Attachment A9

Landscape Plan

118-130 EPSOM ROAD JETLAND LANDSCAPE MASTERPLAN REPORT

PREPARED FOR MERITON IN COLLABORATION WITH MAKO ARCHITECTU

24 JUNE 2022







ACKNOWLEDGEMENT **TO COUNTRY**

Urbis acknowledges the traditional country of the Gadigal people of the Eora Nation. We recognise and respect their cultural heritage, beliefs and continuing relationship with the land, and that they are the proud survivors of more than two hundred years of dispossession.

We reiterate our commitment to addressing disadvantages and attaining justice for Aboriginal and Torres Strait Islander peoples of this community.

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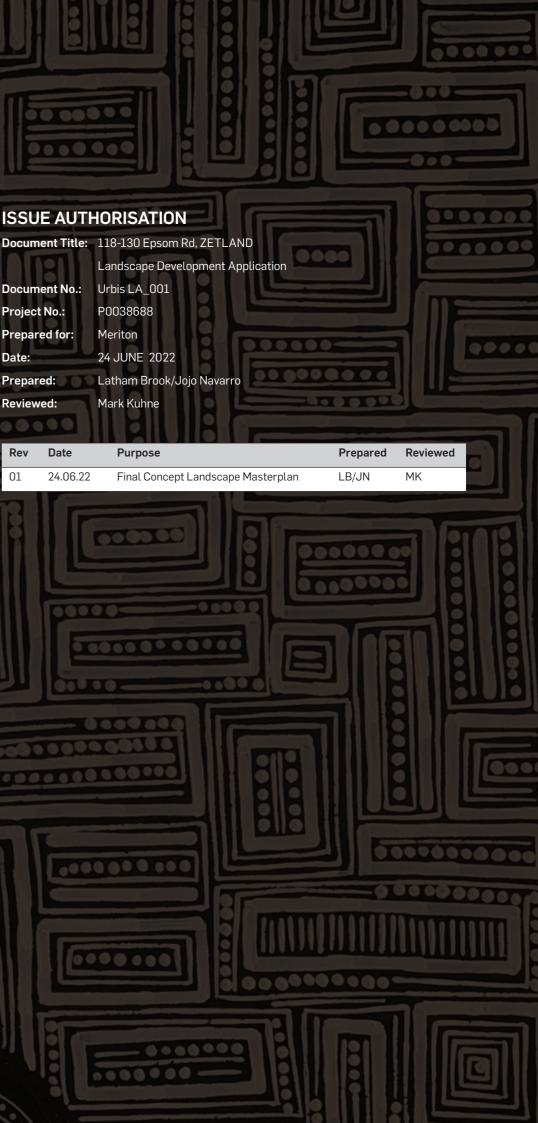
URBIS.COM.AU

Title: Connecting Land Artists: Tarisse King and Sarita King Clan: Gurindji

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Connecting Land is an expression of the beauty of the Australia Landscape. People's connection to the country and the lessons that caring for the land can teach us. Respect for the lands of Australia and creating a positive impact for people is at the centre of shaping great Australian cities and communities



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1.0 INTRODUCTION

THE PROPOSAL

This Landscape design report has been prepared by Urbis for the proposed mixed use development at 118-130 Epsom Road, Zetland. The landscape design presented in this incorporates streetscape design and public open spaces including the proposed Mulgu Park within the Epsom Park Precinct.

The landscape proposal has been prepared in compliance with the City of Sydney Council's DCP and Public Domain Guidelines and DA application checklist.

SITE CONTEXT

The site is comprised of two lots and is located within the broader Green Square Renewal Area. It is bound by Epsom Road and Link Road to the south and east and has limited access to the north and west.

The site has good access to public transport, including rail and light rail as well as bus stops on Epsom Road and Joynton Avenue. A new Metro Station at Waterloo is located approximately 1.6km from the site.

DEVELOPMENT PROPOSAL

This Concept Landscape Masterplan proposes to provide high quality streetscapes incorporating Water Sensitive Urban Design including bioswales on key streets to assist in managing stormwater. Public open spaces including Mulgu Park will also be provided for active and passive recreation. All new streets and shared zones will provide trees for shade and amenity to create an attractive public domain with pedestrian and bike connections.



LEGEND:

Site Boundary

Points of Interest



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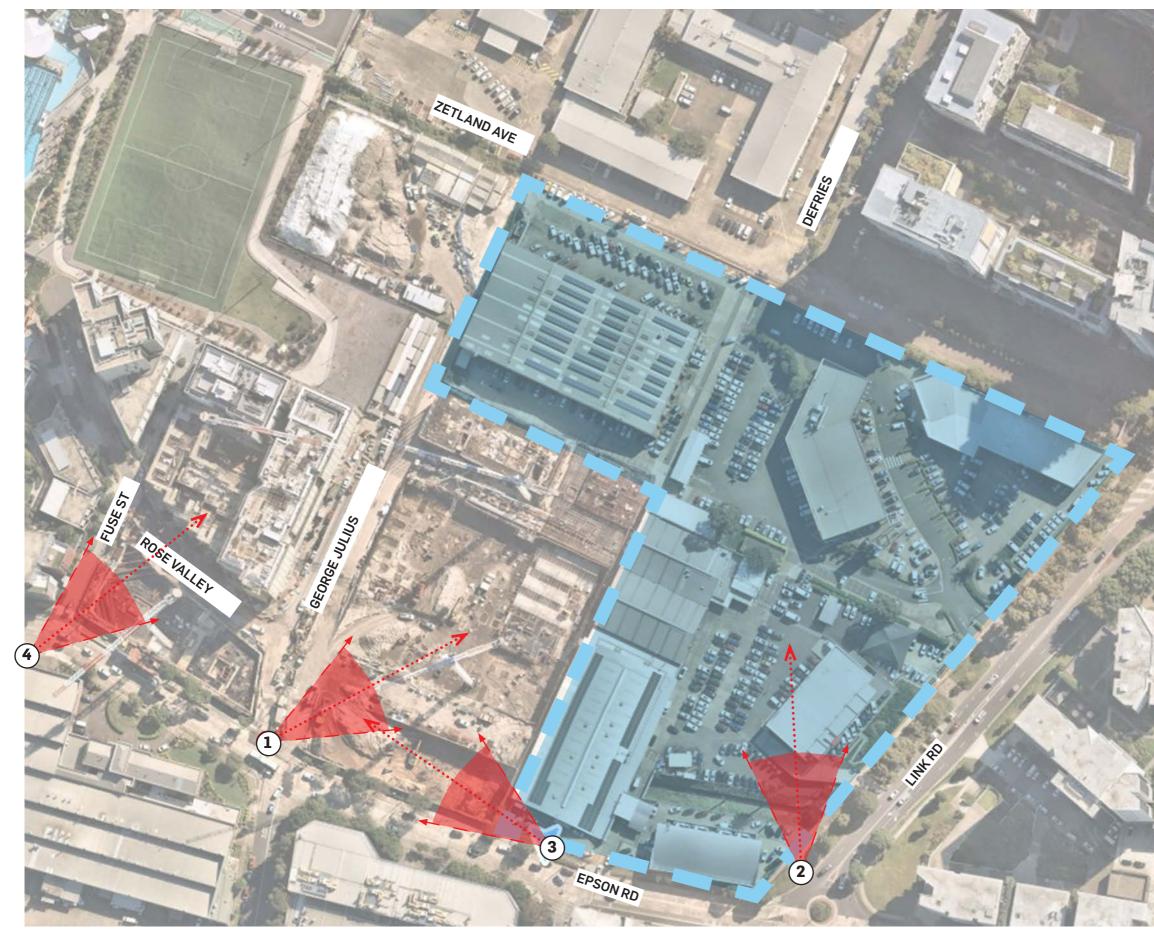
Existing pedestrian

BE

Open Space

Existing Bus Stop

1.1 EXISTING SITE CONDITIONS





1. View from Epsom Road



2. View from Link Road



3. View from Epsom Road looking West



4. View from Epsom Road towards Fuse St.



2.0 PUBLIC DOMAIN DESIGN PRINCIPLES

INTEGRATION



- Integrate green infrastructure to create an urban community that delivers quality of life
- Create balanced green recreational and functional open spaces that strengthen wider environmental, social and economic benefits
- Integrate green spaces into the built form
- Maintain existing trees where possible, particularly on the periphery, providefor adequate compensatory planting in new public spaces as part of an open and accessible precinct

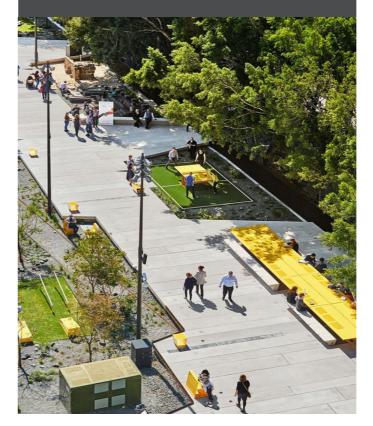
Note: Public Domain Principles referenced from 'Greener Places' document prepared by Government Architects New South Wales

CONNECTIVITY



- Create a series of shared spaces that
 promote meaningful connections with the
 community
- Strengthen green streets and community access to local and regional green open spaces

MULTIFUNCTIONALITY



- Connect and enhances the development through high quality and high performing green spaces
- Deliver an open space that contributes to the value and understanding of place
- Design spaces that foster integration, community identity, sense of connectedness and community capacity

PARTICIPATION



Engage the stakeholders to create community value

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Embrace diversity of activities to encourage community engagement

Create places that cater to all ages and abilities

2.1 DESIGN RESPONSE

METHODOLOGY

Streetscape

- Water Sensitive Urban Design (WSUD) principles, integrating stormwater into landscape verges and central medians.
- Attractive and comfortable streetscapes for pedestrians & cyclists to activate streets.
- High quality paving, furniture & planting in accordance with City of Sydney Council DCP.
- Direct and convenient connections to existing external pedestrian networks.
- All new streets and shared zones will provide trees for shade and amenity

Civic Park

- Activated public open space responding to primary retail frontage
- Opportunities for temporary cafe carts or outdoor dining.
- Planting beds with integrated seating benches as an informal dining/retail space extension space.
- Mix of medium and large evergreen and deciduous canopy trees, providing shade and build form relief.

