stones and builders rubble. Soil shall have a clay content of less than 20%.

C) Handworks

1. Hand 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 corrected 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.

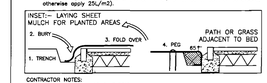
3. Hard surfaces shall be constructed after suitable base courses have been laid, taking into account local soil type and exposure. Refer to the drawings for indicative depths. Base courses are minimum depths assuming suitable substrate conditions.

4. All metalwork shall be finished hot dipped galvanized in accordance with BS EN 1320960. No galvanizer shall be responsible for the thorough removal of all galvanizing swarf/resulting to the complete satisfaction of the Landscape Architect. The decorating contractor shall prepare the galvanized surface by thoroughly degreasing with "Sadolin Classic" thinners and shall apply a primer, undercoat and gloss, white satin & subsequently as available from Weedstop Ltd. 2 Forest Parade, Forest Road, Lydney, Gloucester, GL15 5LA. Telephone (01594) 841781.

SPECIFICATION

1. Prepare and Cultivate imported or existing topsoil including fertilizers as necessary and water to field capacity.
N.B. Ensure that the finished soil level is at least 65mm below adjacent pavement or grass levels to receive sheet and bark mulch, 75m sloping beds ensure that soil levels are 65mm below pavements or grass areas within 600mm of bed edges.
2. Place "Weedstop Biofabric" 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 at the extreme edges 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 @ edges of beds) Metal hooke for pegging purposes are available from Weedstop Ltd.
5. Place plants on beds in intended positions.
6. Cut the fabric with scissors in "x" shape for each plant position, 400mm across.
7. Pit plant the 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 50mm bark mulch from Melcourt Industries "Rustic Bismullin".
9. Finally, water the bed thoroughly to field capacity. (Ensure 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 PLANTED AREAS



CONTRACTOR NOTES:
- DO NOT USE WEEDSTOP BIOFABRIC ON SLOPES GREATER THAN 1:3 WITHOUT THE USE OF GRAVEL BOARDS AT 1 - 1.5m CENTRES ALONG THE CONTOURS TO RETAIN THE BARK COVER.
- FOR GRAVEL/SHINGLE AREAS UTILISE A NON-BIODEGRADABLE POLYPROPYLENE WOVEN FABRIC SUCH AS "COVERTEX" FROM HY-TEX U.K. LTD. TEL: (01253) 720097.

HEALTH AND SAFETY RISK ASSESSMENT

This Risk Assessment has 2 purposes:
1. To identify significant hazards related to design work by James Blake Associates. A significant hazard being defined as a hazard which is likely to cause injury to a competent person employed by a contractor who is given instructions and is not trained in other designer duties or difficult to manage effectively. This is to accord with Regulation 13 (Requirements of the Designers) of the CDM Regulations 1994 (amended 2000).
2. To identify some significant hazards through risk assessment of design work by James Blake Associates, which may be over apparent to a Landscape/Arboricultural Consultant then others.
The following list is not exhaustive and a certificate 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 1992; Manual Handling Operations Regs 1992 etc).

ITEM	HAZARD/RISK	POSSIBLE MITIGATION
EXCAVATION/CONSTRUCTION, DEMOLITION AND SITE PREPARATION WORK EXISTING TREES WITH OR WITHOUT THE SITE	HAZARD TO SAFETY OF WORKERS, USERS OF ADJACENT LAND AND FUTURE USERS OF THE SITE BY DAMAGED TREES	All excavation carried out within the area shall be in accordance the Construction (Health, Safety and Welfare) Regulations 1996. Where construction would normally be excluded by the use of table 1 in the British Standard BS5837:1991 "Guide for trees in relation to Construction" shall be in accordance with the aforementioned Standards the guidance within BS 5837:1991 Trees in relation to design, demolition & construction BS 3998:1989 Recommendations for tree work & NJUG Publication No 10 Guidelines for the planning, installation and maintenance of utility apparatus in proximity to trees. The following list is not exhaustive and a certificate level of "Health and Safety at Work" is assumed. The impact of potential works within exclusion zones should be assessed by a qualified arboriculturalist and any measures recommended by the arboriculturalist should be implemented. Any actual damage to tree roots which occurs as a result of works within the excluded area shall be inspected by a qualified arboriculturalist before the excavation is backfilled and any remedial measures to be carried out. Refer to Service layout drawings prior to commencing work. If no service drawings exist carry out exploratory works to establish potential risks.
WORKING NEAR OR ADJACENT TO OVERHEAD/UNDERGROUND SERVICES	DAMAGE TO SERVICES AND HAZARD TO SAFETY OF WORKERS	Ensure a competent (MAJ) registered landscape contractor is appointed who is capable and willing to follow the supplied James Blake Associates Specification and carry out the use of substitutes or repositioned without specific approval from an Associate of James Blake Associates.
WATCHING BRIEF, PROTECTIVE AND TEMPORARY FENCING IN PROXIMITY TO PATHS AND ENTRANCES	HAZARD TO SAFETY OF PEDESTRIANS	Ensure a competent (MAJ) registered landscape contractor is appointed who is capable and carries out the use of pesticides and herbicides. COSHH Regulations 2003, Control of Pesticide Regulations 1997; Product COSHH Sheets and the product and manufacturer's instructions are to be followed.
USE OF LOOSE MATERIALS SUCH AS GRAVEL AND BARK MULCH ADJACENT TO PAVED AND ROADS	HAZARD TO USERS OF THE SITE IF BLOWN OR DISPLACED ONTO PAVED OR PATHS, OR CLOGS DRAINS OR BECOME A POTENTIAL SKID HAZARD TO VEHICLES	Ensure a competent (MAJ) registered landscape contractor is appointed who will follow the correct mulch and gravel specifications and carry out the correct Herbicide and pesticide use applied with a turnbrush brush strictly in accordance with the manufacturers instructions. COSHH regulations and the product COSHH sheets. Apply 75m coats of paint with a dry film thickness of 150 microns (dft). Apply paint only when galvanized surface is thoroughly dry. Apply subsequent coats of paint in colours and tints as shown / agreed by the current one paint treatments. Paint work will be subject to inspection by experts and if found wanting, shall be stripped off, re-prepared and applied entirely at the decorating contractors own cost.
WORKING ON OR ADJACENT TO THE HIGHWAY	HAZARD TO SAFETY OF WORKERS AND HIGHWAY USERS	Ensure all works are in accordance with the New Road and Street works Act 1991.
WORKING NEAR A WATERCOURSE	HAZARD TO SAFETY OF WORKERS AND POLLUTION OF WATERCOURSE BY HERBICIDES, PESTICIDES AND OTHER WASTE	Take normal specialist precautions to prevent falling in. Follow COSHH Regulations 2003, Control of Pesticide Regulations 1997; Water Supply (Water Quality) Regulations, amended 1999; Control of Pollution act 1974; Follow COSHH Sheets for product and manufacturer's instructions. Seek Environment Agency approval for any chemicals used near a water course.
CONSTRUCTION OF PLANT AREAS	HAZARD TO SAFETY OF PLANT AREA USERS	Ensure equipped play areas are adequately secured with temporary fencing and signs to prevent unauthorised access until completed. Ensure the play area is constructed in accordance with the requirements of BS EN 1176:1998, BS EN 1177:1998 and BS 7188:1998. This is with particular reference to minimum space zones and safety surface requirements. Always follow manufacturer's recommendations regarding these matters and do not simply rely on the supplied plans.

