



# **STREET TREE MASTER PLAN 2017**

Public Document

Version: 2

Adopted by: Council on 04 July 2017

Ownership: Environment and Planning

## TABLE OF CONTENTS

1.0	Introduction.....	2
2.0	Scope.....	2
3.0	Strategy .....	2
3.1	Design Strategy.....	3
3.2	Theme Plantings.....	4
4.0	Street Tree Species Selection .....	5
5.0	Street Tree Location.....	5
6.0	Street Tree Planting and Maintenance Guidelines.....	6
7.0	Conclusion .....	7
8.0	Street Tree MasterPlan Species Manual.....	35
9.0	Appendices.....	47

## 1.0 Introduction

---

Council has developed the Street Tree Master Plan with the aim of ensuring that appropriate tree species are planted and maintained and also to ensure the leafy ambience for which Mosman is well known is maintained and enhanced.

Street trees generally are subject to the continuing stresses and adverse impacts of urbanisation. Council seeks to identify these impacts and provide effective conservation of existing street trees and most importantly, replanting of appropriate species for our next generation.

The benefits of street tree planting include:

- **Pollution Control** - Macro Environmental. Trees are needed to help reduce the impacts of the greenhouse effect and global warming. They replace carbon dioxide in the atmosphere with oxygen for us to breathe
- **Local Environment** - Micro Environmental - Street trees act as insulation from heat, glare and solar radiation and help provide aesthetically pleasing and usable public space
- **Biodiversity / Habitat** - Street trees can provide food and homes for native fauna. They can also provide important habitat links between isolated natural areas of the urban landscape
- **Property Values** - Property values in streets with successful street tree planting are consistently higher than the values of similar properties which do not have street trees.
- **Development Pressures** - Street verges provide planting opportunities which should not be lost due to increased population pressures and development pressures on private land
- **Identity** - Street trees can provide identifying features for a local area or community
- **Aesthetic** - Urban design and visual benefits. Street trees can be used for screening or framing, leading or directing and highlighting or defining various features within urban areas
- **Traffic Calming** - Trees can provide an informal method of traffic calming and help to define vehicle and pedestrian zones

## 2.0 Scope

---

The Street Tree Master Plan provides type and location of street tree planting for Council administration staff and the public in the Mosman local government area.

It is intended that the Street Tree Master Plan will provide a major contribution to the environment and compensate for the loss of trees on private property due to state legislation and commercial and residential developments.

## 3.0 Strategy

---

The Street Tree Master Plan aims to:

- Provide a variety of species identified as environmentally and historically appropriate to the area on public land
- Create wildlife corridors between areas of bushland and bring small birds back to Mosman

- Use street trees to define individual streets with different characteristics
- Define street hierarchy and pedestrian zones
- Establish tree lined streets to link significant parks and open spaces
- Determine standards for street tree planting and maintenance for use by Council, residents, contractors and private developers
- Increase the number of trees in the district
- Consider the safety of the public utilizing footpaths, nature strips and roadways

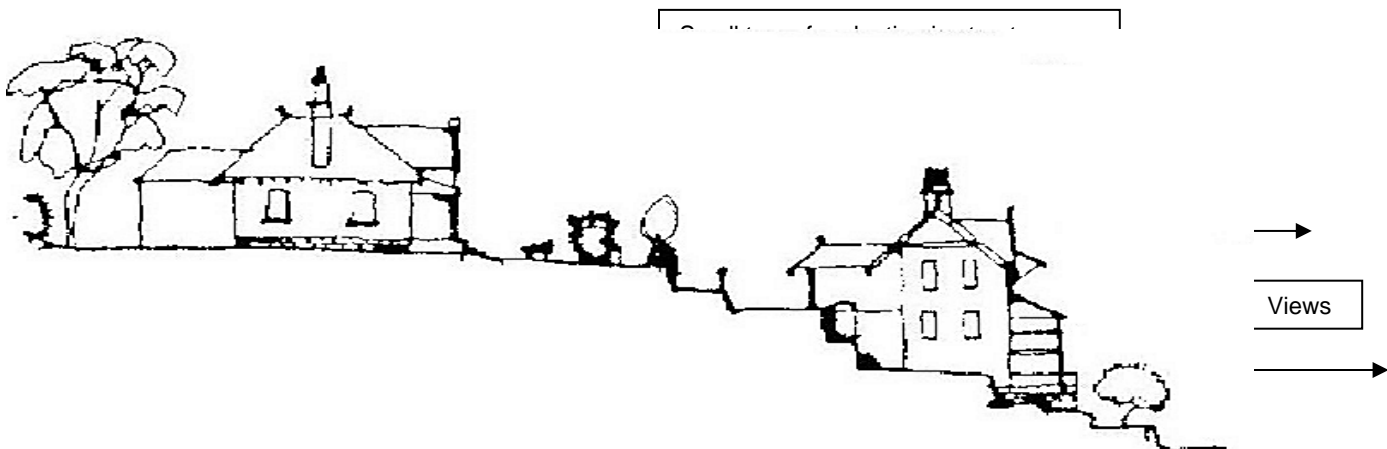
Apart from the environmental considerations, the prime objective of the Street Tree Master Plan is to ensure that recurrent problems associated with the existing street tree species do not recur. These include planting of large canopied trees under power lines necessitating an expensive and repetitive annual pruning, broad canopied trees being planted in streets with significant views, and trees with invasive root systems damaging other assets.

Council will not remove existing specimens from the area and will only remove and replace the above trees when specimens start to decline or are beyond management strategies.

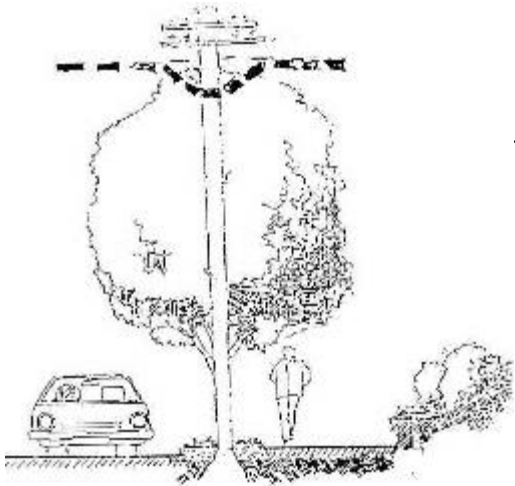
### 3.1 Design Strategy

Tree species selection and usage has been based on the following design strategies:

- Shrubs to small trees have been selected for use as street trees in areas with significant views or vistas
- Small to medium sized trees have been selected for use as street trees in locations under power lines
- Medium to large sized trees have been selected for use as street trees where there are no overhead power lines or in roadway plantings to provide a sense of scale
- Landmark trees selected for use as street trees to arterial roads and ridgelines



***Shrubs to small trees selected for planting in areas with significant views***



Generally no routine pruning required to street trees planted under power lines. May need to tip prune canopy away from power lines in very mature specimens.

***Small to medium sized trees for under power lines***

Landmark tree planting to



***Landmark trees selected as street trees***

**3.2 Theme Plantings**

An integral point of the Street Tree Master Plan design philosophy has been to create theme plantings throughout the Mosman locality, to define the different characteristics of the streetscapes, create a sense of direction, provide visual linkages, along connecting arterial and sub-arterial roads and maintain the village atmosphere of Mosman.

Deviations or changes to the tree species nominated in the Street Tree Master Plan should be avoided. Any changes may adversely affect the design intent of the proposed theme plantings and disrupt the visual linkages between connecting street precincts.

## 4.0 Street Tree Species Selection

---

Considerable time has been spent in reviewing every street within the Mosman area in order to select the most appropriate tree species for the location.

Tree and shrub species have been selected to form a suitable palette of plant material considered to be appropriate for planting in the Mosman streetscapes.

Species selection has been carefully considered and based on the following environmental and design criteria:

- Environmental constraints - *i.e.* soil depth, wind patterns, pollution, rainfall
- Physical constraints - overhead services, underground services, width and location of nature strips
- Streetscape design criteria - streetscape character, scale, road width, architecture
- Historical and heritage aspects - previous history of tree planting
- Maintaining the visual character and village atmosphere of Mosman
- Creation of theme plantings in streets
- Preserving existing views and important vistas
- Maintenance factors - selection of long lived tree species / pruning requirements / root system
- Selection of native trees that encourage and create wildlife corridors
- Proposed tree planting in roadside parking bays as a traffic calming effect

All species have been reviewed and researched for their suitability and use as street trees.

The following factors were considered when determining the final individual species selection for streets within Mosman:

- Growth habit: size - height and width (shrub or tree) and type of root system
- Hardiness - ability to survive with minimal or no maintenance, disease resistance, drought tolerance, longevity, coastal exposure, shallow soil depths
- Pruning requirements - low frequency desirable - generally only directional pruning should be necessary when tree/shrub is young and needs training
- Shrubs and small trees - that can tolerate being severely pruned and consequently regenerate quickly without adverse effects on its health or stability
- Decorative features - flowers - colourful displays of flowering trees planted in avenues (theme planting). Foliage displays, fruiting displays, leaf texture *etc.*
- Landmark Tree - use of large trees planted in appropriate areas to act as directional elements (theme plantings), visual statements and provide a sense of scale

## 5.0 Street Tree Location

---

The position of street trees and shrubs in relation to the proposed planting zone or location is of critical importance to the ongoing performance of the tree/shrub and its impact on the surrounding landscape.

Investigate and consider the following guidelines prior to carrying out tree planting to any streetscape in Mosman.

Location of tree/shrub in relation to:

- Service lines - underground and overhead
- Soil depth - is there rock present
- Sight lines - sufficient setback from driveways, access gates, street corners, and roundabouts
- Vehicle and pedestrian clearances
- Verge width - sufficient space for tree
- Views - maintain existing views and vistas
- Preservation of historical architectural elements/facades of buildings to commercial zones. Do not plant trees in these zones
- Effect of debris on surrounding assets

## 6.0 Street Tree Planting and Maintenance Guidelines

---

To maintain existing avenues of trees Council aims to plant juvenile trees amongst mature trees to maintain visual avenues and have diverse age structure of strands.

The following guidelines have been developed for street tree planting in Mosman:

- Where appropriate, root barrier to be installed to a depth of 300mm to reduce impact of tree roots on paved hard services
- Locate below ground services. Endeavour to plant trees 800 mm from service locations
- Do not plant trees in locations that will impact on street signs and views after maintenance
- Stake trees to encourage growth which will not impact on services, traffic lanes, pedestrian access, buildings, view lines *etc.*
- Endeavour not to plant trees within 800mm of the curb in traffic lanes, 2m from a driveways, 8m from an intersections

To ensure the longevity of an asset that has a limited life span (*e.g.* a single tree), Council has developed a program for management of trees which includes replacement as they become senescent and additional planting in locations which will benefit both residents and visitors. Council ensures regular maintenance is undertaken to prune street trees to encourage growth which will not impact on services, traffic lanes, pedestrian access, buildings and view lines.