Neighbourhood Park

- Alfresco dining opportunities framed by a grove of trees.
- BBQ Pavilions with picnic tables and chairs.
- Graden beds incorporating WSUD principles
- Large central lawn space providing opportunities for larger events.
- Mix of formal and Informal quality furniture & fixtures.
- Fruit tree garden to promote fruit tree planting in public space

Link Parks

- Flexible linear 'kick-about' lawn with seating areas strengthened by a row of tree canopies and buffer planting to screen adjacent built form.
- Feature tree bosques and seating areas for smaller community gatherings.
- Paths connecting internal and external pedestrian networks.
- Fitness Station and parkour equipment providing active recreation.

SAFETY AND SECURITY

An integrated approach to safety will improve actual and perceived personal security in pedestrian public domain areas;

- All paths are overlooked from adjoining buildings and adjacent streets which will provide a high level of passive surveillance;
- All external spaces will have multiple clear sight lines without obstacles, proposed shrub planting is low level which will prevent places to hide;
- All paths will be well lit at night time and designed to meet relevant Australian Lighting Standards;
- Signage will be provided across the precinct to assist with wayfinding and navigation through the site.
- All planting + retaining / planter walls to be low at road intersections to ensure vehicular sight lines are not obstructed

DRAINAGE & WATERING STRATEGY

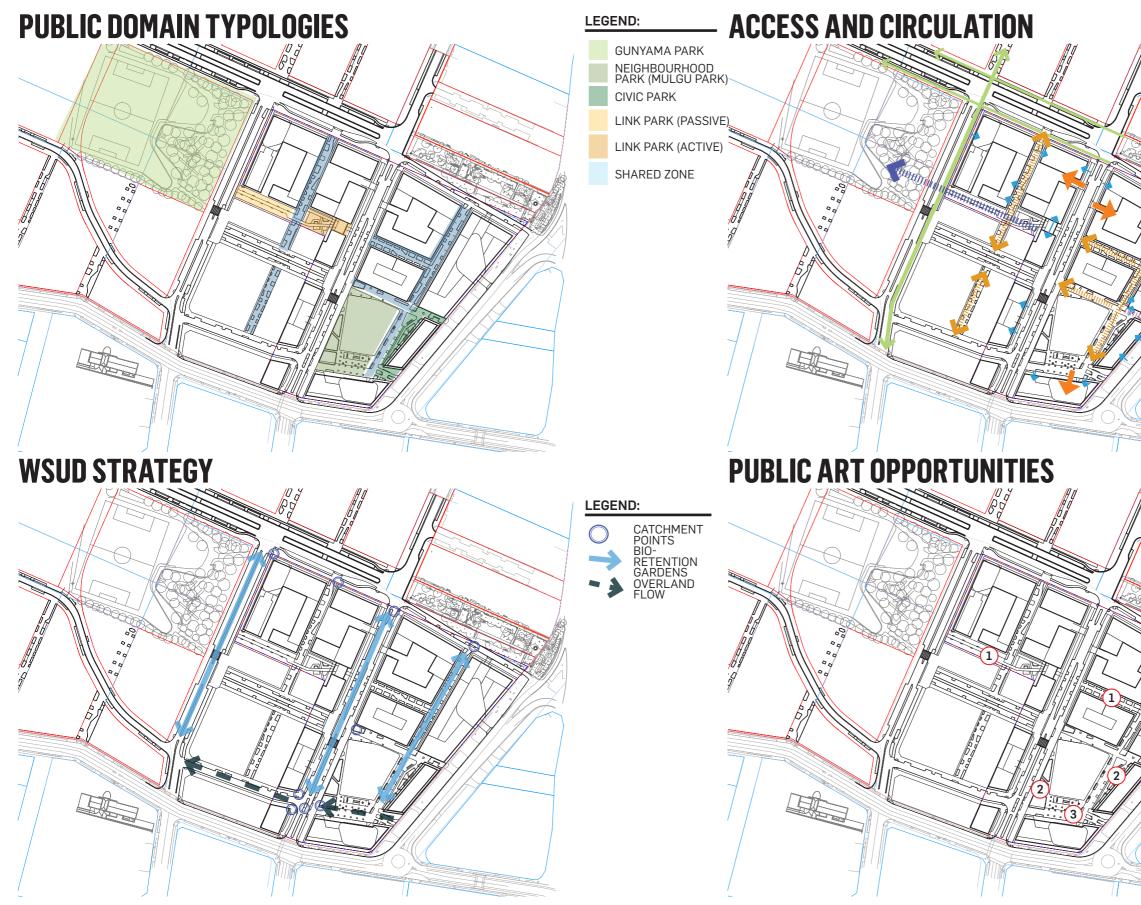
Generally:

- Water Sensitive Urban Design (WSUD) principles have been realised into the landscape design in a way that celebrates a sustainable water cycle.
- All irrigation systems will comprise of subsurface drip systems and automatic timers with rainwater / soil moisture sensor controls;
- Where possible storm water runoff will be directed to the lawn and garden beds; via basement rainwater storage tanks
- Irrigation will be provided to all soft landscape areas and will be specified within the tender package;
- Low water demand shrub planting is proposed.

LIGHTING

• All external areas will be designed to meet relevant Australian Lighting Standards. Integrated landscape lighting is proposed to all the landscape elements.

