# SPECIFICATION NOTES

### **1.0 GENERAL NOTES**

# 1.1 References

All plans and details included in the project documents shall be read in conjunction with this specification. All structural and civil works components of the landscape design shall be referenced to engineers' details and specifications. Read this specification in conjunction with the plant and materials schedules on the drawings. If in doubt about any detail or if conflicts are found in the documents, seek advice.

#### **1.2 Workmanship and Materials**

The whole of the landscape works shall be carried out by a competent Landscape Contractor who is experienced in horticultural practice, landscape construction and planting techniques. The Landscape Contractor shall hold a current Building Contractors License and / or be a financial member of the Landscape Contractors Association.

### 2.0 EARTHWORKS

# 2.1 Excavation, Trimming and Filling

Except as otherwise noted in the contract, bulk excavation is excluded from the landscape works. After the completion of bulk excavation by others, trim and fill the excavated ground surfaces to achieve design levels to accommodate finish materials as detailed. Prepare the sub-grade surface as required for the various finished ground treatments.

#### 2.2 Sub-soil Drainage

Keep the excavated works drained and free of standing water. Allow to supply and install sub-soil drainage pipes as required for the new works to ensure that all gardens are well drained. Connect the sub-soil drainage pipes to the nearest downstream stormwater pits. Include pipe filter socks and course sharp aggregate backfilling of trenches.

# 3.0 HARDWORKS

# 3.1 Furniture, Handrails, Balustrades

Supply and install the scheduled items in accordance with the manufacturer's recommendations, as detailed and in the locations shown on plan. Provide all footings and fixings required for the items to be stable and in accordance with applicable codes and standards.

#### 3.2 Garden Walls, Fences, Steps, TGSI and Edging

Construct garden walls, fences, steps, TGSI and edging as shown on plan, as detailed and of the material scheduled. Provide footings, step nosings, tactile surfaces to comply with standards and applicable legislation. Refer to engineer's details for structural retaining walls, heavy duty slabs and concrete stairs.

#### 3.3 Continuous, Unit and Loose Pavement

Install the scheduled material pavement to the locations shown on plan. Ensure that all

subgrade/subsurface works are complete prior to commencing paving. Confer with the engineer to ensure the structural integrity of the subgrade.

#### 3.3 Steel Edge

Set edging flush with adjoining surfaces, pegs shall be securely fixed to the steel edging at the required location to provide a neat fit, with pegs tops 25mm below the top of the edging.

- Type: Galvanised or mild steel • Size: 100 x 3mm nominal in longest practicable lenghts,
- Pegs: 10 x 10 x 200mm long
- Fixings: fillet welded.
- 4.0 SOFTWORKS

# 4.1 Soil Testing

Undertake at least two (2) soil tests, in locations as advised by Project Manager, and provide results and recommendations for the improvement of plant growth and to adjust the soil to achieve appropriate planting medium (including pit levels) for successful plant growth

# 4.2 Subsoil (This should be read in conjunction with the RAP Report, Tree Wise Men Report and Landscape Details)

Excavate and/or fill all garden beds to bring the top of subsoil to at least 300mm below finished design soil levels. Excavate all turf areas to bring the subsoil to at least 100mm below finished design levels. In all areas shape the subsoil to fall to subsoil drains where applicable. Do not excavate within the drip line of trees and shrubs to be retained. Cultivate or rip the subsoil to a further depth of 100mm before placing top soil. Remove stones of size exceeding 25mm, clods of earth exceeding 50mm, and weeds, rubbish or other deleterious material brought to the surface during cultivation. Do not disturb services or existing tree roots. If necessary cultivate these areas by hand. During cultivation, thoroughly mix in materials required to be incorporated into the subsoil, as recommended in the soil testing results and to manufacturer's recommendations. Trim the surface to design levels again after cultivation.

4.3 Topsoil (This should be read in conjunction with the RAP Report, Tree Wise Men Report and Landscape Details)

Import topsoil for the garden and turf areas, unless the topsoil can be provided from material recovered from the site, as recommended in the soil testing results. Spread the topsoil on the prepared subsoil and grade evenly, compact lightly and uniformly in 150mm layers. Avoid differential subsidence and excess compaction and produce a finished topsoil surface which has the following characteristics:

• Finished to design levels, allowing for mulch or turf, which is to finish flush with adjoining hard surfaces such as paths and edges;

- Smooth and free from inorganic matter, stones or clods of soil;
- Graded to drain freely, without ponding, to catchment and/or sub-soil drains;
- Graded evenly to adjoining surfaces; and
- Ready for planting.

