



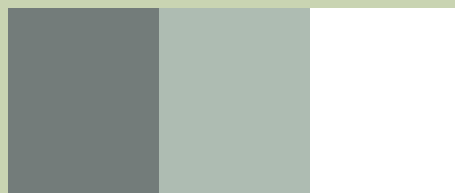
Landscape Design Report and Detail Design Manual

RIVERSIDE, TEA GARDENS

A n d r e w s . N e i l

Job No.: 07077

Date: October 07



contents

1.0	Introduction	2
2.0	Project Description	3
3.0	Landscape Design Intent	4
3.1	Open Space Corridors	4
3.2	Streetscapes	6
3.3	Foreshore/Edge Treatment	15
3.4	Pedestrian/Cycleway Network	17
4.0	Environmental Protection	18
4.1	Erosion Control	18
4.2	Tree Protection	18
4.3	Salinity	18
5.0	Maintenance	19



1.0 Introduction

Riverside at Tea Gardens will provide an attractive and convenient neighbourhood which is linked by a series of open space corridors, pedestrian/cyclepaths and waterways. The neighbourhood precincts are focused around Public open space areas that also contain clubhouses with private recreation facilities such as tennis courts.

The streetscapes have been designed to maximize connectivity and aesthetics through the provision of street tree planting, off road cycleways, viewing decks and platforms for access to the waters edge, pedestrian thresholds, visitor parking and street furniture. The landscape design treatment for the public domain is intended to reflect the high quality of living and lifestyle that the coastal environment of Tea Gardens has to offer.

The Landscape Design Report will outline the design intent for the public domain landscaping including; species list, materials and finishes and general design principles.



2.0 Project Description



Masterplan

Concept Plan		
Lot Size Range	Approx No. Dwellings	% of Total
Multiple Dwellings <450m ² /DW	96 approx.	16%
<450m ² /DW	27 approx.	4.5%
450-550m ² /DW	113 approx.	18.9%
550-650m ² /DW	239 approx.	39.9%
>650m ² /DW	124 approx.	20.7%
Total lots	599	100%
Tourist lodges	50	NA
Town houses	15	NA
+Project Application	381	
OVERALL TOTAL	980/65	
YIELD	980/75.4 Ha	13 DW/Ha

Note: yield not inclusive of tourist lodges or town houses

3.0 Design Intent

The design intent is to compliment the coastal environment and create a “soft edged” landscape that minimises long term maintenance and maximise access to open space areas and waterways. The use of long lasting species and robust materials tolerant of the marine environment will be recommended with a focus on simple and high quality finishes.

The Design intent for;

- Open Space Corridors
- Streetscapes
- Foreshore/Edge Treatments
- Pedestrian/Cycleway Network

is outlined below;

3.1 Open Space Corridors

The open space corridors have been designed as multi-function corridors that address drainage water treatment, pedestrian/cycle access, recreation and amenity. The corridors have been designed with the following principles;

- Maximise accessibility through the use of “soft engineering” principles, the use of batters and ramps in lieu of retaining walls to provide logical pedestrian connections. In addition a series of small bridges will be provided where crossing of drainage lines is required.
- Maximise passive surveillance through selective planting of shrubs and a focus on the use of groundcovers and clean trunked canopy trees. In addition to sensitive landscaping the use of pedestrian lighting will be incorporated where appropriate.
- Provide for drainage requirements during high flow events through the inclusion of a defined channel which will be planted with species that tolerate periodic inundation.
- Provide for separation of the private recreation and club facilities through subtle landscape solutions that integrate with the public domain landscaping.