2.2 DESIGN DRIVERS





LEGEND:



PEDESTRIAN ACCESS

VEHICULAR ACCESS SEPARATED BICYCLE LANES SHARED ZONE

PEDESTRIAN LINK

LINK TO GUNYAMA PARK

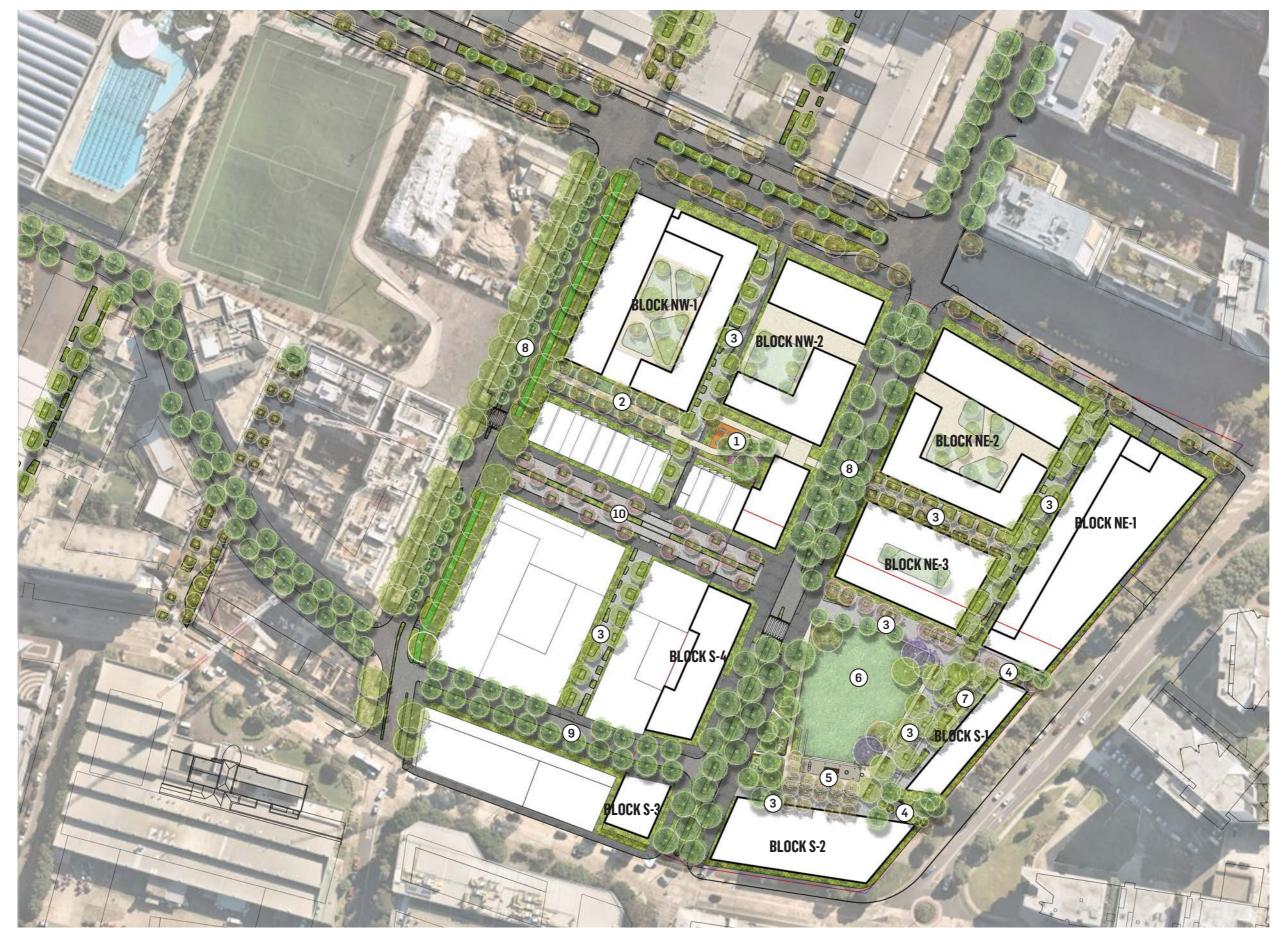
PUBLIC ART OPPORTUNITIES:

(1)	LINEAR EXPERIENCE
2	COMMUNITY & CULTURAL GARDENS
3	SHADE/SHELTER



0 50 100 150 200 250

2.3 LANDSCAPE CONCEPT MASTER PLAN



LEGEND:

- (1) LINK PARK ACTIVE SPACE
- (2) LINK PARK PASSIVE SPACE
- (3) SHARED ZONE
- PEDESTRIAN THROUGH SITE LINK
 BBQ / OUTDOOR DINING FACILITIES
- 6 NEIGHBOURHOOD PARK
- (7) CIVIC PARK
- (8) PRIMARY ROAD
- (9) SECONDARY ROAD
- (10) LOCAL ROAD

DESIGN OBJECTIVES

- The shared zone is to promote a low speed environment to encourage and prioritise pedestrian and cycling over vehicular use
- Integrating Water Sensitive Urban Design strategy to improve the quality of stormwater leaving the site through treatment methods which mimic natural systems
- Parks and public open spaces are to be multi functional, inclusive and accessible that cater to a variety of age groups and abilities
- Use of indigenous / native vegetation and exotic vegetation to create the desired character, ambiance, micro-climate, enclosure and aesthetics of the varying streetscapes and open spaces
- Materials and furniture selections in accordance with the City of Sydney's Public Domain Design Codes to ensure integration with the surrounding urban context, streets, parks and neighbouring properties