Supply and install the following imported topsoil mixes: Soil Mix Type A

- 60% soil mix (60% coarse sand and 40% black soil),
- 10% mushroom compost,
- 10% pine bark fines,
- 10% composted sawdust, and
- 10% composted manures.

- Soil Mix Type B
- $\circ$  80% washed river sand, and 20% black soil.

#### 4.4 Compost

Provide, in accordance with AS 4454, well rotted vegetative material or animal manure, free from harmful chemicals, grass and weed growth.

#### 4.5 Fertiliser

Provide proprietary fertilisers, delivered to the site in sealed bags marked to show manufacturer or vendor, weight, fertiliser type, N:P:K ratio, recommended uses and application rates.

#### 4.6 Plants

characteristics:

- site in full sun, partial shade or full shade conditions;
- Grown in final containers for not less than twelve weeks;

### **4.7 Plant Installation**

Following excavation of the planting hole, place and spread 15gms of wetting agent pre-mixed with one (1) litre of water. Place the plant correctly orientated to north or for best presentation. Backfill the planting holes with specified topsoil mixture. Lightly tamp and water to eliminate air pockets. Ensure that the backfill soil is not placed over the top of the root ball and that the root ball is not higher than the soil in which it is planted. Apply fertiliser, as specified around the plants in the soil at the time of planting.

# 4.8 Embankment Stabilisation

Where necessary and shown on the drawings prevent soil erosion or soil movement by stabilising embankments as follows. As a minimum this should be on slopes >1:3 gradient. Stabilise embankments using biodegradable fibre reinforced heavy weight jute fabric. Lay fabric from top to bottom of slope. Install in accordance with manufacturer's specification, including 300 x 300mm anchor trench at top and bottom of slope, backfilled with soil over the fabric and compacted into the trenches. Using U-shaped galvanised steel pegs at 1000 mm centres generally and 250mm centres at edge overlaps, secure the fabric to the prepared soil surface. Plant through the fabric after it is installed.

#### 4.9 Root Barrier

Supply and install root control barriers to all new tree plantings adjacent to walls, paths, kerbs and all service trenches, where their proximity poses a threat to the stability of the built infrastructure. Install in accordance with manufacturer's recommendations.

**4.10 Mulch** (This should be read in conjunction with the Tree Protection Plan by Tree Wise Men) Mulch shall be approved recycled mulch recovered from site clearing, if available, otherwise pine bark equal "Horticultural Graded Pine Bark 15mm" as supplied by Australian Native Landscapes. Place mulch in all garden beds to a nominal depth of 100mm, when all specified plants are installed, clear of all plant stems, and rake to an even surface flush with the surrounding finished levels and evenly graded between design surface levels. The specified depth shall be achieved after the mulch has settled.

#### 4.11 Stakes and Ties

- quantities and sizes for each of the various plant pot sizes:
- Plants (>25 lt): 1 off 38 x 38 x 1200mm; • Semi-advanced plants (>75 lt): 2 off 50x50x 1800mm;
- Advanced (>100 lt): 3 off 50 x 50 x 2400mm.

# 4.12 Turf

Turf shall be delivered to site as 25mm minimum thick cut rolls. Obtain turf from a specialist grower of cultivated turf. Turf shall have an even thickness, free from weeds and other foreign matter. Deliver turf to the site within 24 hours of being cut and lay it within 24 hours of delivery. Prevent it form drying out between cutting and laying. Lay the turf in the following manner:

- In stretcher pattern, joints staggered and close butted; • Parallel long sides of level areas, with contours on slopes; and

**5.0 IRRIGATION** 

5.0 System The irrigation system shall be an automatic permanent system, with an irrigation controller self operated via a soil moisture sensor. The system shall be calibrated to deliver the optimum rate and volume of water appropriate to the type of plants in the design. The system shall be adjustable and fully serviceable. The layout of the entire irrigation system shall focus on delivering the required amount of water to maintain healthy and vigorous growth. The irrigation system shall be such that, component theft, vandalism, over-spray and wetting of paths shall be reduced to a minimum or completely eliminated by the use of drip, pop-up sprinklers and judiciously placed fixed spray emitters. Generally do not use fine mist emitters that provide a drifting mist that may wet paths and the buildings.