Recommended Planting List

TREES:

Acmena smithii (Lilly Pilly)
Allocasuarina torulosa (Forest Oak)
Brachychiton acerifolius (Illawarra Flame Tree)
Casuarina glauca (Swamp Oak)
Corymbia maculata (Spotted Gum)
Eucalyptus robusta (Swamp Mahogany)
Leptospermum laevigatum (Coastal Teatree)
Melaleuca quinquenervia (Broad Leafed Paperbark)
Syzygium paniculatum (Magenta Lilly Pilly)

SHRUBS:

Acacia myrtifolia (Red-stemmed Wattle)
Banksia ericifolia (Heath-leaved Banksia)
Banksia spinulosa (Hairpin Banksia)
Callistemon citrinus (Crimson Bottlebrush)
Dodonaea triquetra (Large-leaf Hop-bush)
Leptospermum polygalifolium (Tantoon)
Melaleuca thymifolia (Thyme Honey Myrtle)
Persoonia linearis (Narrow-leaved Geebung)
Pimelea linifolia (Slender Rice Flower)
Pittosporum revolutum (Rough Fruit Pittosporum)
Westringia fruticosa (Coastal Rosemary)

GROUNDCOVERS/GRASSES:

Clematis aristata (Old Man's Beard)
Dianella caerulea (Blue Flax Lilly)
Hardenbergia violacea (False Sarsaparilla)
Isolepis nodosa (Knobby Club-rush)
Juncus usitatus (Common Rush)
Lomandra longifolia (Spiny-headed Mat-rush)
Poa labillardieri 'Eskdale'
Pennisetum alopecuroides 'Nafray'
Themeda australis (Kangaroo Grass)

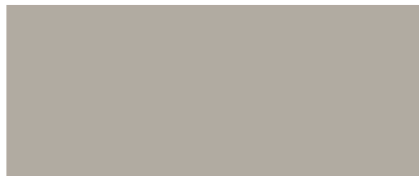
3.2 Streetscapes

Streetscapes have been designed to allow landscaping to provide separation between the dwelling and public domain. The key components of the streetscape elements are described below;

- Street trees have been selected to reflect the road hierarchys and the orientation to maximise solar access.
- Street types and their recommended street trees are indicated below.
- The treatment of verges may vary to include turf or mass planting.
- Footpaths will be of a uniform colour in exposed aggregate concrete finish or within the following colour range:



'Oyster' as supplied by Concrete Colour Systems



'Gecko' as supplied by Concrete Colour Systems



'Ghost Gum' as supplied by Concrete Colour Systems



Exposed aggregate finish



Exposed aggregate finish

Recommended Street Tree List



Angophora costata (Sydney Red Gum)

Mature height (m): 12H x 8W

- Deep wine red new foliage
- Pink/gray bark turning bright orange/brown
- Clusters of white flowers



Bauhinia purpurea (Orchid Tree)

Mature height (m): 7H x 5W

- Rich magenta flowers
- Bright green glossy leaves



Corymbia maculata (Spotted Gum)

Mature height (m): 15H x 8W

- Feature mottled bark
- Fragrant white flower clusters
- Dark green leaves



Cupaniopsis anacardioides (Tuckeroo)

Mature height (m): 8H x 5W

- Dense glossy foliage.
- Spreading canopy
- Orange fruit



Elaeocarpus eumundii (Quandong)

Mature height (m): 6H x 4W

- Evergreen tree
- Dense glossy foliage
- Deep bronze to burgundy new growth



Eucalyptus robusta (Swamp Mahogany)

Mature height (m): 15H x 8W

- Dense spreading canopy
- Red brown bark
- Dark green leaves

Recommended Street Tree List



Ficus microcarpa var. *hillii* (Hill's Weeping Fig)

Mature height (m): 15H x 10W

- Smooth trunk
- Green glossy leaves
- Excellent shade tree



Lophostemon confertus (Brush Box)

Mature height (m): 15H x 12W

- Pink/brown peeling bark
- Dark green glossy leaves
- White flowers



Melaleuca quinquenervia (Broad Leafed Paperbark)

Mature height (m): 8H x 5W

- Creamy/papery bark
- Cream flower spikes
- Drooping needle like leaves



Podocarpus elatus (Plum Pine)

Mature height (m): 10H x 6W

- Deep green leathery leaves
- Dense branching habit
- Blue/black fruit



Waterhousia floribunda (Weeping Lillypilly)

Mature height (m): 8H x 5W

- Weeping foliage
- Glossy green leaves

Recommended Street Tree List



Lagerstroemia indica (Crepe Myrtle)

Mature height (m): 6H x 5W

- Deciduous tree
- Attractive smooth mottled trunk
- Heavily ruffled flowers



Pyrus calleryana (Flowering Pear)