As with any project or program of works there are potential costs, risks and benefits associated with the works. The success of a project can be determined by the projected benefits outweighing the costs and possible risks.

The costs or risks associated with street tree planting include:

- **Installation** - Purchase and installation costs, including vandalism
- **Maintenance** - Maintenance costs - pruning / establishment
- **Paved Surfaces** - Potential impacts on paved surfaces
- **Services** - Potential impacts on above and below ground services
- **Traffic** - Potential impact on vehicle and pedestrian traffic
- **Views and View lines** - Potential impacts on lines of sight for residents, drivers and pedestrians

All of the items are able to be managed to significantly reduce the costs and risks associated. For example, correct species selection is a primary factor in street tree management and can have a positive impact on each of the items listed above. Regular and proactive street tree maintenance programs can be implemented to reduce insurance cost and liability claims and also encourage growth so it does not impact on traffic and building clearances. Root barriers can be installed to reduce impacts on paved surfaces and below ground services.

Through acknowledgement of the potential issues an integrated approach to street tree management has been developed with the costs and risks associated with street tree planting greatly reduced while retaining the benefits.

With these items considered in planning, planting and an effective and ongoing maintenance program, street tree planting can be successful in even the most urbanised areas. It is these areas that often benefit the most from tree planting.

## **7.0 Conclusion**

---

By implementing an integrated Street Tree Planting Scheme, Council is endeavouring to plan for the future Cultural Heritage of the locality. Council's commitment to ensuring Mosman's tree canopy is reflected through trees being a specific sub program in Council's strategic management document Mosplan and tree planting being an annual key performance indicator in determining Council's effectiveness in meeting the needs and wants of the community.

Residents can also contribute to the environment by planting suitable trees in their properties to complement and augment Council's street tree plantings.



Asp= Aspect- Direction road runs (North South or East West)

P/L= Powerlines- (O) Odd or (E) Even

Vs= Views- (O) Odd or (E) Even; 1 (Significant), 2 (Medium), 3 (Filtered)

Street	Section	Site/Street Characteristics					Planting opportunities	Species (HxW)
		Asp	P/L	Vs	Existing planting theme			
<b>ALBION LN</b>	All						Commercial planting theme.	<i>Odd: Ulmus parvifolia (12x8)</i> <i>Even: Ulmus parvifolia (12x8)</i>
<b>ALEXANDER AVE</b>	All	EW	Odd		Mixture of native and exotic plants.			<i>Odd: Buckinghamia celsissima (5x2)</i> <i>Even: Barklya syringifolia (8x4)</i>
<b>ALMORA ST (LOWER)</b>	All	EW	Odd		Jacaranda sp within road blisters.	Maintain existing avenues.		<i>Odd: Banksia integrifolia (12x10)</i> <i>Even: Jacaranda mimosifolia (12x10) (existing avenue)</i>
<b>ALMORA ST (UPPER) *</b>	All	EW	Odd	3	No existing theme. No power lines between Muston and Military.	Create gateway between Military and Balmoral. Eucalyptus on odd side due to power lines.		<i>Odd: Corymbia ficifolia 'Summer Red' (5x3)</i> <i>Even: Corymbia eximia 'Nana' (10x7)</i>
<b>AMAROO CR *</b>	All	NS	Both	E3	Native species.	Limited opportunities.		<i>Spot plant Angophora costata (15x7) where possible to complement bushland.</i>
<b>AMIENS AVE</b>	All	EW	Odd		Lophostemon sp lined street. Transition street between Bullecourt and Bapaume.	Retain existing theme.		<i>Odd: Lophostemon confertus (12x8)</i> <i>Even: Lophostemon confertus (12x8)</i>
<b>ARBUTUS ST</b>	All	NS	Odd	E1				<i>Odd: Corymbia ficifolia 'Summer Red' (5x3)</i> <i>Even: Corymbia ficifolia 'Summer Red' (5x3)</i>
<b>ARCHER ST</b>	All							<i>Angophora costata (15x7) in wide areas of verge</i> <i>Jacaranda mimosifolia (12x10) in the narrow areas of verge</i>
<b>AVENUE RD</b>	Military Rd to Rangers Rd	NS	No		Long wide street lined with established Harpullia sp on odd side and maturing E. scoparia on even.	Maintain Harpullia sp and plant even side with same to establish (maintain) prominent avenue.		<i>Odd: Harpullia pendula (8x6)</i> <i>Even: Harpullia pendula (8x6)</i>

Street	Section	Site/Street Characteristics					Species (HxW)
		Asp	P/L	Vs	Existing planting theme	Planting opportunities	
<b>AVENUE RD</b>	Rangers Rd to Mosman Bay	NS		03	Naturally growing vegetation on odd side embankment.	Limited opportunity for formal planting. Encourage native regeneration and planting where possible and remove weed and exotic species. Plant new Cabbage Palm to replace existing in park adjacent reserve.	<i>Odd:</i> <i>Even:</i>
<b>AWABA ST</b>	The Esplanade to Spit Rd	EW	Odd	1	Inconsistent planting. Some old small trees in poor condition.	Important link road to Balmoral Beach. Panoramic views of the harbour and ocean. Cross views from residences. Use of <i>B serrata</i> linking Stanton, Moruben, Awaba and also Raglan will provide continuity without interfering with views.	<i>Odd: Banksia serrata (5x3)</i> <i>Even: Banksia serrata (5x3)</i>
<b>AWABA ST</b>	Spit Rd to Cowles Rd	EW	Even		Odd side predominantly planted with mature <i>Tristaniopsis</i> sp.		<i>Odd: Tristaniopsis laurina (10x6)</i> <i>Even: Backhousia citriodora (12x5)</i>
<b>AWABA ST</b>	Cowles to Congewoi	EW	Even		<i>Lophostemon</i> sp planted opposite park.	Limited planting opportunities.	<i>Odd: Tristaniopsis laurina (10x6)</i> <i>Even: Tristaniopsis laurina (10x6)</i>
<b>AWABA ST</b>	Congewoi to Macpherson	EW	Even	E2	Mixed planting. Some large trees.	Wide nature strip even side although potential for large tree limited by views.	<i>Odd: Tristaniopsis laurina (10x6)</i> <i>Even: Corymbia ficifolia 'Summer Red' (5x3) adjacent to Countess Park</i>
<b>BADHAM AVE</b>	All	NS				Limited planting opportunities.	<i>Odd: Buckinghamia celsissima (5x2)</i> <i>Even: Buckinghamia celsissima (5x2)</i>

Street	Section	Site/Street Characteristics				Species (HxW)	
		Asp	P/L	Vs	Existing planting theme		Planting opportunities
<b>BALLANTYNE ST</b>	All						Odd: Even:
<b>BALMORAL AVE *</b>		EW	Odd	E2		Limited opportunities for planting.	Odd: <i>Callistemon salignus</i> (5x3) Even: <i>Callistemon salignus</i> (5x3)
<b>BAPAUME RD</b>	All	NS	Odd	E1	Mature Platanus sp and some Lophostemon sp on odd side. Some new plantings of Ulmus parvifolia on even side. Row of Cabbage Palms southern end even side.	Maintain existing themes. Wide nature strip and even side.	Odd: <i>Platanus orientalis</i> (20x15) Even: <i>Platanus orientalis</i> (20x15) Plant <i>Platanus</i> sp 14-34. Retain/replant row of cabbage palms or plant cabbage palms all even side.
<b>BARDWELL RD</b>	All	NS	Odd		Most of street recently planted with Crepe Myrtle (odd) and Acer (even). Previous Masterplan specified Acer Buergerianum although it appears that the box elder ( <i>A. negundo</i> ) was planted.	Recently planted (circa 2000).	Odd: <i>Harpullia pendula</i> (8x6) Even: <i>Lophostemon confertus</i> (12x8)
<b>BAY ST *</b>	All	NS	Both	O2	No planting front of 16-26 Bay because of limited pedestrian access. * Retain Jacarandas even side from #66 north and opp. 86-96.	Grass strip along divided road out the front of 85-87 Bay. Native shrub planting to 3 metres tall, refer to Bushland.	Odd: <i>Xanthostemon chrysanthus</i> (6x3) Even: <i>Buckinghamia celsissima</i> (5x2) <i>Jacaranda mimosifolia</i> * (12x10)
<b>BAYVIEW AVE*</b>	All	EW	Even	2	No street trees. Formal front gardens present to streetscape.		Odd: <i>Callistemon salignus</i> (5x3) Even: <i>Callistemon salignus</i> (5x3)
<b>BEACONSFIELD RD</b>	All	NS	Odd	2	Predominately <i>Callistemon</i> sp.		Odd: <i>Callistemon 'Kings Park Special'</i> (5x3) Even: <i>Callistemon 'Kings Park Special'</i> (5x3)
<b>BEAUTY POINT RD</b>	All	EW	Odd	O2	Mixed native and exotic with the predominate species being <i>Melaleuca</i> sp and <i>Jacaranda</i> sp.	Limited planting opportunities. Height restricted by power lines and views.	Odd: <i>Banksia serrata</i> (5x3) Even: <i>Banksia serrata</i> (5x3)

Street	Section	Site/Street Characteristics					Species (HxW)
		Asp	P/L	Vs	Existing planting theme	Planting opportunities	
<b>BELMONT RD</b>	All	EW	Even		Predominantly Lophostemon sp.		Odd: <i>Banksia integrifolia</i> (12x8) Even: <i>Tristaniopsis laurina</i> (10x6)
<b>BICKELL RD</b>	All	EW	Odd		Mixed planting with native species dominating.	Limited planting opportunities. Some space front and opp. #10.	Odd: <i>Tristaniopsis laurina</i> (10x6) Even: <i>Tristaniopsis laurina</i> (10x6)
<b>BOND ST</b>	All	NS	Odd		Large mature trees, predominantly plane trees and some brush box on odd side.	Limited planting space even side. Retain large trees odd side despite power lines.	Odd: <i>Lophostemon confertus</i> (12x8) Even: <i>Syzygium luehmannii</i> (6x5)
<b>BOTANIC RD *</b>	All	EW	Even	E2	Buildings dominate streetscape. Mixed planting in road blisters. Background planting native (bushland).	Very limited opportunity for large trees. Canopy to be maintained in park.	Odd: <i>Xanthostemon chrysanthus</i> (6x3) Even: <i>Acmena smithii 'Minor'</i> (6x4)
<b>BOYLE ST</b>	All	EW	Odd	O1	No street trees.	Very narrow nature strips, spot plant where possible.	Odd: <i>Acmena smithii 'Minor'</i> (6x4) Even:
<b>BRADLEY'S HEAD RD</b>	All	NS	Odd		An historic and impressive planting of Brush box lining both sides of the street.	Retain and enhance existing planting.	Odd: <i>Lophostemon confertus</i> (12x8) Even: <i>Lophostemon confertus</i> (12x8)
<b>BRADY ST</b>	All	NS	Odd		Planted both sides with <i>Platanus digitata</i> .	Maintain existing planting.	Odd: <i>Platanus digitata</i> (20x15) Even: <i>Platanus digitata</i> (20x15)
<b>BRAY ST</b>	Macpherson St to Congewoi Rd	EW	Odd		Mid-size native species.	Even side planting to high side.	Odd: <i>Callistemon 'Kings Park Special'</i> (5x3) Even: <i>Callistemon salignus</i> (5x3)
<b>BRIERLEY ST *</b>	Spofforth St and Oswald Rd	EW	Odd		Mid to large sized native species.		Odd: <i>Callistemon 'Kings Park Special'</i> (5x3) Even: <i>Buckinghamia celsissima</i> (5x2)
<b>BUENA VISTA AVE*</b>	Thompson St	NS	Odd		Bushland reserve at end of the road.		Odd: <i>Buckinghamia celsissima</i> (5x2) Even: <i>Eucalyptus sideroxylon</i> (25x5)
<b>BULLECOURT AVE (North)*</b>	Central Ave	NS	Even	O1	Streetscape mixed native and exotic species. Odd	Larger Eucalyptus sp can be planted	Odd: <i>Barklya syringifolia</i> (18x6) Even: <i>Angophora costata</i> (15x7)