Prepared by Urbis for Meriton

150 200 250

2.4 PRECEDENT IMAGERY

PUBLIC DOMAIN STREETSCAPE



Street with separated cycle lanes and vegetated swale median



Planting verge setback



Native Street Planning



Shared zone planting

10 118-130 Epsom Road, Zetland Concept Landscape Masterplan





2.5 DETAIL PLAN - LINK PARK



LEGEND:

- 1 ACTIVE RECREATION SPACE
- ACTIVE RECREATION SPACE
 PASSIVE LINEAR PARK
 WITH SEATING FRAMED BY DECIDUOUS TREES
 SHARED ZONE

- 4 DEDICATED CYCLE LANES
- 5 FLEXIBLE KICK-ABOUT LAWN





Turf area under trees for respite



Linear park with row of trees

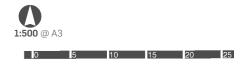


Outdoor fitness station





Planting with integrated seating

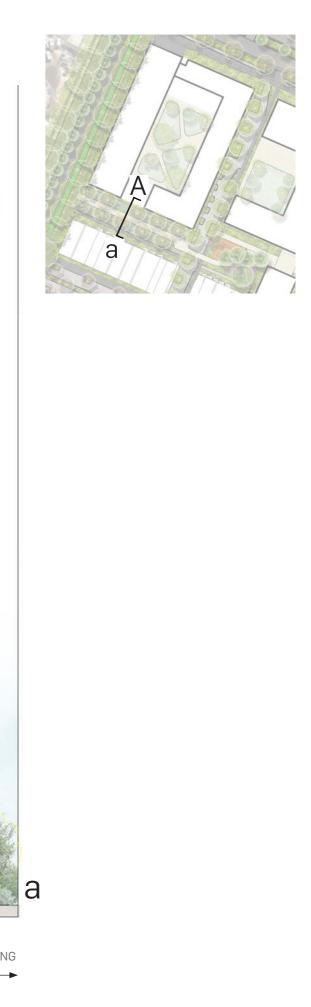


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2.6 SECTION - LINK PARK



SECTION Add, Zetland Concept Landscape Masterplan



2.7 DETAIL PLAN - MULGU PARK AND CIVIC PARK



LEGEND:

- ① RETAIL / ALFRESCO DINING ACTIVATION
- 2 NATIVE GARDEN
- 3 BIO-FILTRATION GARDEN
- CENTRAL LAWN / INFORMAL PLAY
- (5) BBQ AND DINING AREA
- (6) SHARED ZONE
- (7) FRUIT TREE GARDEN