Mature height (m): 10H x 6W

- Ornamental deciduous tree
- Deep green leaves
- Masses of white blossoms

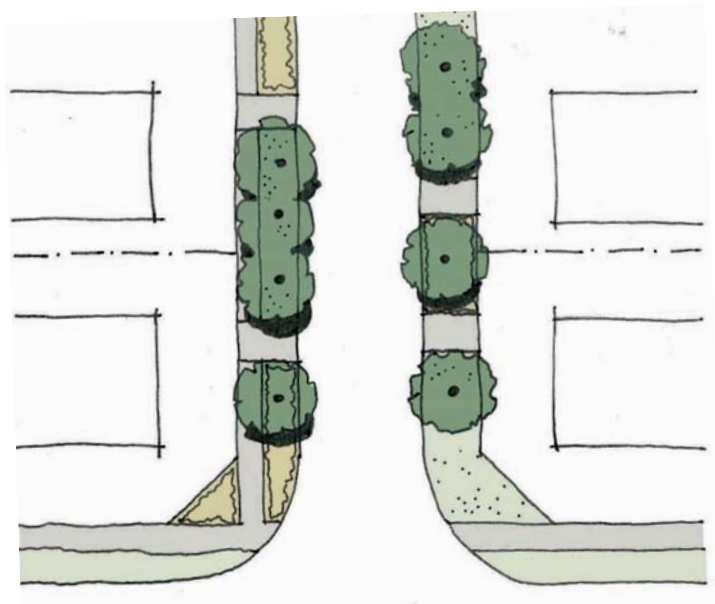


Sapium sebiferum (Chinese Tallowood)

Mature height (m): 8H x 6W

- Excellent autumn colour
- Fast growing
- Soft green heart shaped leaves





Street Type 1

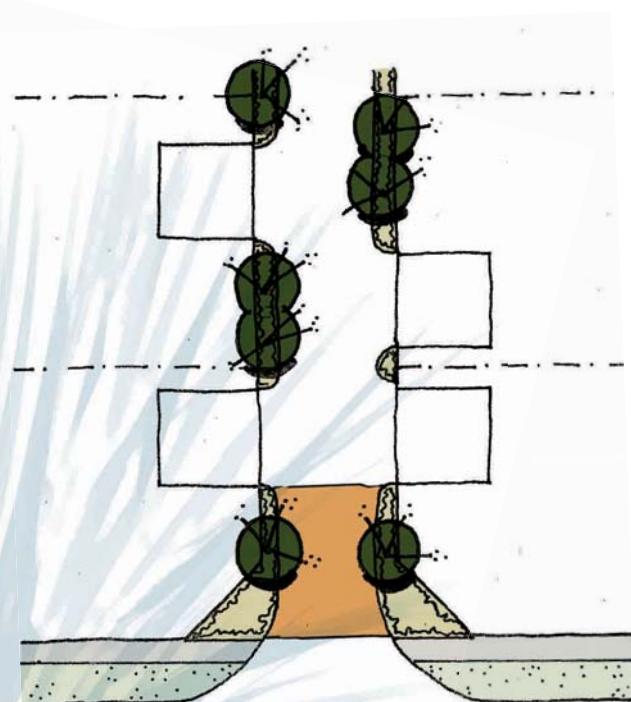
Recommended Planting List eg:

- *Elaeocarpus eumundii* (Quondong)
- *Waterhousia floribunda* (Weeping Lillypilly)