Street	Section	Site/Street Characteristics					Species (HxW)
		Asp	P/L	Vs	Existing planting theme	Planting opportunities	
					side of street well vegetated at Central Ave end of the street.	between Quakers unmade road and Central Ave on the even side, species should be decided in conjunction with Bushland Officers.	
<b>BULLECOURT AVE(South)*</b>	Killarney St	NS	Both	O2	Angophora costata to high and low sections of divided road.		<i>Odd: Callistemon salignus (5x3) in selected locations</i> <i>Even: Banksia integrifolia (12x10)</i>
<b>BURRAN AVE</b>	Stanton Rd to Hopetoun Ave	NS	Odd	O1	Exotic species of trees dominated by Jacaranda sp.		<i>Odd:</i> <i>Even: Banksia integrifolia (12x10)</i>
<b>BURRAWONG AVE*</b>	Clifton St	NS	Odd	3	A couple of mature Eucalyptus sp and some Lagerstroemia sp.		<i>Odd: Corymbia ficifolia 'Summer Red' (5x3)</i> <i>Even: Corymbia eximia 'Nana' (10x7)</i>
<b>BURTON ST</b>	Congewoi Rd to Julian St	EW	Odd	E2	Couple of mature Eucalyptus sp		<i>Odd: Banksia serrata (5x3) under wires</i> <i>Even: Melaleuca quinquenervia (20x6)</i>
<b>CABBAN ST</b>	Magic Grove	NS	Even		Jacaranda sp and other mixed exotic sp. Even side of street has a wide nature strip.	Opportunity for extra planting in median strip at cul-de-sac end.	<i>Odd: Syzygium luehmannii (6x5)</i> <i>Even: Buckinghamia celsissima (5x2)</i>
<b>CABBAN ST</b>	Magic Grove to Elfrida St	NS	Odd		Jacaranda sp and other mixed exotic sp. Even side of street has a wide nature strip.	Look at median strip between Elfrida and Cabban for further planting.	<i>Odd: Tristaniopsis laurina (10x6)</i> <i>Even: Melaleuca quinquenervia (20x6) (ABC wires installed)</i>
<b>CABRAMATTA RD</b>	Spofforth St to Cowles Rd	EW	Even		Lophostemon sp is the dominant street tree.		<i>Odd: Lophostemon confertus (12x8)</i> <i>Even: Jacaranda mimosifolia (12x10)</i>
<b>CALLIOPE ST</b>	Spofforth St to Royalist Rd	EW	Even		Mixture of small to medium sized native and exotic species.		<i>Odd: Tristaniopsis laurina (10x6)</i> <i>Even: Tristaniopsis laurina (10x6)</i>

Street	Section	Site/Street Characteristics					Species (HxW)
		Asp	P/L	Vs	Existing planting theme	Planting opportunities	
<b>CALYPSO AVE</b>	Clan Alpine St to Magic Grove	EW	Even		Jacaranda sp and Lophostemon sp are the dominate street trees.	Opportunity for garden design to the median strip.	<i>Odd: Lophostemon confertus (12x8)</i> <i>Even: Jacaranda mimosifolia (12x10)</i>
<b>CANROBERT ST</b>	Avenue Rd to Raglan St	NS	No		Street trees a mixture of medium sized native and exotic species.		<i>Odd: Delonix regia (15x10)</i> <i>Even: Delonix regia (15x10)</i>
<b>CARDINAL ST</b>	Military Rd to Earl St	NS	No		No theme.		<i>Odd: Backhousia citriodora (12x5)</i> <i>Even: Backhousia citriodora (12x5)</i>
<b>CARDINAL ST</b>	School to Military Rd	NS	Odd		No theme.		<i>Odd: Angophora costata (15x9) or Angophora floribunda (12x8)</i> <i>Even: Angophora costata (15x9) or Angophora floribunda (12x8)</i>
<b>CARDINAL ST</b>	School to Prince St	NS	Odd		Large Platanus sp. Some in road blisters with under planting of ground covers.	No additional plane trees due to water mains.	<i>Odd: Angophora costata (15x9) or Angophora floribunda (12x8)</i> <i>Even: Angophora costata (15x9) or Angophora floribunda (12x8)</i>
<b>CARRINGTON AVE</b>	Bay St to Harston Ave	EW	Even	E2	Jacaranda sp the dominant street tree.		<i>Odd: Eucalyptus sideroxylon (25x5)</i> <i>Even: Banksia integrifolia (12x10)</i>
<b>CARRINGTON AVE*</b>	Harston Avenue	EW	Even	E2	Jacaranda sp the dominant street tree.		<i>Odd: Jacaranda mimosifolia (12x10)</i> <i>Even: Callistemon 'Kings Park Special' (5x3)</i>
<b>CENTRAL AVE*</b>	Pindari Ave to Bay St	EW	Odd	O2		Limited planting opportunities, spot plant where possible.	<i>Odd: Corymbia ficifolia 'Summer Red' (5x3)</i> <i>Even: Corymbia ficifolia 'Summer Red' (5x3)</i>
<b>CENTRAL AVE*</b>	Spit Rd to Pindari Ave	EW	Odd	O2	Mix of native and exotic species. Even side has strong masonry elements to the front boundaries.		<i>Odd: Corymbia ficifolia 'Summer Red' (5x3)</i> <i>Even: Corymbia eximia 'Nana' (10x7)</i>

Street	Section	Site/Street Characteristics					Species (HxW)
		Asp	P/L	Vs	Existing planting theme	Planting opportunities	
<b>CLANALPINE ST</b>	Kallaroo St to Raglan St	EW	Even		Presentation to streetscape is formal front gardens.		<i>Odd: Acmena smithii 'Minor' (6x4)</i> <i>Even: Calodendrum capense (15x10)</i>
<b>CLANALPINE ST</b>	Magic Grove to Kallaroo St	NS	Even		Minimal street trees with presentation to streetscape being formal gardens.		<i>Odd:</i> <i>Even: Acmena smithii 'minor' (6x5)</i>
<b>CLANALPINE ST</b>	Queen St to Magic Grove	NS	Even		Calodendrum sp and Lophostemon sp are the dominant street trees.		<i>Odd: Calodendrum capense (15x10)</i> <i>Even: Calodendrum capense (15x10)</i>
<b>CLIFFORD ST</b>	Spit Rd to Moruben St	EW	No		Strong native theme. Street dominated by three storey walk ups and flat buildings. Wide road with wide nature strips.		<i>Odd: Tristaniopsis laurina (10x6)</i> <i>Even: Tristaniopsis laurina (10x6)</i>
<b>CLIFTON ST</b>	Burrawong Ave	EW	No	2	Mixture of native and exotic species.		<i>Odd:</i> <i>Even: Callistemon 'Kings Park Special' (5x3)</i>
<b>COBBITTEE ST</b>	Middle Head Rd	NS	Even	3	Various native species.	Planting of Angophora sp will need to take into account filtered views from the odd side of the street.	<i>Odd: Angophora costata (15x7)</i> <i>Even: Acmena smithii 'Minor' (6x4)</i>
<b>CONGEWOI RD</b>	Ourimbah Rd to Wyong Rd	NS	Odd		Mid to large sized native and exotic varieties.		<i>Odd: Buckinghamia celsissima (5x2)</i> <i>Even: Callistemon salignus (5x3)</i>
<b>CONGEWOI RD</b>	Wyong Rd to Burton St	NS	Odd	O3	Small to medium native species.	Wires crisscross.	<i>Odd: Callistemon salignus (5x3) – open sky</i> <i>Even: Callistemon 'Kings Park Special' (5x3) – under wires</i>
<b>CORONATION AVE*</b>	Wolseley Rd to The Esplanade	NS	Odd	2	Strong native theme especially in lower end of road.	Limited planting opportunities. May be further opportunity to plant in street gardens.	<i>Angophora costata (15x7) where space permits</i>
<b>COUNTESS ST</b>	Ourimbah Rd to Earl St	NS	Even	O2	Eucalyptus scoparia, over mature.		<i>Odd: Lophostemon confertus (12x8)</i> <i>Even: Barklya syringifolia (18x6) under wires</i>



Street	Section	Site/Street Characteristics					Species (HxW)
		Asp	P/L	Vs	Existing planting theme	Planting opportunities	
<b>COUNTESS ST</b>	Wyong Rd to Ourimbah Rd	NS	Odd	O2	Eucalyptus scoparia, over mature.		<i>Odd: Eucalyptus sideroxylon (25x10)</i> <i>Even: Banksia serrata (5x3)</i>
<b>COWLES RD</b>	Killarney St to Military Rd	NS	Even		Not enough room for large trees.		<i>Odd: Callistemon salignus (5x3)</i> <i>Even: Acmena smithii 'Minor' (6x4)</i>
<b>COWLES RD</b>	Military Rd to Avenue Rd	NS	Even		Eucalyptus scoparia, over mature.		<i>Odd: Eucalyptus botryoides (20x12)</i> <i>Even: Acmena smithii 'Minor' (6x4)</i>
<b>CROSS ST</b>	Bradley's Head Rd	EW	Even		Lophostemon sp is the dominant street tree.		<i>Odd: Lophostemon confertus(12x8)</i> <i>Even: Lophostemon confertus(12x8)</i>
<b>CRUX ST</b>	Shadforth St to Somerset St	EW	No		Melaleuca sp is the dominant street tree.		<i>Odd: Melaleuca linarifolia (8x4)</i> <i>Even: Melaleuca linarifolia (8x4)</i>
<b>CYPRIAN ST</b>	Parriwi Rd to McLean Cr	EW	Odd	1	Established Eucalyptus sp	Main planting opportunities to odd side of the street up towards the Parriwi Rd end.	<i>Odd: Angophora costata (15x7)</i> <i>Even: Angophora costata (15x7)</i>
<b>DALTON RD</b>	Cowles Rd	EW	Even		Mid-size exotics dominate the streetscape. Powerlines crisscross the road constantly	Footpath against road on odd side.	<i>Odd: Callistemon salignus (5x3)</i> <i>Even: Jacaranda mimosifolia (12x10)</i>
<b>DAVID ST *</b>	Burrawong Ave to Morella Rd	EW	Odd	2	Some large to medium natives and Acer sp. Formal cottage type gardens presented to streetscape.	Width of footpath not conducive to large trees.	<i>Odd: Delonix regia (15x10)</i> <i>Even: Melaleuca linarifolia (8x4)</i>
<b>DAYRELL AVE</b>	Cobbittee St and Dayrell Ave	EW	Odd		Native back drop.		<i>Odd: Acmena smithii 'Minor' (6x4)</i> <i>Even: Acmena smithii 'Minor' (6x4)</i>
<b>DUGALD RD</b>	Gordon St to Mulbring St	EW	Even		Mixture of native and exotic species with planting in the median strip also.	Planting to match existing themes where appropriate	<i>Angophora costata (5x3)</i> <i>Camellia japonica (5x4)</i>