#### 6.0 PLANT ESTABLISHMENT

#### 6.1 Generally

The Landscape Contractor shall rectify defects during installation and that become apparent in the works under normal use for the duration of the contract Defects Liability Period. The Landscape Contractor shall maintain the contract areas by the implementation of industry accepted horticultural practices for 52 weeks. The landscape maintenance works shall include, but not be limited to, the following: Replacing failed plants,

- Pruning,
- Insect and pest control
- Fertilising,
- Maintaining mulch,
- Mowing, • Watering,
- Rubbish removal, and
- Cleaning of the surrounding areas.

Supply plants in accordance with the landscape design drawings and schedules, which have the following

• Large healthy root systems, with no evidence of root curl, restriction or damage;

• Vigorous, well established, free from disease and pests, of good form consistent with the species/variety; • Hardened off, not soft or forced, and suitable for planting in the natural climatic conditions prevailing at the

• Trees, unless required to be multi-stemmed, shall have a single leading shoot; and

Containers shall be free from weeds and of appropriate size in relation to their container.

Stakes shall be durable hardwood, straight, free of knots and twists, pointed at one end, in the following

To finish flush, after lightly tamping, with adjacent finished surfaces of ground

	CHEDULE - "THE TERRACES" PAC PADE	n betre man num i de von tre men	
Symbol	Botanical Name	Common Name	
Trees		1	
Ag	Angophora costata	Smooth-barked Apple	
Ar	Archontophoenix cunninghamiana	Bangalow Palm	
Cg	Ceratopetalum gummiferum	Nsw Christmas Bush	
Ср	Cordyline petiolaris	Palm Lily	
Ca	Cupaniopsis anacardioides	Tuckeroo	
Eu	Elaeocarpus eumundii	Smooth leaved Quandong	
Er	Elaeocarpus reticulatus	Blueberry Ash	
Fr	Ficus rubiginosa	Port Jackson Fig	
Ga Li	Gordonia axillaris	Fried Egg Plant Crepe Myrtle	
Li	Lagerstroemia indica Livistona australis	Cabbage Tree Palm	
Mf	Michelia figo	Port Wine Magnolia	
Ms	Magnolia stellata	Star Magnolia	
Pm	Polyscias murrayi	Pencil Cedar	
Wf	Waterhousia floribunda	Weeping Lilly Pilly	
Wr	Washingtonia robusta	Mexican Fan Palm	
	Accent Planting		
Af	Adiantum formosum	Giant Maidenhair Fern	
Ac	Arthropodium cirratum	Renga Lily	
An	Asplenium nidus	Birds nest Fern	
CR Cst	Cordyline fruticosa 'Rubra'	Cordyline Rubra	
Eca	Cordyline Stricta Echium candicans	Narrow Leaved Palm Lily Pride of Maidera	
Lan	Lavandula angustifolia	Lavender	
Ro	Rosmarinus officinalis	Rosemary	
Grasses &	Groundcovers		
Afl	Anigozanthos flavidus	Kangarro Paw	
Ama	Antirrhinum majus	Snapdragon	
Bc	Blechnum cartilaginium	Waterfem	
BSL	Blechnum 'Silver Lady'	Silver Lady Fern	
Co	Carex oshimensis	Japanese Forest Grass	
Сра	Clematis paniculata	Sweet Autumn Clematis	
Cm	Clivia miniata	Clivia Dask Orahid	
Ds DLJ	Dendrobium speciosum Dianella 'Little Jess'	Rock Orchid Little Jess	
Ep	Echinacea purpurea	Purple Coneflower	
EBG	Echinops bannaticus 'Blue Glow'	Blue Globe Thistle	
Ec	Euphorbia characias	Mediterranian Spurge	
ESS	Eremophilia glabra 'Silver Spread'	Prostrate Silver Bush	
Gt	Gazania tomentosa	Silver Gazania	
GRM	Grevilia 'Poorinda Royal Mantle'	Royal Mantle	
Hs	Hibertia scandens	Golden Guinea Vine	
lc	Imperata cylindrica	Japanese Blood Grass	
INA	Isolepis nodosa 'Arida'	Knobby Club Rush	
Ma	Mentha Australis	River Mint	
Мр	Myoporum parvifolium	Creeping Boobialla	
MEQ MZ	Miscanthus oligostachyus 'Eileen Quinn' Miscanthus sinensis 'Zebrinus'	Dwarf Feather Grass Zebra Grass	
Lm	Linum marginale	Native Flax	
LIII	Lomandra longifolia 'Nyalla'	Fine Leaf Lomandra	
Pt	Parthenocissus tricuspidata	Boston lw	
	Pennisetum alopecuroides 'Black Lea'	Black Lea Native Foxtail Gras	
PBL			
	Pennisetum alopecuriodes 'Nafray'	Natray Native Foxtall Grass	
PBL	Pennisetum alopecuriodes 'Nafray' Poa labillardieri 'Eskdale'	Nafray Native Foxtail Grass Blue Tussock Grass	
PBL PN		-	
PBL PN PE Sn Sc	Poa labillardieri 'Eskdale' Salvia nemorosa Santolina chamaecyparissus	Blue Tussock Grass	
PBL PN PE Sn Sc SSB	Poa labillardieri 'Eskdale' Salvia nemorosa Santolina chamaecyparissus Sedum spectabile 'Brilliant'	Blue Tussock Grass Sage Cotton lavender Stonecrops	
PBL PN PE Sn Sc	Poa labillardieri 'Eskdale' Salvia nemorosa Santolina chamaecyparissus	Blue Tussock Grass Sage Cotton lavender	
PBL PN PE Sn Sc SSB Sm Tv	Poa labillardieri 'Eskdale' Salvia nemorosa Santolina chamaecyparissus Sedum spectabile 'Brilliant' Senecio mandraliscae Thymus vulgaris	Blue Tussock Grass Sage Cotton lavender Stonecrops Blue Chalk Sticks Thyme	
PBL PN PE Sn Sc SSB Sm Tv Tj	Poa labillardieri 'Eskdale' Salvia nemorosa Santolina chamaecyparissus Sedum spectabile 'Brilliant' Senecio mandraliscae Thymus vulgaris Trachelospermum jasminoides	Blue Tussock Grass Sage Cotton lavender Stonecrops Blue Chalk Sticks Thyme Star Jasmine	
PBL PN PE Sn Sc SSB Sm Tv Tj Vh	Poa labillardieri 'Eskdale' Salvia nemorosa Santolina chamaecyparissus Sedum spectabile 'Brilliant' Senecio mandraliscae Thymus vulgaris Trachelospermum jasminoides Viola hederacea	Blue Tussock Grass Sage Cotton lavender Stonecrops Blue Chalk Sticks Thyme Star Jasmine Native Violet	
PBL PN PE Sn Sc SSB Sm Tv Tj Vh Vh Vo	Poa labillardieri 'Eskdale' Salvia nemorosa Santolina chamaecyparissus Sedum spectabile 'Brilliant' Senecio mandraliscae Thymus vulgaris Trachelospermum jasminoides Viola hederacea Viola odorata	Blue Tussock Grass Sage Cotton lavender Stonecrops Blue Chalk Sticks Thyme Star Jasmine Native Violet Sweet Violet	
PBL PN PE Sn Sc SSB Sm Tv Tj Vh	Poa labillardieri 'Eskdale' Salvia nemorosa Santolina chamaecyparissus Sedum spectabile 'Brilliant' Senecio mandraliscae Thymus vulgaris Trachelospermum jasminoides Viola hederacea	Blue Tussock Grass Sage Cotton lavender Stonecrops Blue Chalk Sticks Thyme Star Jasmine Native Violet	