A full list of James Blake Associates Approved Landscape Contractors is available on request.

SPECIFICATION FOR "WEEDSTOP BIOFABRIC" FOR PLANTED AREAS

INTRODUCTION

"Weedstop Biofabric" is a woven, natural fibre, biodegradable fabric of sufficient strength to last 1 to 2 growing seasons and to ensure weed suppression and successful plant establishment. The water porous product helps ground water remain moisture and weed free, speeding plant growth and establishment greatly. This product is available from Weedstop Ltd. 2 Forest Parade, Forest Road, Lydney, Gloucester, GL15 5LA. Telephone (01594) 841781.

SPECIFICATION

1. Prepare and Cultivate imported or existing topsoil including fertilizers as necessary and water to field capacity.
N.B. Ensure that the finished soil level is at least 65mm below adjacent pavement or grass levels to receive sheet and bark mulch, 75m sloping beds ensure that soil levels are 65mm below pavements or grass areas within 600mm of bed edges.
2. Place "Weedstop Biofabric" 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 at the extreme edges 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 @ edges of beds) Metal hooke for pegging purposes are available from Weedstop Ltd.
5. Place plants on beds in intended positions.
6. Cut the fabric with scissors in "x" shape for each plant position, 400mm across.
7. Pit plant the 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 50mm bark mulch from Melcourt Industries "Rustic Bismullin".
9. Finally, water the bed thoroughly to field capacity. (Ensure 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 PLANTED AREAS

CONTRACTOR NOTES:
- DO NOT USE WEEDSTOP BIOFABRIC ON SLOPES GREATER THAN 1:3 WITHOUT THE USE OF GRAVEL BOARDS AT 1 - 1.5m CENTRES ALONG THE CONTOURS TO RETAIN THE BARK COVER.
- FOR GRAVEL/SHINGLE AREAS UTILISE A NON-BIODEGRADABLE POLYPROPYLENE WOVEN FABRIC SUCH AS "COVERTEX" FROM HY-TEX U.K. LTD. TEL: (01253) 720097.

JBA 05/13-01
JBA 05/13-02
JOIN LINE
LANDSCAPED BUFFER STRIP, DESIGNED BY OTHERS.
FOOTPATH LINK
AREA TO BE SEEDED
4m HEDGE TYPE 01
23No. Vib tin @ 3/m
3No. CAR INT
3No. PHO RED
3No. Cot Cor
3No. Par tri (C)
3m HEDGE TYPE 02
59No. Vib tin @ 3/m
3m HEDGE TYPE 04
23No. Esc App @ 3/m
3No. AME ROB
6m HEDGE TYPE 05
38No. Vib tin @ 3/m
3No. FIL COR
3m HEDGE TYPE 03
23No. Vib tin @ 3/m
3No. ACE MOP
3No. PYR CHA
3No. Vib tin @ 3/m
3No. ALN ICH
3No. CAR BET
3No. Cor sil
3No. Pyr Cha
3No. Cor alt
3No. Pyr Nen (C)
3No. Hed col (C)
3No. Pyr Cha
3No. PHO RED
3No. PHO RED
3No. Cot Cor
3No. Cot Cor
3No. Cot Cor