Street	Section	Site/Street Characteristics					Species (HxW)
		Asp	P/L	Vs	Existing planting theme	Planting opportunities	
<b>EARL ST</b>	Countess St to Bond St	EW	Odd		Large Eucalyptus sp and Lophostemon sp in narrow nature strip.	Road blisters to be planted out with Elaeocarpus sp and under planted with native ground cover or Trachelospermum jasminoides.	<i>Odd: Melaleuca linarifolia (8x4)</i> <i>Even: Barklya syringifolia (18x6)</i>
<b>EDWARDS BAY RD</b>	The Grove to Wyargine St	EW	Odd	E1	Predominately natives with Jacaranda sp at Awaba Rd end.		<i>Odd: Acmena smithii 'minor' (5x3)</i> <i>Even: Delonix regia (15x10)</i>
<b>EFFINGHAM ST</b>	Bradley's Head Rd to Middle Head Rd	EW/NS	Odd		Buckinghamia sp and Elaeocarpus sp already dominate.		<i>Odd: Buckinghamia celsissima (5x2)</i> <i>Even: Cupaniopsis anacardioides (8x6)</i>
<b>ELFRIDA ST</b>	Prince Albert St	EW	Even		Large Eucalyptus sp and Lophostemon sp mixed with a few Jacaranda sp.	Width of nature strip better suited to Jacaranda sp.	<i>Odd: Jacaranda mimosifolia (12x10)</i> <i>Even: Jacaranda mimosifolia (12x10)</i>
<b>ELLAMATTA AVE</b>	Bradley's head Rd	EW	Even		Mixed garden types presenting to streetscape with no street trees.	Limited opportunities to plant.	<i>Odd: Acmena smithii 'Minor' (6x4)</i> <i>Even: Acmena smithii 'Minor' (6x4)</i>
<b>ERITH ST</b>	Macpherson St to Hale Rd	EW			Lophostemon sp to the odd side of the street with mixed exotic species to the even side.	Power lines part underground from Military Rd.	<i>Odd: Lophostemon confertus (12x8)</i> <i>Even: Jacaranda mimosifolia (12x10)</i>
<b>ESTHER RD *</b>	Esther Lane to The Esplanade	EW	Odd	1	Strong theme of Jacaranda sp.		<i>Odd: Jacaranda mimosifolia (12x10)</i> <i>Even: Jacaranda mimosifolia (12x10)</i>
<b>EURYALUS ST</b>	Pindari Ave to Central Ave	NS	Even	O2		Corymbia to reduce view issues.	<i>Odd: Corymbia ficifolia 'Summer Red' (5x3)</i> <i>Even: Corymbia ficifolia 'Summer Red' (5x3)</i>
<b>EVERVIEW AVE</b>	Cowles Rd to Countess St	EW	Odd		Native Teak doing well and dominating the streetscape.		<i>Odd:</i> <i>Even: Flindersia australis (25x4)</i>

Street	Section	Site/Street Characteristics					Species (HxW)
		Asp	P/L	Vs	Existing planting theme	Planting opportunities	
<b>FAIRFAX RD</b>	Kiora Ave to Upper Fairfax Rd	EW	Odd	E1	Visual connection to mature endemic species.	Limited planting opportunities towards the cul-de-sac end of the street. This end is currently well vegetated.	<i>Odd: Acmena smithii 'Minor' (6x4)</i> <i>Even: Acmena smithii 'Minor' (6x4)</i>
<b>FIG TREE WALK</b>	Pearl Bay Ave to Reserve	NS	No		Visual connection to mature endemic species.	Opportunity for Angophora costata or bloodwood.	<i>Angophora costata (15x7) where removals allow</i>
<b>GLADSTONE AVE</b>	Avenue Rd to Belmont Rd	NS	Odd		Lophostemon sp the dominant street tree.		<i>Odd: Tristaniopsis laurina (10x6)</i> <i>Even: Lophostemon confertus (12x8)</i>
<b>GLOVER ST</b>	Military Rd to Cowles Rd	EW	Odd		Lophostemon sp the dominant street tree.		<i>Odd: Syzygium luehmannii (6x5)</i> <i>Even: Lophostemon confertus (12x8)</i>
<b>GORDON ST</b>	Middle Head Rd to Bayview Ave	NS	Even		Sporadic plantings of native sp and Jacaranda sp.		<i>Odd: Jacaranda mimosifolia (12x10)</i> <i>Even: Jacaranda mimosifolia (12x10)</i>
<b>GOULDSBURY ST</b>	Military Rd	EW	No		Lophostemon sp, Camphor Laurel and a couple of large Eucalyptus sp planted in a narrow nature strip. Shade trees for parking should continue.		<i>Odd: Lophostemon confertus (12x8)</i> <i>Even: Corymbia eximia 'Nana' (10x7)</i>
<b>GOVERNMENT RD</b>	Pindari Ave	NS	Both	2		Planting possible both sides from No. 8 north to cul-de-sac.	<i>Odd: Corymbia ficifolia 'Summer Red' (5x3)</i> <i>Even: Corymbia ficifolia 'Summer Red' (5x3)</i>
<b>GRECIA LN</b>	James St to Rosherville Reserve	EW	Even	1	Strong native theme.	Strong visual connection to water and bushland.	<i>Odd: Angophora costata</i> <i>Even: Melaleuca quinquenervia (20x6)</i>
<b>GURRIGAL ST</b>	Military Rd to Vista St	NS	Even				<i>Odd:</i> <i>Even: Flindersia australis (25x4)</i>

Street	Section	Site/Street Characteristics					Species (HxW)
		Asp	P/L	Vs	Existing planting theme	Planting opportunities	
<b>HALE RD</b>	Ourimbah Rd to Erith St	NS	Even		No obvious street tree theme. Presentation to streetscape from private property is cottage garden.		<i>Odd: Tristaniopsis laurina (10x6)</i> <i>Even: Tristaniopsis laurina (10x6)</i>
<b>HAMPDEN ST</b>	Stanton Rd	NS	No	O3	No theme present in street tree planting.	Median strip garden needs to be re-vamped.	<i>Odd: Backhousia citriodora (12x5)</i> <i>Even: Backhousia citriodora (12x5)</i>
<b>HARBOUR ST</b>	Gurrigal St to Military Rd	NS	Even		Mixture of mid-size native and exotic species.		<i>Odd: Tristaniopsis laurina (10x6)</i> <i>Even: Tristaniopsis laurina (10x6)</i>
<b>HARSTON AVE*</b>	Carrington Ave to Wyong Rd	NS	Odd				<i>Odd: Angophora costata (15x7)</i> <i>Even: Angophora costata (15x7)</i>
<b>HEYDON ST</b>	Ourimbah Rd	NS	Even				<i>Odd: Cupaniopsis anacardioides (8x6)</i> <i>Even: Syzygium luehmannii (6x5)</i>
<b>HOLT AVE*</b>	Cowles Rd too Spofforth St	EW	Odd			Platanus sp in this street are heritage listed.	<i>Odd: Platanus orientalis (20x15)</i> <i>Even: Platanus orientalis (20x15)</i>
<b>HOPETOUN AVE</b>	Warringah Rd too Burran Ave	EW	Odd	O1	Mixture of exotics dominated by Jacaranda sp.		<i>Odd:</i> <i>Even: Banksia integrifolia (12x10)</i>
<b>HUNTER ST</b>	The Esplanade	EW	Even	O1	Council nature strips generally planted out as gardens. Acmena changed to Callistemon as slower growing hence better to manage through permits.	Nature strip bordering Hunter Park is empty. Opportunity to plant out this area, but would need to take into consideration views across the park to the water. Planting opportunities limited, spot plant where necessary.	<i>Odd: Callistemon 'Kings Park Special' (5x3)</i> <i>Even: Callistemon 'Kings Park Special' (5x3)</i>
<b>IDA AVE</b>	Spit Rd	EW	Even	E1	Jacaranda sp dominate in a mismatch of native and		<i>Odd: Jacaranda mimosifolia (12x10)</i> <i>Even: Jacaranda mimosifolia (12x10)</i>

Street	Section	Site/Street Characteristics				Planting opportunities	Species (HxW)
		Asp	P/L	Vs	Existing planting theme		
					exotic sp. Jacaranda theme to be continued.		
<b>ILLAWARRA ST</b>	Raglan St	EW	No				Odd: <i>Callistemon 'Kings Park Special'</i> (5x3) Even: <i>Callistemon 'Kings Park Special'</i> (5x3)
<b>ILLAWARRA ST</b>	Sirius Cove Rd	EW	Odd				Odd: <i>Angophora costata</i> (15x7) Even: <i>Callistemon 'Kings Park Special'</i> (5x3)
<b>ILUKA RD*</b>	Burrawong Ave to Morella Rd	EW	Even	O1	Large Eucalyptus sp and smaller mixed native and exotic species.		Odd: <i>Callistemon 'Kings Park Special'</i> (5x3) Even: <i>Corymbia eximia 'Nana'</i> (10x7)
<b>INKERMAN ST*</b>	Wyong Rd	NS	Even		Presentation to streetscape is of formal private gardens with some natives mixed in especially towards the end of the street.	Low amount of soil.	Odd: <i>Corymbia ficifolia 'Summer Red'</i> (5x3) Even: <i>Callistemon 'Kings Park Special'</i> (5x3)
<b>JAMES ST</b>	Parriwi Rd	EW	Even				Odd: <i>Angophora costata</i> (15x7) Even: <i>Callistemon 'Kings Park Special'</i> (5x3)
<b>JULIAN ST</b>	Wyong Rd to Burton St	NS	Even	2	Strong native theme with some exotic species planted in narrow nature strips.	Illegal works 2014/2015 – view to consider.	Odd: <i>Angophora hispida</i> (7x3) Even: <i>Angophora hispida</i> (7x3)
<b>KAHIBAH RD</b>	Middle Head Rd to Wolseley Rd	NS	Odd	3	Presentation to streetscape is of formal private gardens with some <i>Lagerstroemia</i> sp.	View to consider. <i>Barklya</i> can be pruned to height and will frame street.	Odd: <i>Barklya syringifolia</i> (18x6) Even: <i>Barklya syringifolia</i> (18x6)
<b>KAHIBAH RD</b>	Windward Ave to Coronation Ave	NS	Odd	3			Odd: <i>Buckinghamia celsissima</i> (5x2) Even:
<b>KALLAROO ST</b>	Clanlaine St to Sirius Cove Rd	EW	Odd		Existing Jacarandas.		Odd: <i>Banksia integrifolia</i> (12x10) Even: <i>Banksia integrifolia</i> (12x10)
<b>KARDINIA RD*</b>	Burrawong Ave to Morella Rd	EW	Even	O3	<i>Gordonia axillaris</i> (5x3.)		Odd: <i>Callistemon salignus</i> (5x3) Even: <i>Gordonia axillaris</i> (5x3)