# Note:

Refer to LA-P-1017 Planting Plan for plant layout.

Samples of all elements are to be submitted to Client for approval prior to work commencing.

Refer to RAP for site remediation plan.

Mature size	Container Size	Quantity
H x W (m)		
20.0 x 10.0	100L	1
20.0 x 4.0	100L	3
6.0 x 3.0	100L	3
5.0 x 3.0	100L	4
10.0 x 5.0	100L	13
20.0 x 4.0 15.0 x 5.0	100L 45L	2 7
30.0 x 15.0	1000L	1
3.5 x 3.5	100L	6
4.0 x 4.0	100L	22
25.0 x 4.0	100L	5
3.5 x 3.5	100L	1 10
5.0 x 5.0 25.0 x 5.0	100L 100L	2
5.0 x 4.0	300L	15
25.0 x 5.0	100L	1
2.0 x 2.0	45L	18
2.0 x 2.0 1.0 x 1.0	45L 250mm	18
1.5 x 1.0	45L	8
3.0 x 1.0	45L	80
5.0 x 1.0	45L	52
1.5 x 1.0	250mm	55
1.2 x 1.0 1.5 x 1.5	250mm 250mm	1394 175
1.5 X 1.5	2501111	175
1.2 x 0.6	200mm	310
0.5 x 0.5	200mm	183 862
0.6 x 0.6 0.5 x 1.0	200mm 200mm	 13
0.2 x 0.2	200mm	88
CLIMBER	200mm	141
0.5 x 0.5	200mm	2016
	200mm	29
0.4 x 0.4 1.2 x .25	200mm	21 77
1.2 x 0.9	200mm 200mm	77
1.0 x 1.0	200mm	209
1.0 x 1.0	200mm	24
0.15 x 1.0	200mm	923
0.2 x 3.0	200mm	1266
	200mm	12 122
1.0 x 1.0 0.6 x 0.4	200mm 200mm	322
0.5 x 1.0	200mm	69
0.2 x 1.0	200mm	465
0.6 x 0.5	200mm	37
1.5 x 1.5	200mm	487
0.6 x 0.6 0.5 x 0.5	200mm 200mm	58 352
CLIMBER	200mm	20
0.6 x 0.6	200mm	616
0.6 x 0.6	200mm	592
0.5 x 0.5	200mm	516
0.3 x 0.3 0.5 x 0.3	200mm	363
0.5 x 0.3 0.6 x 0.6	200mm 200mm	428 295
0.0 × 0.0	200mm	52
0.3 x 0.4	200mm	281
CLIMBER	200mm	31
0.1 x 0.5	200mm	3068
0.1 x 0.5 0.15 x 0.5	200mm 200mm	5 5
0.15 X 0.5 TURF	20011111	5 1700m2