outdoor seating and di

formal active recreation



Seating area for gathering and eating



BBQ facilities and pavilion with communal table









11 11 m

15

25

2.8 SECTION - MULGA PARK AND CIVIC PARK

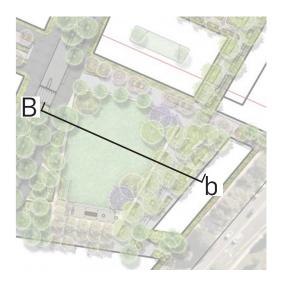


SECTION Bb



SECTION CONTINUED ABOVE

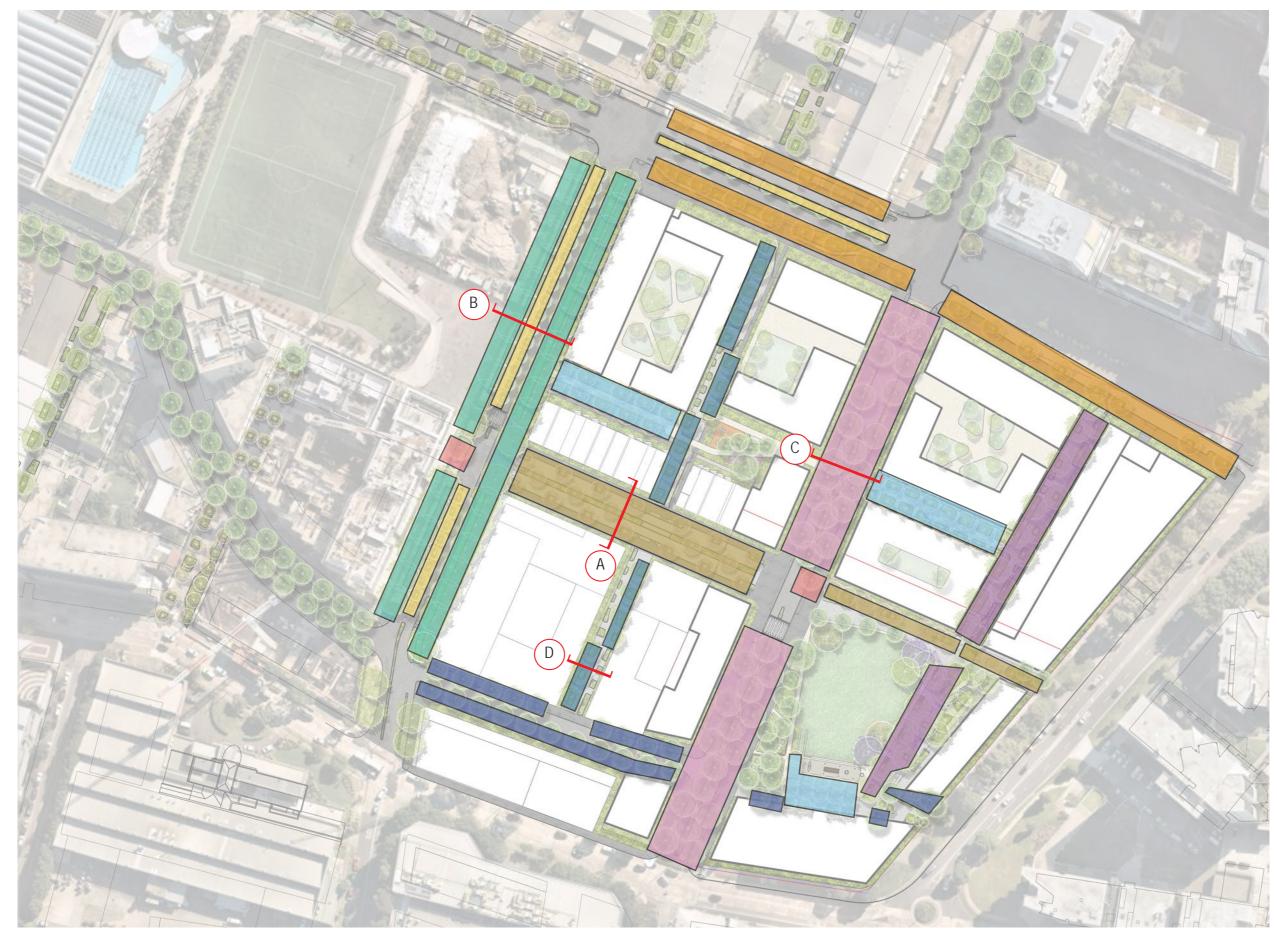






SECTION CONTINUED BELOW

3.0 STREET TREE MASTERPLAN



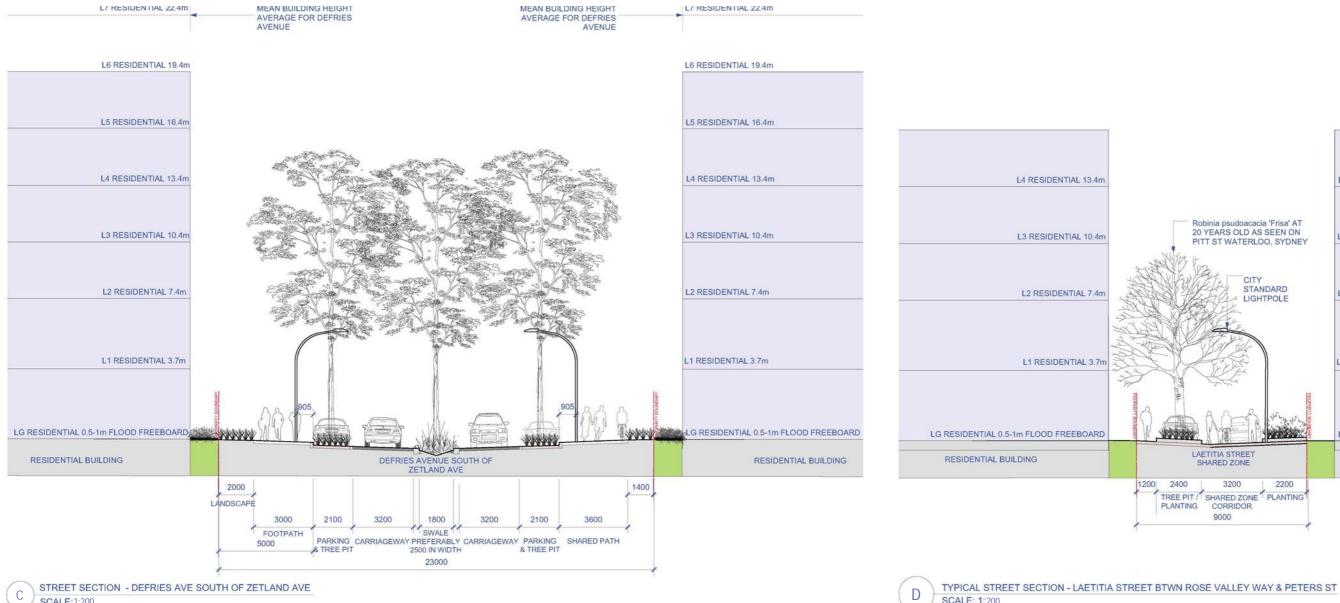
LEGEND:

Livistonia australis, Cabbage Palm Brachychiton discolor, Lacebark Tree
Brachychiton populneus, Kurrajong Eucalyptus mircocorys, Tallowwood Koelreuteria paniculata, Golden Raintree
Liriodendron tulipifera, Tulip Tree
Pyrus calleryana, Callery Pear Robinia pseudoacacia 'Frisia', Golden Robinia Waterhousia floribunda 'Green Avenue', Weeping Lillypilly
Zelkova serrata 'Green Vase' , Zelkova

3.1 TYPICAL STREETSCAPE SECTIONS



* TYPICAL STREETSCAPE SECTIONS SHOWN ARE SOURCED FROM EPSOM PARK PRECINCT PUBLIC DOMAIN CONCEPT DESIGN PREPARED BY THE CITY IF SYDNEY (12.02.2016)