Street	Section	Site/Street Characteristics					Species (HxW)
		Asp	P/L	Vs	Existing planting theme	Planting opportunities	
<b>KESTON AVE</b>	Gladstone Ave to Archer St	EW	Odd		Dominated by large to medium sized canopy trees in narrow nature strip. Strong presence of Jacaranda sp.		Odd: <i>Jacaranda mimosifolia</i> (12x10) Even: <i>Jacaranda mimosifolia</i> (12x10)
<b>KILLARNEY ST (Lower level)</b>	Cowles Rd	EW	Even	E3	Lophostemon sp the dominant street tree.		Odd: <i>Banksia serrata</i> (5x3) Even: <i>Lophostemon confertus</i> (12x8)
<b>KILLARNEY ST (Upper level)</b>	Spit Rd	EW	Even		Lophostemon sp and Eucalyptus sp the dominant street trees.	Narrow nature strips not conducive to planting of large trees.	Odd: <i>Buckinghamia celsissima</i> (5x2) Even: <i>Buckinghamia celsissima</i> (5x2)
<b>KING MAX ST</b>	Middle Head Rd to Bradley's Head Rd	NS	No	3	Semi mature Araucaria sp both sides of the street.		Odd: <i>Araucaria heterophylla</i> (20x8) Even: <i>Araucaria heterophylla</i> (20x8)
<b>KIORA AVE</b>	Fairfax Rd	NS	Odd	E2	Native species dominate, but with some exotics mixed in.		Odd: <i>Acmena smithii 'minor'</i> (6x5) Even: <i>Banksia serrata</i> (5x3)
<b>KIRKOSWALD AVE</b>	Fairfax Rd to Tivoli St	EW	Even	3	Mixed planting of native and exotic species.		Odd: <i>Fraxinus griffithii</i> (5x3) Even: <i>Acmena smithii 'Minor'</i> (6x4)
<b>KIRKOSWALD AVE</b>	Tivoli St to Hopetoun Ave	NS	Even	E2	Mixed planting of native and exotic species.	Odd side of nature strip narrow and all concrete.	Odd: Even: <i>Fraxinus griffithii</i> (5x3)
<b>LANG ST</b>	Military Rd to Ourimbah St	NS	Even		Over mature Eucalyptus scoparia, botryoides, saligna.	Plant out centre median strip with Delonix or Xanthostemon.	Odd: <i>Eucalyptus botryoides</i> (12x6) Even: <i>Buckinghamia celsissima</i> (5x2)
<b>LAVONI ST</b>	Awaba St to Mandolong Rd	NS	Odd	E2	Mature Callistemon sp planting with streetscape dominated by formal private gardens and hedging.		Odd: <i>Callistemon salignus</i> (5x3) Even: <i>Buckinghamia celsissima</i> (5x2)
<b>LENNOX ST</b>	Prince Albert St	EW	Even		Small to medium sized native trees plus one mature Livistona sp and four Date Palms in a row.		Odd: <i>Livistona australis</i> (20) Even: <i>Harpullia pendula</i> (8x6)

Street	Section	Site/Street Characteristics					Species (HxW)
		Asp	P/L	Vs	Existing planting theme	Planting opportunities	
<b>LITTLE ST</b>	Mandolong Rd too Lower Punch St	NS	Even			Limited planting opportunities.	<i>Odd:</i> <i>Even: Acmena smithii 'Minor' (6x4)</i>
<b>LOWER ALMORA ST</b>	The Esplanade to Ryan Avenue	EW	Odd	2	Strong planting of Jacaranda sp.	Informal road blisters containing existing planting to be formally edged and raised to improve growing conditions whenever re-planting occurs. Edging material to be sawn sandstone.	<i>Odd: Jacaranda mimosifolia (12x10)</i> <i>Even: Jacaranda mimosifolia (12x10)</i>
<b>LOWER PUNCH ST</b>	Little St	EW	Even			No planting opportunity to even side of road.	<i>Odd: Fraxinus griffithii (5x3)</i> <i>Even:</i>
<b>MACKIE LN</b>	Lang St	EW	Even				<i>Odd:</i> <i>Even: Acmena smithii 'Minor' (6x4)</i>
<b>MACPHERSON ST</b>	Military Rd to Ourimbah Rd	NS	Even			Municipal boundary with North Sydney down the middle of the street, even side of road is North Sydney.	<i>Odd: Callistemon 'Kings Park Special' (5x3)</i> <i>Even:</i>
<b>MACPHERSON ST</b>	Ourimbah Rd to Wyong Rd	NS	Odd			Municipal boundary with North Sydney down the middle of the street, even side of road is North Sydney.	<i>Odd: Callistemon 'Kings Park Special' (5x3)</i> <i>Even:</i>
<b>MAGIC GR</b>	Clanalpine St to Cabban St	EW	Odd		Small to medium sized native plants.	Median strip corner of Magic Grove and Sirius Cove Rd to has a Ficus planted in it.	<i>Odd: Banksia integrifolia (12x10)</i> <i>Even: Banksia integrifolia (12x10)</i>

Street	Section	Site/Street Characteristics					Species (HxW)
		Asp	P/L	Vs	Existing planting theme	Planting opportunities	
<b>MAJOR ST*</b>	Whiting Beach Rd to Simpson St	NS	Odd		Lophostemon sp dominate street tree. Canopy should be maintained in area.		Odd: <i>Syzygium luehmannii</i> (6x5) Even: <i>Lophostemon confertus</i> (12x8)
<b>MANDOLONG RD</b>	Military Rd to Moruben Rd	EW	Both	3	No street trees. Streetscape dominated by built structures. Masonry elements dominate.	Limited opportunities but important for streetscape that planting occur wherever possible.	Odd: <i>Acmena smithii 'minor'</i> (5x2) Even: <i>Acmena smithii 'minor'</i> (5x2)
<b>MARSALA RD</b>	Beauty Point Rd	EW	Even	O1			Odd: Even: <i>Angophora costata</i> (15x7)
<b>MCLEAN CR</b>	Cyprian St	NS	Odd	O2	Melaleuca sp dominant under power line. <i>Tristaniopsis</i> sp will help link to the park.		Odd: Even: <i>Tristaniopsis laurina</i> (10x6)
<b>MCLEOD ST</b>	Musgrave St to Trumfield Lane	EW	No	1			Odd: <i>Washingtonia robusta</i> (20) Even: <i>Callistemon 'Kings Park Special'</i> (5x3)
<b>MCLEOD ST</b>	Raglan St	EW	No	2			Odd: <i>Callistemon 'Kings Park Special'</i> (5x3) Even: <i>Callistemon 'Kings Park Special'</i> (5x3)
<b>MCLEOD ST</b>	Raglan St to Musgrave St	EW	No	2			Odd: <i>Araucaria heterophylla</i> (20x8) Even: <i>Washingtonia robusta</i> (20)
<b>MCLEOD ST</b>	Trumfield Lane	EW	No	2			Odd: <i>Callistemon 'Kings Park Special'</i> (5x3) Even: <i>Callistemon 'Kings Park Special'</i> (5x3)
<b>MEDUSA ST</b>	Spit Rd to Pindari Ave	EW	Odd	E2	<i>Callistemon</i> sp in road blisters. Mixture of native and exotic species in streetscape.		Odd: <i>Buckinghamia celsissima</i> (5x2) Even: <i>Buckinghamia celsissima</i> (5x2)
<b>MELALEUCA LN</b>	Mandolong Rd to Muston St	NS	No				Odd: <i>Syzygium luehmannii</i> (6x5) Even:
<b>MELROSE ST</b>	Bardwell Rd to Military Rd	EW	Even		Lophostemon sp the dominant street tree. Medium trees to replenish canopy	Width on nature strip not conducive to the planting of large tree species.	Odd: <i>Tristaniopsis laurina</i> (10x6) Even: <i>Jacaranda mimosifolia</i> (12x10)



Street	Section	Site/Street Characteristics					Species (HxW)
		Asp	P/L	Vs	Existing planting theme	Planting opportunities	
<b>METHUEN AVE</b>	Middle Head Rd to Wolseley Rd	NS	Odd	2	No significant street tree theme. Cottage gardens present to streetscape from private properties.	Small trees can be managed through TPA.	<i>Odd: Corymbia ficifolia 'Summer Red' (5x3)</i> <i>Even: Corymbia ficifolia 'Summer Red' (5x3)</i>
<b>MIDDLE HEAD RD</b>	Gordon St to Cobbittee St	EW	Even	E1	Lophostemon sp the dominant street tree.	Species to remain the same to retain existing avenue.	<i>Odd: Lophostemon confertus (12x8)</i> <i>Even: Lophostemon confertus (12x8)</i>
<b>MIDDLE HEAD RD</b>	Gordon St to Military Rd	EW	Even	E1	Lophostemon sp and Harpullia sp the dominant street trees.		<i>Odd: Harpullia pendula (8x6)</i> <i>Even: Harpullia pendula (8x6)</i>
<b>MILITARY RD</b>	Spit Rd to Middle Head Rd	NS	No		Mainly exotic species with some natives. Planted out with Ulmus sp 2004.		<i>Odd: Ulmus parvifolia (12x8)</i> <i>Even: Ulmus parvifolia (12x8)</i>
<b>MILITARY RD</b>	Spit Rd to Spofforth St	EW	No		Mixture of native and exotic sp dominated by Eucalyptus sideroxylon planted 2004. New plantings to be placed in existing tree pits where vegetative competition will not force growth towards roadway		<i>Odd: Melaleuca quinquenervia (15x8) or Eucalyptus microcorys (15x10)</i> <i>Even: Melaleuca quinquenervia (15x8) or Eucalyptus microcorys (15x10)</i>
<b>MILNER ST</b>	Raglan St to Prince Albert St	EW	No		Large native species with some Ulmus sp in wide nature strips	Lophostemon sp to be used to provide visual link between Raglan St and Prince Albert St.	<i>Odd: Lophostemon confertus (12x8)</i> <i>Even: Lophostemon confertus (12x8)</i>
<b>MILTON AVE</b>	Queen St to Union St	NS	Even	3	Mixed planting of native and exotic species.		<i>Odd: Jacaranda mimosifolia (12x10)</i> <i>Even: Jacaranda mimosifolia (12x10)</i>
<b>MISTRAL AVE</b>	Magic Grove to Clanalpine St	NS	Odd				<i>Odd: Acmena smithii 'Minor' (6x4)</i> <i>Even: Flindersia australis (25x4)</i>
<b>MITCHELL LNE</b>	Killarney St to Mitchell Rd	NS	Even				<i>Odd: Acmena smithii 'Minor' (6x4)</i> <i>Even:</i>