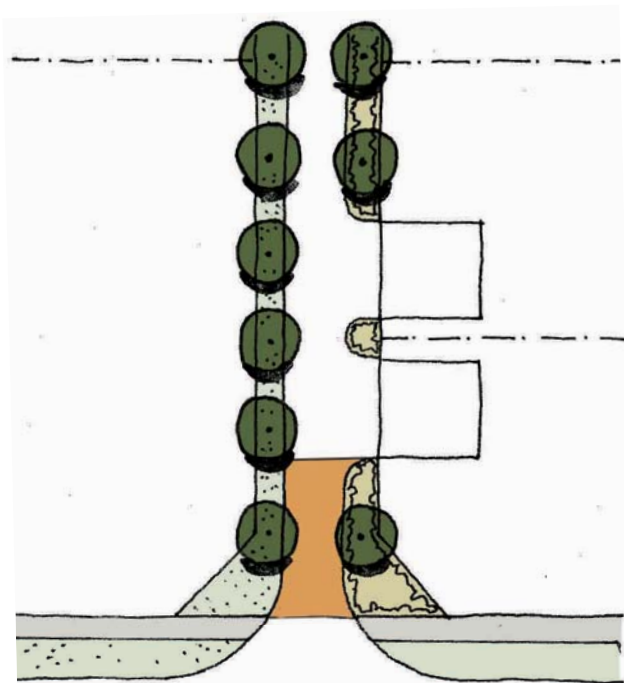
Street Type 2

- *Corymbia maculata* (Spotted Gum)
- *Melaleuca quinquenervia* (Broad Leafed Paperbark)
- *Lophostemon confertus* (Brush Box)



Street Type 3

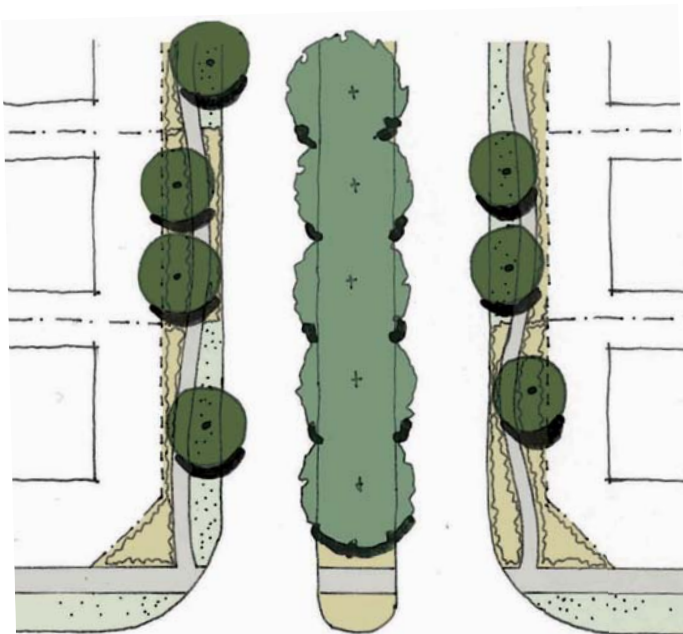
- *Lagerstroemia indica* (Crepe Myrtle)
- *Pyrus calleryana* (Flowering Pear)
- *Sapium sebiferum* (Chinese Tallowood)



Street Type 4

Recommended Planting List eg:

- *Elaeocarpus eumundii* (Quondong)



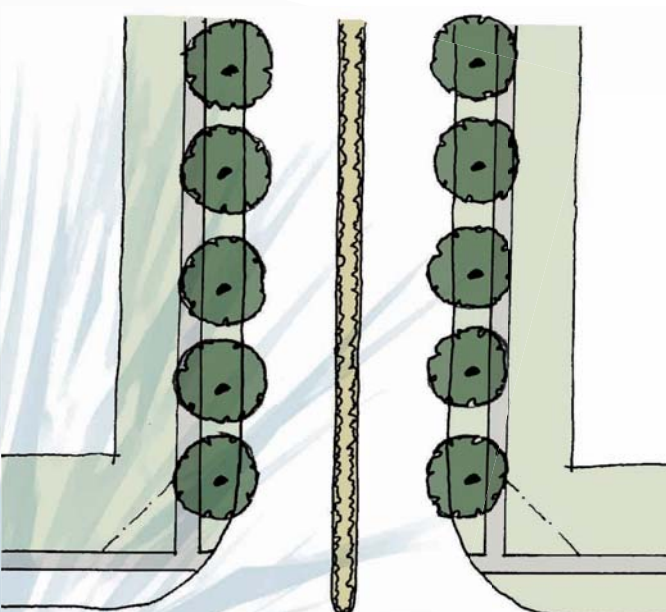
Street Type 5

VERGE:

- *Cupaniopsis anacardioides* (Tuckeroo)
- *Waterhousia floribunda* (Weeping Lillypilly)

MEDIAN:

- *Bauhinia purpurea* (Orchid Tree)
- *Podcarpus elatus* (Plum Pine)



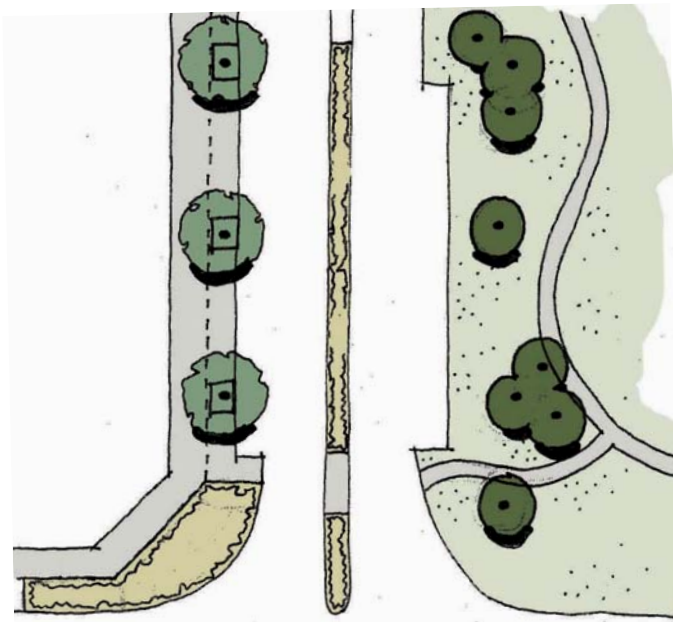
Street Type 6

VERGE:

- *Cupaniopsis anacardioides* (Tuckeroo)
- *Waterhousia floribunda* (Weeping Lillypilly)

MEDIAN:

- *Dianella 'Breeze'* (Blue Flax Lilly)
- *Grevillea x gaudichaudi* (Grevillea)



Street Type 7

Recommended Planting List eg:

VERGE:

- *Cupaniopsis anacardioides* (Tuckeroo)

- *Lophostemon confertus* (Brush Box)

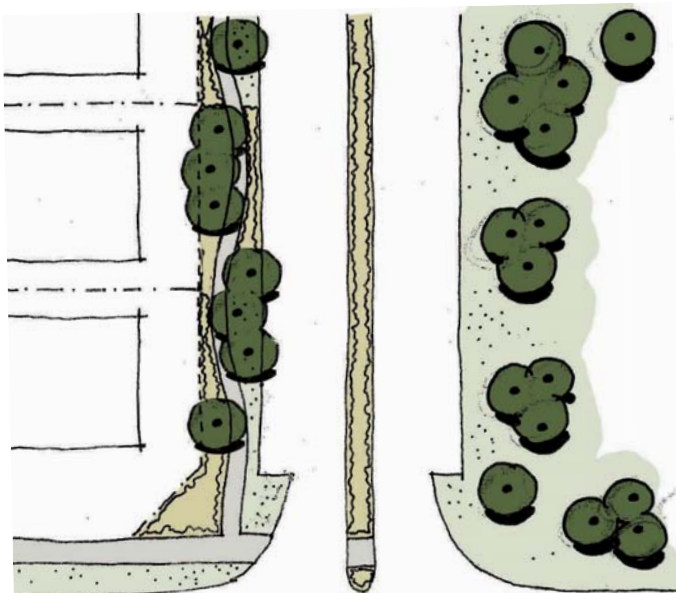
MEDIAN:

Prostrate species eg:

- *Dianella 'Breeze'* (Blue Flax Lilly)

- *Grevillea x gaudichaudi* (Grevillea)

- *Juniperus conferta* (Shore Juniper)



Street Type 8

VERGE:

- *Cupaniopsis anacardioides* (Tuckeroo)

- *Lophostemon confertus* (Brush Box)