REVISIONS		
11         10.11.2016         FOR TENDER           10         09.11.2016         FOR TENDER           9         04.11.2016         FOR TENDER		
8         06.07.2016         FOR TENDER           7         17.06.2016         FOR TENDER           6         27.05.2016         FOR TENDER		
5         12.04.2016         FOR COORDINATION           4         29.02.2016         FOR COORDINATION (90%)           3         17.12.2015         FOR COORDINATION (90%)		
2       06.11.2015       FOR COORDINATION (80%)         1       08.10.2015       PRELIMINARY         CONTRACTOR TO VERIFY ALL DIMENSIONS ON SITE         PRIOR TO COMMENCING WORK. JPR IS TO BE		
NOTIFIED OF ANY DISCREPANCIES IN THE DIMENSION AND SETTING OUT OF THE WORK. COPYRIGHT OF DESIGNS SHOWN HEREON IS RETAINED BY JPR. AUTHORITY IS REQUIRED FOR ANY REPRODUCTION.		
Presbyterian Aged Care		
Brookfield MULTIPLEX		
CLIENT: Brookfield Multiplex Pty Ltd Level 22, 135 King St		
Sydney, NSW 2000 DOCUMENT REVIEW - BROOKFIELD MULTIPLEX A - Acceptable for Construction B - A-acceptable for Construction		
B - Acceptable for Construction subject to comments. Correct & Resubmit     C - Unacceptable for Construction. Correct & Resubmit for Review     D - Drawing on Hold     ReviewedDate		
These documents have been reviewed for conformity with design intent. Acceptance does not mean approval of dimensions, sizes or weights nor does it relieve the subcontractor and/or the Consultant from responsibility for errors, omissions or compliance with the obligations and/or requirements of the Contract and/or Subcontract.		
LANDSCAPE ARCHITECT: SITE IMAGE Site Image Landscape Architects CONTACT:		
Mr Nathan Pirrottina Level 1, 3-5 Baptist Street Redfern NSW 2016		
ARCHITECT: JPR Architects Pty Ltd		
CONTACT: Mr Brad Sharpe 50 Stanley Street East Sydney NSW 2010		
HERITAGE ARCHITECT: Conybeare Morrison CONTACT: Mrs Audrey Thomas Level 1, 52-58 William Street East Sydney NSW 2011		
INTERIOR DESIGN: Gilmore interior design CONTACT: Mrs Lisa Agostino		
Unit 9, 37 Nicholson Street East Balmain NSW 2041 STRUCTURAL ENGINEER:		
Taylor Thomson Whitting CONTACT:Mr Scott Nixon 48 Chandos Street		
St Leonards NSW 2065 HYDRAULIC & MECHANICAL ENGINEER: EMF Griffiths		
CONTACT: Clayton Duckworth Level 4, 204 Clarence St		
Sydney NSW 2000		
KEY PLAN		
н		
R		
PROJECT: The Terraces		
Seniors Living and Residential Aged Care Facility 74 Brown Street Paddington NSW 2021 DRAWING TITLE:		
SPECIFICATION NOTES AND PLANT SCHEDULE DOCUMENT CONTROL STATUS:		
FOR TENDER		
PROJECT NO: SS14-2900 DRAWN BY: NP		
DRAWING NO: REV:		
<b>LA-P-1001</b> 11		