Street	Section	Site/Street Characteristics					Species (HxW)
		Asp	P/L	Vs	Existing planting theme	Planting opportunities	
<b>MORELLA RD*</b>	Iluka Rd to David St	NS	Odd	3	Limited planting of exotic species of street trees with private garden areas presenting too the street being planted predominately with exotic species. Strong visual connection with local bushland.	Strong visual relationship to bushland, filtered water views.	<i>Odd: Angophora costata (15x7)</i> <i>Even: Angophora hispida (7x3)</i>
<b>MORELLA RD*</b>	David St to Burrawong Ave	EW	Even	E1	Dominated by native plantings as a result of bush.	Strong visual relationship to bushland and water.	<i>Odd: Angophora costata (15x7)</i> <i>Even: Angophora hispida (7x3)</i>
<b>MORUBEN RD</b>	Awaba St to Stanton Rd	NS	No	O2			<i>Odd: Banksia integrifolia (12x6)</i> <i>Even: Banksia integrifolia (12x6)</i>
<b>MORUBEN RD</b>	Mandolong Rd to Awaba St	NS	No	O2	Mixed planting of native and exotic species.	Limited planting opportunities from Rawson St to Stanton Rd.	<i>Odd: Banksia integrifolia (12x6)</i> <i>Even: Banksia integrifolia (12x6)</i>
<b>MOSMAN ST</b>	Raglan St to Upper Avenue Rd	EW	No		Mixed planting of native and exotic species.		<i>Odd: Corymbia eximia 'Nana' (10x7)</i> <i>Even: Corymbia gummifera (15x7)</i>
<b>MOSS LN</b>	Ida Ave to Pearl Bay Rd	NS	Even				<i>Odd: Angophora costata (15x7)</i> <i>Even: Angophora costata (15x7)</i>
<b>MULBRING ST*</b>	Wolseley Rd	NS	Odd		Strong native theme with wide nature strips. Strong relationship too surrounding bushland reserve.	Wide verge perfect for large tree with open canopy.	<i>Odd: Angophora costata (15x7)</i> <i>Even: Angophora costata (15x7)</i>
<b>MUSGRAVE ST</b>	Raglan St to McLeod St	NS	No	O1	Phoenix canariensis.	Offset current planting with Washingtonia robusta.	<i>Odd: Banksia integrifolia (12x8)</i> <i>Even:</i>
<b>MUSTON ST</b>	Raglan St to Melaleuca Lane	NS	No				<i>Odd: Tristaniopsis laurina (10x6)</i> <i>Even: Backhousia citriodora</i>

Street	Section	Site/Street Characteristics				Planting opportunities	Species (HxW)
		Asp	P/L	Vs	Existing planting theme		
<b>MUSTON ST</b>	Melaleuca Lane to Middle Head Rd	NS	No			Opportunity for street garden design as majority of nature strip has been planted.	<i>Odd: Tristaniopsis laurina (10x6)</i> <i>Even: Backhousia citriodora (12x5)</i>
<b>MYAHGAH RD</b>	Belmont Rd to The Crescent	NS			Ficus and Lophostemon sp in oval reserve on even side of street, Camphor Laurel, Lophostemon and one large Araucaria sp planted in narrow nature strip on odd side.		<i>Odd: Cupaniopsis anacardioides (8x6)</i> <i>Even: Lophostemon confertus (12x8) to be planted in park</i>
<b>NEWTON LN</b>	Medusa St to Beauty Point Public School	NS	No				<i>Odd: Washingtonia robusta (20)</i> <i>Even: Washingtonia robusta (20)</i>
<b>NOBLE ST</b>	Wolger Rd to Belmont Rd	NS	Odd		Platanus sp in narrow nature strip.		<i>Odd: Banksia serrata (12x5)</i> <i>Even: Cupaniopsis anacardioides (8x6)</i>
<b>ORLANDO AVE</b>	Boyle St to Calliope St	NS	Odd		Large native species dominate street tree planting mixed with some exotic species. Nature strip to even side of street wide.		<i>Odd: Buckinghamia celsissima (5x2)</i> <i>Even: Buckinghamia celsissima (5x2)</i>
<b>OSWALD ST*</b>	Rangers Ave to Reginald St	NS	Even		Mixed planting of native and exotic species, wide nature strip to even side.	Views to be considered.	<i>Odd: Flindersia australis (25x4)</i> <i>Even: Flindersia australis (25x4)</i>
<b>OURIMBAH RD</b>	Spit Rd to Macpherson St	EW	Odd		Mixed planting of small to medium native and exotic species. Tristaniopsis works well under wires.	Narrow nature strips to both sides along a wide street. Trees with potential for a high wide dome to scale street, but that will respond to pruning	<i>Odd: Tristaniopsis laurina (10x6)</i> <i>Even: Tristaniopsis laurina (10x6)</i>

Street	Section	Site/Street Characteristics				Species (HxW)
		Asp	P/L	Vs	Existing planting theme	
						to allow pedestrian access.
<b>PARK AVE*</b>	Rangers Rd	SW				Limited. <i>Odd: Callistemon 'Kings Park Special' (5x3)</i> <i>Even: Callistemon 'Kings Park Special' (5x3)</i>
<b>PARRIWI RD</b>	Spit Rd	NS	Odd	E1	Strong native theme due to bushland reserve and some private plantings. In built areas streetscape dominated by dwellings.	Opportunities limited for planting. <i>Angophora costata (15x7) to be planted when room allows</i>
<b>PEARL BAY AVE</b>	Spit Rd to Beauty Point Rd	EW	Even	E1	Jacaranda sp dominate along with large Eucalyptus sp. Nature strip width better suited to Jacaranda sp.	Replace Jacarandas where avenues already exist, otherwise Banksia integrifolia. <i>Odd: Banksia integrifolia/ Jacaranda mimosifolia (12x10)</i> <i>Even: Banksia integrifolia/ Jacaranda mimosifolia (12x10)</i>
<b>PINDARI AVE</b>	Beauty Point Rd to Central Avenue	NS	Even	E3	Lophostemon sp dominate street tree species.	<i>Odd: Lophostemon confertus (12x8)</i> <i>Even: Buckinghamia celsissima (5x2)</i>
<b>PLUNKETT RD*</b>	Beaconsfield to Coronation	NW				Limited. <i>Banksia serrata where space allows</i>
<b>POST OFFICE LN</b>	Almora St	NS	No			<i>Odd:</i> <i>Even: Backhousia citriodora (12x5)</i>
<b>PRETORIA AVE*</b>	Dayrell Avenue	NS	Even	1	Streetscape dominated by dwellings with some insignificant exotic plantings. Background landscape dominated by views of bushland reserve. Plantings in unmade Pretoria soften views.	<i>Odd:</i> <i>Even: Angophora hispida (7x3)</i>
<b>PRINCE ALBERT ST</b>	Middle Head Rd to Queen St	NS	Odd		Lophostemon sp dominate street tree species.	<i>Odd: Lophostemon confertus (12x8)</i> <i>Even: Lophostemon confertus (12x8)</i>

Street	Section	Site/Street Characteristics					Species (HxW)
		Asp	P/L	Vs	Existing planting theme	Planting opportunities	
<b>PRINCE ALBERT ST</b>	Queen St to Thompson St	NS	Odd	O2	Lophostemon sp dominate street tree species.	Harpullia are slow growing and can be managed through TPA	<i>Odd: Harpullia pendula (8x6)</i> <i>Even: Banksia serrata (5x3)</i>
<b>PRINCE ALBERT ST</b>	Thompson St to Whiting Beach Rd	NS	Nod	O2	Jacaranda sp and small to medium sized natives the dominant street trees.		<i>Odd: Harpullia pendula (8x6)</i> <i>Even: Cupaniopsis anacardioides (8x6)</i>
<b>PRINCE ST</b>	Cowles Rd to Military Rd	EW	Even		Large native canopy trees dominate the streetscape.		<i>Odd: Cupaniopsis anacardioides (8x6)</i> <i>Even: Cupaniopsis anacardioides (8x6)</i>
<b>PRINCE ST</b>	Bardwell to Military	EW	Even		Mixed plantings of native and exotic tree species.		<i>Odd: Melaleuca quinquenervia (20x6)</i> <i>Even: Melaleuca quinquenervia (20x6)</i>
<b>PRINCE ST</b>	Military Rd to Macpherson St	EW	Even		Mixed plantings of native and exotic tree species.		<i>Odd: Cupaniopsis anacardioides (8x6)</i> <i>Even: Cupaniopsis anacardioides (8x6)</i>
<b>PULPIT LN</b>	Bay St	EW	No				<i>Odd: Angophora costata (15x7)</i> <i>Even: Angophora costata (15x7)</i>
<b>PUNCH LN</b>	Punch St	NS	No				<i>Odd:</i> <i>Even: Acmena smithii 'Minor' (6x4)</i>
<b>PUNCH ST</b>	Spit Rd to Moruben Rd	EW	No		Mixture of large native and exotic canopy trees.	Strong native theme. Street dominated by three storey walk ups and flat buildings. Wide road with wide nature strips.	<i>Odd: Tristaniopsis laurina (10x6)</i> <i>Even: Tristaniopsis laurina (10x6)</i>
<b>PURSELL AVE</b>	Medusa St	NS	Even				<i>Odd: No room to plant. View to consider</i> <i>Even: Callistemon 'Kings Park Special' (5x3)</i>
<b>QUAKERS RD</b>	Bay St to Koowong Ave	EW	Even	E3	Streetscape plantings a mixture of native and exotic species.		<i>Odd:</i> <i>Even: Xanthostemon chrysanthus (6x3)</i>
<b>QUEEN ST</b>	Bradley's Head Rd to Prince Albert St	EW	No		Lophostemon sp dominate street tree species.		<i>Odd: Acmena smithii 'Minor' (6x4)</i> <i>Even: Lophostemon confertus (12x8)</i>