SCALE:1:200

SCALE: 1:200

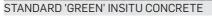
	L4 RESIDENTIAL 13.4m
Robinia psudoacacia 'Frisa' AT 20 YEARS OLD AS SEEN ON PITT ST WATERLOO, SYDNEY	L3 RESIDENTIAL 10.4m
CITY STANDARD LIGHTPOLE	L2 RESIDENTIAL 7.4m
	L1 RESIDENTIAL 3.7m
	LG RESIDENTIAL 0.5-1m FLOOD FREEBOARD
LAETITIA STREET SHARED ZONE	RESIDENTIAL BUILDING
0 3200 2200 PIT / SHARED ZONE PLANTING TING CORRIDOR 9000	

4.0 MATERIALS, FURNITURE & FIXTURES

PAVING & FINISHES









WALLS







FITNESS & PARKOUR EQUIPMENT















FURNITURE & FIXTURES



TZANNES 'VILLAGE SUITE' BENCH



TZANNES 'VILLAGE SUITE' BUBBLER







STANDARD PARKS BIKE RAIL



CITY OF SYDNEY SMART POLE







TZANNES 'VILLAGE SUITE' BOLLARD



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5.0 INDICATIVE PLANTING SCHEDULE

PLANT CODE	BOTANICAL NAME	COMMON NAME	MATURITY HEIGHT AND SPREAD (m)	SUPPLY HEIGHT AND SPREAD (m)	CONTAINER SIZE
TREES					
BRA dis	Brachychiton discolor	Lacebark Tree	15 x 5	4 x 2	200L
BRA pop	Brachychiton populneus	Kurrajong Tree	10 x 5	4 x 2	200L
EUC mir	Eucalyptus mircocorys	Tallowwood	25 x 10	4 x 2	200L
KOE pan	Koelreuteria paniculata	Golden Raintree	10 x 5	4 x 2	200L
LIV aus	Livistona australis	Cabbage Palm	20 x 3	4 x 2	200L
LIR tul	Liriodendron tulipifera	Tulip Tree	15 x 5	4 x 2	200L
PYR cal	Pyrus calleryana	Callery Pear	10 x 3	4 x 2	200L
ROB pse	Robinia	Golden Robinia	10 x 5	4 x 2	200L
	pseudoacacia 'Frisia'				
WAT flo	Waterhousia floribunda	Weeping Lillypilly	10 x 5	4 x 2	200L
	'Green Avenue'				
ZAL ser	Zelkova serrata 'Green Vase'	Zelkova	10 x 10	4 x 2	200L
BLA cit	Backhousia citriodora	Lemon scented myrtle	5 x 5	4 x 2	200L
FIC car	Ficus carica	Fig 'Black Genoa'	10 x 10	4 x 2	200L
JAR mim	Jacaranda mimosifolia	Jacaranda	15 x 10	4 x 2	200L
MET gly	Metasequoia glyptostroboides	Dawn redwood	20 x 8	4 x 2	200L
MAC tet	Macadamia tetraphylla	Macadamia	20 x 6	4 x 2	200L
MIC aus	Microcitrus australasica	Finger Lime	7 x 5	4 x 2	200L
MOR nig	Morus nigra	Mulberry	8 x 15	4 x 2	200L
OLE eur	Olea europaea ' Manzanillo'	Olive	6 x 5	4 x 2	200L
PER pin	Persea americana 'Pinkerton'	Avocado (Type A)	10 x 12	4 x 2	200L
PER fue	Persea americana ' Fuerte'	Avocado Fuerte (Type B)	8 x 12	4 x 2	200L
PER wur	Persea americana ' Wurtz'	Dwarf Avocado Wurtz (Type C)	4 x 3	4 x 2	200L
POD ela	Podocarpus elatus	Callery Pear	8 x 4	4 x 2	200L
SYZ lue	Syzygium luehmannii	Small leaf lilly pilly	10 x 5	2x1	100L

SHRUBS & ACCENT PLANT	S			
Arthropodium cirratum	Renga Lily	0.6 x 0.6	na	300mm
Blechnum cartilagineum	Gristle Fern	0.6 x 0.8	na	200mm
Bergenia cordifolia	Heart-leaved bergenia	0.5 x 0.5	na	150mm
Pteris tremula	Australian brake	0.6 x 0.6	na	150mm
Sedum 'autumn joy'	Autumn Joy	0.6 x 0.6	na	150mm
Echinacea purpurea	Purple coneflower	1.5 x 0.7	na	100mm
Zephyranthes candida	Fairy Lily	0.2 x 0.4	na	100mm
Blechnum nudum	Fishbone Water-fern	1x1	na	200mm
Euphorbia characias 'wulfenii'	Mediterranean Spurge	0.9 x 0.9	na	200mm
Allium giganteum	Giant onion	1.5 x 0.6	na	200mm