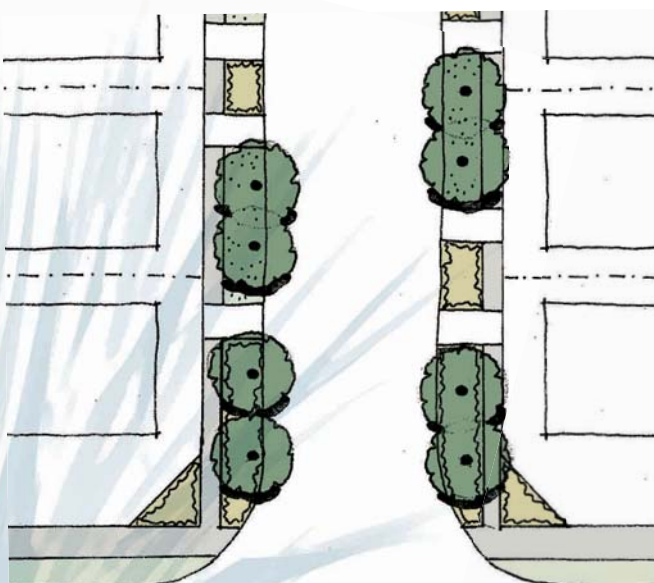
MEDIAN:

Prostrate species eg:

- *Dianella 'Breeze'* (Blue Flax Lilly)

- *Grevillea x gaudichaudi* (Grevillea)

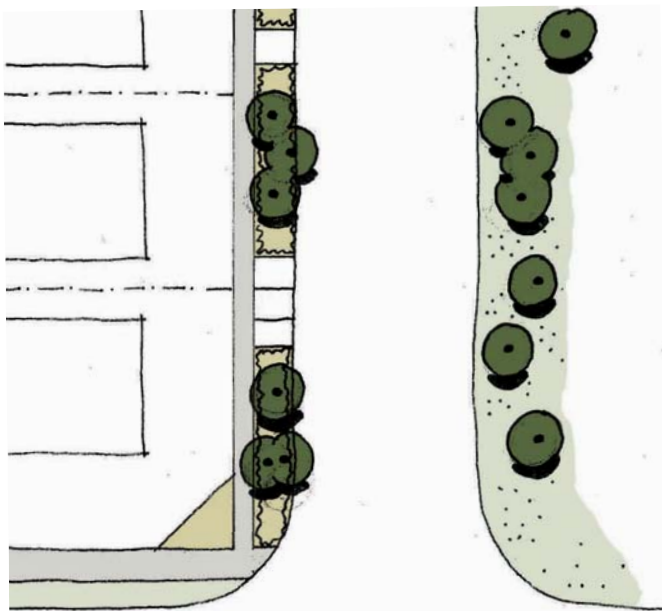
- *Juniperus conferta* (Shore Juniper)



Street Type 9

- *Elaeocarpus eumundii* (Quondong))

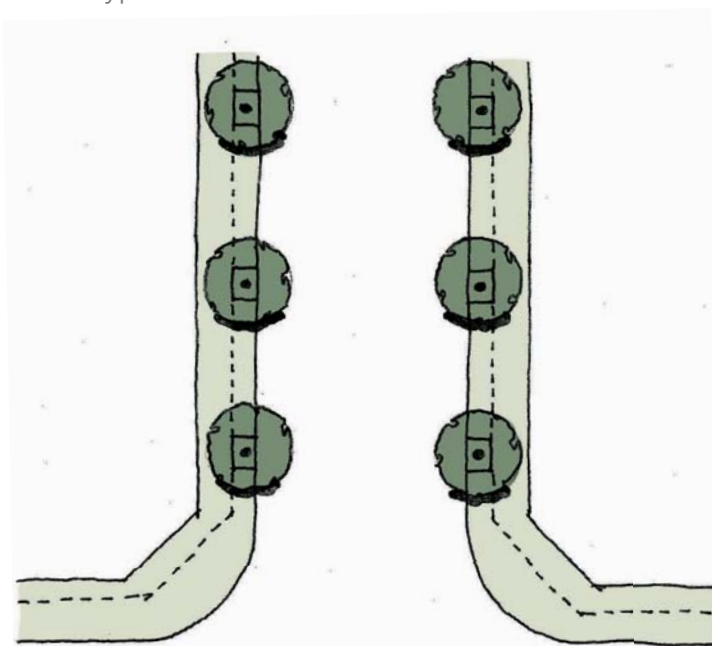
- *Waterhousia floribunda* (Weeping Lillypilly)