GROUNDCOVERS & GRASSES	6			
Viola hederacea	Native violet	0.1 x 0.5	na	140mm
Festuca glauca	Blue Fescue Grass	0.5 x 0.5	na	140mm
Dianella caerulea 'little jess'	Native Flax	0.3 x 0.3	na	140mm
Dianella revoluta 'little rev'	Native Flax	0.4 x 0.3	na	140mm
Dianella tasmanica 'emerald arch'	Native Flax	0.5 x 0.5	na	140mm
Ficinia nodosa	Nobby Club Rush	1 x 1.5	na	140mm
Pennisetum alopecuroides 'nafray'	Swamp Foxtail Grass	0.7 x 1	na	140mm
Anemone x hybrida	Windflower	0.9 x 0.9	na	140mm
Imperata cylindrica	Cogon grass	0.5 x 0.4	na	140mm
Lomandra longifolia ' tanika'	Mat Rush	0.5 x 0.6	na	140mm
Lomandra confertifolia 'wingarra'	Mat Rush	0.4 x 0.6	na	140mm
Tulbaghia violacea	Society Garlic	0.4 x 0.3	na	140mm

COMMUNITY GARDEN				
Petroselinum crispum 'Krausa'	Parsley	0.6 x 0.6	na	100mm
Ocimum basilicum	Common Basil	0.4 x 0.4	na	100mm
Coriandrum sativum	Coriander	0.4 x 0.4	na	100mm

Note: 50% of planting area to be native/low water use plants

5.1 INDICATIVE PLANTING PALETTE

TREES













Robinia pseudoacacia 'Frisia



Brachychiton populneus









Koelreuteria paniculata

SHRUBS AND ACCENT PLANTING



Arthropodium cirratum



Blechnum nudum

Bergenia cordifolia





GROUNDCOVERS AND GRASSES



Dianella revoluta 'little rev'







Tulbaghia violacea

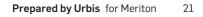


Pennisetum alopecuroides 'nafray'





Lomandra longifolia 'Tanika'



5.2 PLANT ESTABLISHMENT + MAINTENANCE

Landscape Maintenance Strategy

General

- Planting maintenance period: the planting maintenance period will be 52 weeks and will commence from the date of practical completion. Of each phase of planting works (hereby specified to be a separable part of the works). It is anticipated that planting works will be undertaken in one phase
- Planting maintenance program: 2 weeks prior to practical completion, furnish a proposed planting establishment program, and amend it as required. Such proposal should contain details of the types and frequency of maintenance activities involved with the establishment of plants and grassed areas. Comply with the approved program.
- Planting maintenance log book: keep a log book recording when and what maintenance work has been done and what materials, including approved toxic materials, have been used. Log book must be signed off by the client's representative after each maintenance visit. Maintain log book in location nominated by superintendent. All entries are to be initialled by person nominated by superintendent. Log book to contain a copy of the approved planting establishment program.
- Product warranty: submit the supplier's written statement certifying that plants are true to the required species and type, and are free from diseases, pests and weeds.
- Insurance: the contractor is to ensure suitable insurance cover and / or bank guarantee is in place for the theft and / or damage of all works executed under this contract for the plant maintenance period.

Planting Maintenance

Protection of works: provide any fencing or barriers necessary to protect the planting from damage throughout the planting establishment period.

Recurrent works: throughout the planting maintenance period, continue to carry out recurrent works of a maintenance nature all to the extent required to ensure that the plants are in the best possible condition at the end of the planting maintenance period. These activities are including but not limited to:

 Weeding, Rubbish removal, Fertilizing, Pest and disease control, Adjust / replace stakes and ties, Topping up mulch, Cultivating, Pruning, Keeping the site neat and tidy

Replacements: the contractor is responsible for the replacement of failed, damaged or stolen trees, shrubs and groundcovers throughout the planting establishment period.

Weeding

Generally: regularly remove, by hand, rubbish and weed growth that may occur or recur throughout turfed, planted and mulched areas. Continue eradication throughout the course of the works and during the planting establishment periods.

Weed eradication: the contractor must make allowance for a higher level of maintenance during establishment to ensure that weeds are controlled.

Herbicide use: re-application of herbicide such as Ronstar or equivalent if required.

Compliance

- Requirement: plant maintenance shall be deemed complete subject to the following compliance with the criteria:
- Repairs to planting media completed
- Ground surfaces are covered with the specified treatment to the specified depths
- Pests, disease, or nutrient deficiencies or toxicities are not evident.
- Organic and rock mulched surfaces have been maintained in a weed free and tidy condition and to the specified depth
- Vegetation is established and well formed

- Plants have healthy root systems that have penetrated into the surrounding, undisturbed ground and not able to be lifted out of its planting hole
- Vegetation is not restricting essential sight lines and signage
- Collection and removal of litter
- All non-conformance reports and defects notifications have been closed out.
- Plant maintenance compliance schedule:*as defined by the superintendent

Pruning

- Generally: tree plantings shall be left to grow in a form consistent with the growth habit of the species.
- Pruning: cut back tree canopies and groundcovers to road verges, and light poles and signs as required achieving clear sight lines when viewed along roadway.
- Requirement: pruning to be undertaken by a qualified tree surgeon / arborist

Fertilisina

- Generally: the fertiliser regimes have been devised to provide sufficient long-term fertility for the vegetation type and it is anticipated that all except the very high status horticultural beds such as feature plantings (entry and courtyard planting) for colour and foliage will not need regular fertiliser regimes.
- Testing: additional nitrogen may be required due to drawdown effects from composts and mulches and localised waterlogging. To compensate for this, soil testing is to be carried out after 12 months to ascertain nutrient requirements.

Completion

Cleaning: remove temporary protective fences and tree stakes at the end of the planting maintenance period.