Street Type 10

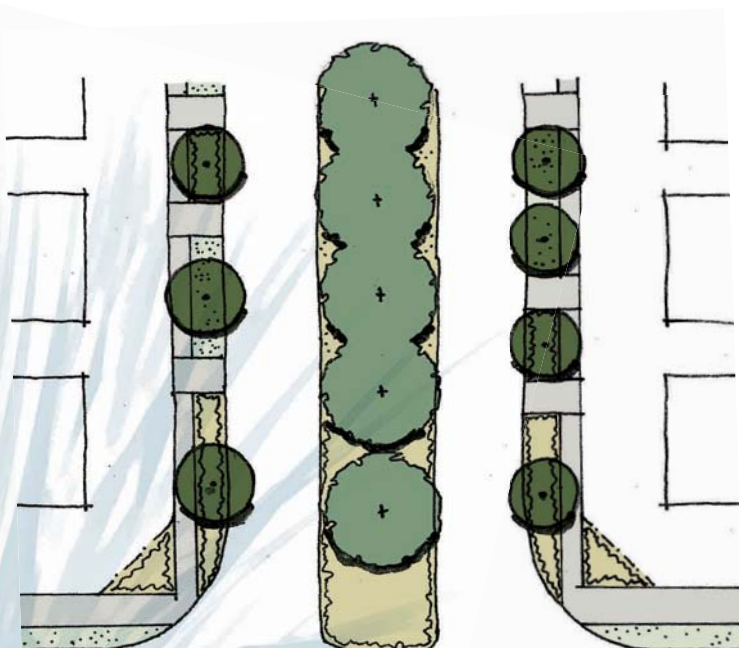
Recommended Planting List eg:

- *Corymbia maculata* (Spotted Gum)
- *Eucalyptus robusta* (Swamp Mahogany)
- *Melaleuca quinquenervia* (Broad Leafed Paperbark)



Street Type 11

- *Cupaniopsis anacardiodes* (Tuckeroo)
- *Lophostemon confertus* (Brush Box)



Street Type 12

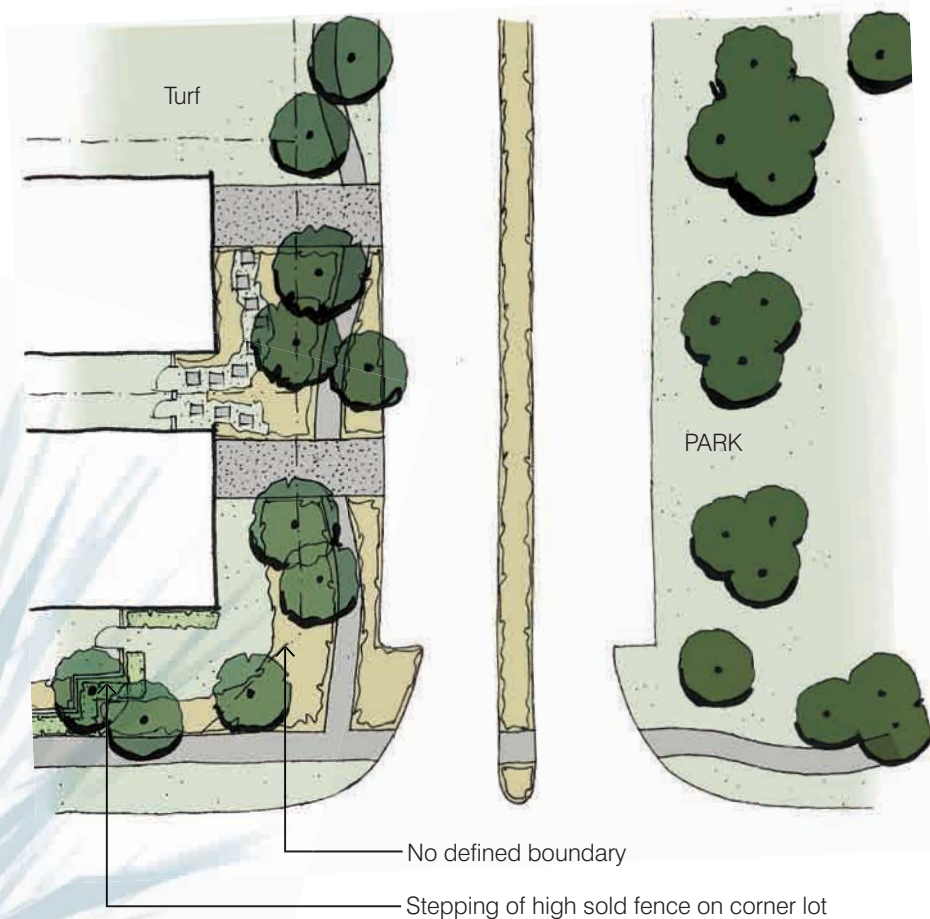
VERGE:

- *Cupaniopsis anacardiodes* (Tuckeroo)
- *Waterhousia floribunda* (Weeping Lillypilly)

MEDIAN:

- *Bauhinia purpurea* (Orchid Tree)
- *Ficus microcarpa* (Hills Weeping Fig)

Typical Verge Treatments



3.3 Basin Edge Treatment

A variety of edge treatments to the waters edge including soft landscaped edges where turf and or sand will provide access for small boat craft such as kayaks, whilst timber decks, paving and retaining walls will be used to formalise promenade areas.

- Promenades may include; balustrades, lighting , formal tree planting, seating, shelter, signage and feature walls.
- Soft edges will include turf, macrophyte plantings and possibly sand.
- Decks will include; outdoor eating/cafes, handrails, pontoons, hardwood timbers and stainless steel components.



Soft landscaped edge treatment exhibiting macrophyte planting



Turfed edge to waterbody provides access for small boat craft



Water body in natural surrounding.



Water body with soft landscape edge treatment and boardwalk in background.



Hard edge treatment incorporating masonry walls and handrails.



Deck with water body.

Recommended Planting List - Basin Edge

MACROPHYTES:

Baumea articulata (Jointed Twig Rush)

Eleocharis acuta (Common Spike Rush)

Gahnia sieberana (Red Fruited Saw Sedge)

Isolepis nodosa (Knobby Clubrush)

Juncus usitatus (Common Rush)

Schoenoplectus validus (River Club Sedge)

TREES:

Casuarina glauca (Swamp Oak)

Eucalyptus robusta (Swamp Mahogany)

Melaleuca quinquenervia (Broad Leafed Paper Bark)



3.4 Pedestrian/Cycleway Network

An extensive pedestrian and cycleway network has been developed for the site that also connects with the broader pedestrian network. Internal open space corridors and roads form part of the network and contribute to the connectivity of the broader Tea Gardens area. Key features of the network include;

- Road crossings
- Threshold treatments
- Wayfinding and signage
- Surveillance
- Provision of 2.4m wide sealed shared path and 1.5m wide pedestrian paths.
- Provision of stopping and rest points along the network.



4.0 Environmental Protection

4.1 Erosion Control

All erosion and sediment control devices are to be installed prior to the start of construction. All stockpile areas are to be fenced with erosion and sediment control fencing.

Temporary protective fencing is to be placed around each tree to be retained prior to construction. The fencing is to be removed at the end of the planting establishment period

4.2 Tree Protection

The existing trees to be retained are to be protected during and after the construction period. Where possible existing trees have been retained to maintain instant landscape impact and habitat link to surrounding vegetated areas. The trees to be removed will be chipped and reused as mulch in all garden beds.

4.3 Salinity

The landscape design has undertaken the following practices to consider the impact of urban salinity;

- The use of salt tolerant native plants with low water requirements throughout the development.
- Use of organic mulch in all garden beds.
- Turf limited to rear yards and the community park to reduce the requirement of irrigation.



5.0 Maintenance

The landscape contractor will be responsible for the maintenance of all the landscaped areas for twelve months after Practical Completion has been awarded. When the twelve month maintenance period is completed the ongoing maintenance will be the responsibility of the developer. Maintenance during the twelve month period will consist of, but not limited to the following;

- Watering
- Weeding
- Mulching
- Fertilising
- Pruning
- Pest & disease attack
- Plant replacement
- Mowing
- Aerating
- Rubbish removal
- Hedging
- Monitoring
- Repairing of vandalism
- Re-staking
- etc.