Street	Section	Site/Street Characteristics					Species (HxW)
		Asp	P/L	Vs	Existing planting theme	Planting opportunities	
<b>QUEEN ST</b>	Raglan St to Prince Albert St	EW	No		Lophostemon sp dominate street tree species. Wide nature strip to odd side.		Odd: <i>Lophostemon confertus</i> (12x8) Even: <i>Corymbia gummifera</i> (15x7)
<b>RAGLAN ST</b>	Military Rd to Mosman St	NS	No		Lophostemon sp dominate street tree species.		Odd: <i>Lophostemon confertus</i> (12x8) Even: <i>Lophostemon confertus</i> (12x8)
<b>RAGLAN ST</b>	Mosman St to Musgrave St	NS	No		Lophostemon sp dominate street tree species.		Odd: <i>Lophostemon confertus</i> (12x8) Even: <i>Lophostemon confertus</i> (12x8)
<b>RAGLAN ST</b>	Musgrave St to Curraghbee Park	NS	No		Lophostemon sp dominate street tree species.		Odd: <i>Lophostemon confertus</i> (12x8) Even: <i>Lophostemon confertus</i> (12x8)
<b>RAGLAN ST*</b>	The Esplanade to Military Rd	NS	No		No street tree theme present.		Odd: <i>Banksia serrata</i> (5x3) Even: <i>Banksia serrata</i> (5x3)
<b>RANGERS AVE*</b>	Oswald Rd to Avenue Rd	EW	Odd		Small to medium sized natives dominate with the nature strips narrow in places.	View lines to city.	Odd: <i>Callistemon 'Kings Park Special'</i> (5x3) Even: <i>Callistemon 'Kings Park Special'</i> (5x3)
<b>RANGERS AVE*</b>	Oswald Rd to Spofforth St	EW	Even		Mixed plantings of native and exotics species.		Odd: <i>Callistemon salignus</i> (5x3) Even: <i>Callistemon 'Kings Park Special'</i> (5x3)
<b>RAWSON LN</b>	Rawson St to Moruben Rd	EW	No				Odd: <i>Acmena smithii 'Minor'</i> (6x4) Even:
<b>RAWSON ST</b>	Awaba St	NS	No	E2	Mixed plantings, no predominant themes.	View lines to consider.	Odd: <i>Corymbia ficifolia 'Summer Red'</i> (5x3) Even: <i>Lagerstroemia indica</i> (6x5)
<b>REDAN ST</b>	Raglan St to Wolseley Rd	NS	Even	E3	Lophostemon sp is dominant with a wide nature strip to the even side.		Odd: <i>Lophostemon confertus</i> (12x8) Even: <i>Delonix regia</i> (15x10)

Street	Section	Site/Street Characteristics					Species (HxW)
		Asp	P/L	Vs	Existing planting theme	Planting opportunities	
<b>REDAN ST</b>	Raglan St to Upper Almora Ave	NS	Odd	O2	Predominately native species.		<i>Odd: Corymbia ficifolia 'Summer Red' (5x3)</i> <i>Even: Corymbia ficifolia 'Summer Red' (5x3)</i>
<b>REGINALD ST*</b>	Oswald St to Spofforth St	EW	Odd		Mixed plantings of native and exotic species.		<i>Odd: Jacaranda mimosifolia (12x10)</i> <i>Even: Backhousia citriodora (12x5)</i>
<b>RICKARD AVE</b>	Whiting beach Rd	NS	Even	O2	Mixed plantings of native and exotic species.	Australian Teak established well in street.	<i>Odd: Angophora costata (15x7)</i> <i>Even: Corymbia ficifolia 'Summer Red' (5x3)</i>
<b>ROSEBERY ST</b>	Earl St to Ourimbah Rd	NS	Even		Medium sized exotic species.		<i>Odd: Flindersia australis (25x4)</i> <i>Even: Flindersia australis (25x4)</i>
<b>ROSEBERY ST</b>	Ourimbah Rd to Awaba St	NS	Even		Lophostemon sp dominate street tree species.	Keep Crepe Myrtle as residents maintain well.	<i>Odd: Lophostemon confertus (12x8)</i> <i>Even: Lagerstroemia indica (6x5)</i>
<b>ROYALIST RD</b>	Calliope St to Boyle St	NS	Odd	E3	Mixed plantings of native and exotic species.	This street will probably have shallow soils due to the presence of surface rock in the nature strips.	<i>Odd: Acmena smithii 'minor' (6x5)</i> <i>Even: Acmena smithii 'minor' (6x5)</i>
<b>RUBY ST</b>	Thompson St to Union St	NS	Even	O3	Mixed plantings of exotic species including the median strip.	Views to consider.	<i>Odd: Delonix regia (15x10)</i> <i>Even: Delonix regia (15x10)</i>
<b>RYAN AVE*</b>	Lower Almora St	EW	Even	2	Dominated by Jacarandas, should be maintained to create feature avenue.		<i>Odd: Banksia integrifolia (12x10)</i> <i>Even: Banksia integrifolia (12x10)</i>
<b>RYRIE ST</b>	Bickell Rd to Quakers Rd	NS	Odd	O2	Sapium sp dominates along with other exotic species with cottage gardens presenting the street from private gardens.	Wide nature strips present a good opportunity for healthy tree establishment. Smaller trees under wires.	<i>Odd: Corymbia eximia 'Nana' (10x7)</i> <i>Even: Corymbia ficifolia 'Summer Red' (5x3)</i>
<b>SABINA ST</b>	Tivoli St	EW	Odd				<i>Odd: Sapium sebiferum (10x5)</i> <i>Even: Sapium sebiferum(10x5)</i>

Street	Section	Site/Street Characteristics				Planting opportunities	Species (HxW)
		Asp	P/L	Vs	Existing planting theme		
<b>SHADFORTH ST</b>	Canrobert St to Avenue Rd	NS	No		Lophostemon sp dominate street tree species.		<i>Odd: Lophostemon confertus (12x8)</i> <i>Even: Lophostemon confertus (12x8)</i>
<b>SHADFORTH ST</b>	Avenue Rd to Mosman St	NS	No		Lophostemon sp dominate street tree species.		<i>Odd: Lophostemon confertus (12x8)</i> <i>Even: Lophostemon confertus (12x8)</i>
<b>SHELLBANK AVE</b>	Wyong Rd to Shellbank Pde	EW	No	1			<i>Odd: Acmena smithii 'Minor' (6x4)</i> <i>Even:</i>
<b>SILEX RD</b>	Thompson St to Bradley's head Rd	EW	Even	2	Callistemon and larger native tree species. Continue use of Callistemons.	Narrow nature strips.	<i>Odd: Melaleuca quinquenervia (20x6)</i> <i>Even: Callistemon 'Kings Park Special' (5x3)</i>
<b>SIMPSON ST</b>	Prince Albert St to Major St	EW	Odd		Medium to large native tree species.	Nature strip too narrow to safely support large to medium trees.	<i>Odd: Acmena smithii 'Minor' (6x4)</i> <i>Even: Acmena smithii 'Minor' (6x4)</i>
<b>SIRIUS COVE RD</b>	Elfrida St	NS	Even		Not many street trees, but streetscape dominated by large canopy trees in private gardens.	Opportunity to visually link to surrounding bushland through planting of <i>Angophora costata</i> . There are some appropriate spots in the area between Cabban St and Sirius Cove Rd.	<i>Odd: Angophora costata (15x7)</i> <i>Even: Angophora costata (15x7)</i>
<b>SNELL ST</b>	Military Rd to Melrose E St	NS	No		Medium size native species.		<i>Odd: Backhousia citriodora (12x5)</i> <i>Even: Buckinghamia celsissima (5x2)</i>
<b>SOMERSET ST</b>	Crux St to Canrobert St	NS	No		Dominated by large trees, Nature strip wide on the odd side of the street.		<i>Odd: Platanus orientalis (20x15)</i> <i>Even: Callistemon 'Kings Park Special' (5x3)</i>
<b>SPENCER RD</b>	Spofforth St to Cowles Rd	EW	Odd		Avenue planting of <i>Platanus</i> sp.		<i>Odd: Platanus orientalis (20x15)</i> <i>Even: Platanus orientalis (20x15)</i>



Street	Section	Site/Street Characteristics					Species (HxW)
		Asp	P/L	Vs	Existing planting theme	Planting opportunities	
<b>SPIT RD</b>	Military Rd to Medusa St	NS	No		Mixture of native and exotic sp dominated by Eucalyptus sideroxylon planted 2004.		Odd: <i>Lophostemon confertus</i> (12x8) or <i>Eucalyptus resinifera</i> (15x10) Even: <i>Lophostemon confertus</i> (12x8) or <i>Eucalyptus resinifera</i> (15x10)
<b>SPOFFORTH ST*</b>	Rangers Rd to Boyle St	NS	Odd		Predominately native, but some exotic. Nature strips generally narrow.	Wires to contend with.	Odd: <i>Buckinghamia celsissima</i> (5x2) Even:
<b>ST ELMO ST*</b>	Thompson St	NS	Even		Small size natives and Robina sp.	Bush reserve to end of street.	Odd: <i>Callistemon salignus</i> (5x3) Even: <i>Callistemon 'Kings Park Special'</i> (5x3)
<b>STANLEY AVE</b>	Awaba St	NS	Odd				Odd: <i>Angophora hispida</i> (7x3) Even: <i>Acmena smithii 'Minor'</i> (6x4)
<b>STANTON RD</b>	Spit Rd to Moruben Rd	EW	No	O1	Predominantly native, background views to reserve.		Odd: <i>Banksia integrifolia</i> (12x6) Even: <i>Banksia integrifolia</i> (12x6)
<b>STANTON RD</b>	Moruben Rd to Wyargine St	EW	Odd	O2	Predominantly exotic with pockets of mature Eucalyptus sp and native understorey.	Pockets of eucalypts should be maintained so not lost.	Odd: <i>Acmena smithii 'minor'</i> (5x2) Even: <i>Acmena smithii 'minor'</i> (5x2) <i>Angophora costata</i> to replace pockets of <i>Eucalypts</i>
<b>STANTON RD</b>	Wyargine St	EW	No	O1	Predominantly native, background views to reserve.		Odd: <i>Buckinghamia celsissima</i> (5x2) Even: <i>Buckinghamia celsissima</i> (5x2)
<b>THE CRESCENT</b>	Myahgah Rd to Gouldsbury St	NS	No		Large canopy trees dominated by <i>Lophostemon</i> sp. on park side. Narrow nature strip to residential side.		Odd: <i>Eucalyptus sideroxylon</i> (25x10) Even:
<b>THE ESPLANADE</b>	Awaba St to Coronation Ave	NS	Both	O1	Minimal street trees as a result of planting by Council in 2005. Large canopy trees in Hunter Park and Balmoral Reserve bordering The Esplanade.		Odd: <i>Acmena smithii 'Minor'</i> (6x4) Even:



Street	Section	Site/Street Characteristics				Species (HxW)	
		Asp	P/L	Vs	Existing planting theme		Planting opportunities
<b>THE GROVE</b>	Awaba St to Edwards Bay Rd	NS	Odd	E1	Mixed and sporadic planting of small to medium native and exotic species.	Good opportunity for planting to even side due to the elevation of the houses to take advantage of views.	<i>Odd: Callistemon 'Kings Park Special' (5x3)</i> <i>Even: Callistemon 'Kings Park Special' (5x3)</i>
<b>THE GROVE</b>	Awaba St to Mandolong Rd	NS	Odd	E1	Mixed and sporadic planting of small to medium native and exotic species.	Good opportunity for planting to even side due to the elevation of the houses to take advantage of views.	<i>Odd: Acmena smithii 'minor' (5x3)</i> <i>Even: Acmena smithii 'minor' (5x3)</i>
<b>THOMPSON ST</b>	Bradley's head Rd to Burrawong Ave	EW	Odd		Small to medium native species.		<i>Odd: Banksia serrata (5x3)</i> <i>Even: Buckinghamia celsissima (5x2)</i>
<b>THOMPSON ST</b>	Prince Albert Rd to Bradley's Head Rd	EW	Odd		Lophostemon sp dominate street tree species.		<i>Odd: Callistemon 'Kings Park Special' (5x3)</i> <i>Even: Lophostemon confertus (12x8)</i>
<b>TIVOLI ST</b>	Sabina St to Fairfax Rd	NS	Odd				<i>Odd: Cupaniopsis anacardioides (8x6)</i> <i>Even: Cupaniopsis anacardioides (8x6)</i>
<b>UNION ST</b>	Prince Albert St to Bradley's Head Rd	EW	Odd		Mixed plantings of native and exotic species.		<i>Odd: Tristaniopsis laurina (10x6)</i> <i>Even: Lophostemon confertus (12x8)</i>
<b>UPPER ALMORA RD</b>	Military Rd to Superba	EW	Odd	2	Lophostemon sp dominate street tree species.		<i>Odd: Eucalyptus 'Summer Red' (5x3)</i> <i>Even: Eucalyptus 'Summer Red' (5x3)</i>
<b>UPPER AVENUE RD</b>	Mosman St to Avenue Rd	NS	No		No obvious theme to street tree planting. Presentation to streetscape by private gardens is formal and cottage garden types.		<i>Odd: Callistemon salignus (8x5)</i> <i>Even: Callistemon 'Kings Park Special' (5x3)</i>
<b>UPPER FAIRFAX RD</b>	Parriwi Rd	EW	Even		No real nature strips, just narrow space between		<i>Odd: Acmena smithii 'Minor' (6x4)</i> <i>Even: Acmena smithii 'Minor' (6x4)</i>

Street	Section	Site/Street Characteristics					Species (HxW)
		Asp	P/L	Vs	Existing planting theme	Planting opportunities	
					gutter and boundary fences which has been planted by residents. Some <i>Acmena</i> sp planted by Council 2005.		
<b>UPPER SPIT RD</b>	Spit Rd	NS	Odd	O1	Large canopy trees dominate with wide nature strip to the odd side.		<i>Odd: Angophora costata (15x7)</i> <i>Even: Angophora costata (15x7)</i>
<b>VISTA ST</b>	Military Rd to Belmont Rd	NS	Odd		Lophostemon sp and mid-size Eucalyptus sp in narrow nature strips.		<i>Odd: Callistemon 'Kings Park Special' (5x3)</i> <i>Even: Cupaniopsis anacardioides (8x6)</i>
<b>WAITOVU ST</b>	Mandolong Rd to Awaba St	NS	Even	E2	Strong planting of Jacaranda sp.		<i>Odd: Jacaranda mimosifolia (12x10)</i> <i>Even: Jacaranda mimosifolia (12x10)</i>
<b>WALLINGTON RD</b>	Fairfax Rd	NS	No	2			<i>Odd: Angophora costata (15x7)</i> <i>Even: Angophora costata (15x7)</i>
<b>WANT ST</b>	Raglan St	NS	No		Small to medium native tree species.	Median strip to be planted out beginning of 2006 under the Public Garden Upgrade Program.	<i>Odd: Cupaniopsis anacardioides (8x6)</i> <i>Even: Cupaniopsis anacardioides (8x6)</i>
<b>WARRINGAH RD</b>	Spit Rd to Hopetoun Ave	EW	No		Mixed native and exotic species, wide nature strip to odd side of road.	Wide verge on odd side.	<i>Odd: Melaleuca quinquenervia (20x10)</i> <i>Even: Cupaniopsis anacardioides (8x6)</i>
<b>WATER LN</b>	Raglan St to Sirius Cove Rd	EW	Even		Mixed native and exotic species, wide nature strip which can sustain a wide variety of species		<i>Odd: Elaeocarpus reticulatus (7x3)</i> <i>Even: Flindersia australis (25x4)</i>
<b>WHITING BEACH RD</b>	Bradley's Head Rd to Zoo	EW	Even		Small natives on residential side and extensive planting, including large Eucalyptus sp to zoo side.	No room for large trees.	<i>Odd: Callistemon salignus (8x5)</i> <i>Even: Callistemon 'Kings Park Special' (5x3)</i>

Street	Section	Site/Street Characteristics					Species (HxW)
		Asp	P/L	Vs	Existing planting theme	Planting opportunities	
<b>WINDWARD AVE</b>	Kahibah Rd	EW	Odd		Mixed native species.	Limited planting opportunities.	Odd: <i>Acmena smithii</i> 'Minor' (6x4) Even:
<b>WOLGER RD</b>	Cowles Rd to Noble St	EW	Odd		Magnolia sp and Ginkgo sp to wide street.	Magnolia grandiflora out the front of No. 8.	Odd: <i>Lophostemon confertus</i> (12x8) Even: <i>Acmena smithii</i> 'Minor' (6x4)
<b>WOLGER RD</b>	Noble St to Archer St	EW	Odd		Mature Platanus sp and Brushbox to wide street. Continue Brushbox.		Odd: <i>Platanus orientalis</i> (20x15) Even: <i>Lophostemon confertus</i> (12x8)
<b>WOLSELEY RD</b>	Pretoria Ave to Redan St	NS	Odd	E2	Formal private gardens presenting to streetscape with limited street tree planting.		Odd: <i>Acmena smithii</i> 'Minor' (6x4) Even: <i>Acmena smithii</i> 'Minor' (6x4)
<b>WUDGONG ST</b>	Military Rd to Prince St	NS	Odd		Medium sized Eucalyptus sp.	Even side of street is wide with no power lines on the north side to the bend.	Odd: <i>Backhousia citriodora</i> (12x4) Even: <i>Corymbia gummifera</i> (15x8)
<b>WUDGONG WALK</b>	Cowles Rd to Wudgong St	EW	No				Odd: <i>Syzygium luehmannii</i> (6x5) Even:
<b>WUNDA RD</b>	Belmont Rd to Wolger St	NS	Odd		Jacaranda sp dominate street tree with a mix of medium sized native and exotic species.		Odd: <i>Jacaranda mimosifolia</i> (12x10) Even: <i>Jacaranda mimosifolia</i> (12x10)
<b>WYARGINE ST</b>	Stanton Rd to Edwards Bay Rd	NS	Even	1	No distinctive pattern, but with some natives in the backdrop.	Create shade for parking.	Odd: <i>Callistemon salignus</i> (8x5) Even: <i>Callistemon salignus</i> (8x5)
<b>WYONG RD</b>	Macpherson St to Shellbank Ave	EW	Even	E2	Mid-size exotic and native species.	Plant to odd side of street only as this is Mosman Council's boundary.	Odd: <i>Callistemon</i> 'Kings Park Special' (5X3) Even:
<b>WYONG RD*</b>	Macpherson St to Cowles Rd	EW	Even	E2	Mid-size exotic and native species.		Odd: <i>Harpullia pendula</i> (12x6) Even: <i>Harpullia pendula</i> (12x6)







\* Streets identified through 10/50 canopy replenishment program (EP/20 10/50 Tree Replenishment Program)

## 8.0 Street Tree MasterPlan Species Manual








---








Note: Approximate height at maturity figures are indicative only and individual tree heights will vary dependent on their growing conditions.



Botanical Name Common Name Native or Exotic Evergreen or Deciduous Approx. Height at Maturity Other	<i>Acmena smithii</i> 'Minor' Lilly Pilly Native Evergreen 5m Pink Fruits		
Botanical Name Common Name Native or Exotic Evergreen or Deciduous Approx. Height at Maturity Other	<i>Angophora costata</i> Sydney Red Gum Native (Indigenous) Evergreen 15m Pink New Bark		
Botanical Name Common Name Native or Exotic Evergreen or Deciduous Approx. Height at Maturity Other	<i>Angophora floribunda</i> Rough-Barked Apple Native (Indigenous) Evergreen 12m Fibrous grey bark	(Image sourced from google)	
Botanical Name Common Name Native or Exotic Evergreen or Deciduous Approx. Height at Maturity Other	<i>Angophora hispida</i> Dwarf Apple Native Evergreen 5m Often used as a street tree	(Image sourced from google)	



Botanical Name Common Name Native or Exotic Evergreen or Deciduous Approx. Height at Maturity Other	<i>Backhousia citriodora</i> Lemon Myrtle Native Evergreen 12m Lemon Scented Leaves		
Botanical Name Common Name Native or Exotic Evergreen or Deciduous Approx. Height at Maturity Other	<i>Banksia integrifolia</i> Coast Banksia Native Evergreen 12m Yellow Flower Spikes		
Botanical Name Common Name Native or Exotic Evergreen or Deciduous Approx. Height at Maturity Other	<i>Banksia serrata</i> Old Man Banksia Native (Indigenous) Evergreen 12m Saw Toothed Leaves		
Botanical Name Common Name Native or Exotic Evergreen or Deciduous Approx. Height at Maturity Other	<i>Barklya syringifolia</i> Crown of Gold Native Evergreen 7m Golden flowers	(Image sourced from google)	






Botanical Name Common Name Native or Exotic Evergreen or Deciduous Approx. Height at Maturity Other	<i>Buckinghamia celsissima</i> Ivory Curl Flower Native Evergreen 5m Cream Flowers		
Botanical Name Common Name Native or Exotic Evergreen or Deciduous Approx. Height at Maturity Other	<i>Callistemon 'King's Park Special'</i> Bottlebrush Native Evergreen 4m Crimson Flowers		
Botanical Name Common Name Native or Exotic Evergreen or Deciduous Approx. Height at Maturity Other	<i>Callistemon salignus</i> Willow Bottlebrush Native Evergreen 8m Cream/Yellow Bottlebrush Flowers	(Image sourced from google)	
Botanical Name Common Name Native or Exotic Evergreen or Deciduous Approx. Height at Maturity Other	<i>Calodendrum capense</i> Cape Chestnut Exotic Evergreen 15m Pink Flowers		






Botanical Name Common Name Native or Exotic Evergreen or Deciduous Approx. Height at Maturity Other	<i>Corymbia ficifolia</i> 'Summer Red' Red Flowering Gum Native Evergreen 5m Reddish Flowers	(Image sourced from google)	
Botanical Name Common Name Native or Exotic Evergreen or Deciduous Approx. Height at Maturity Other	<i>Corymbia gummifera</i> Red Bloodwood Native (Indigenous) Evergreen 15m White Flowers in Clusters		
Botanical Name Common Name Native or Exotic Evergreen or Deciduous Approx. Height at Maturity Other	<i>Corymbia eximia</i> 'Nana' Yellow Bloodwood Native Evergreen 10m Cream Flowers	(Image sourced from google)	
Botanical Name Common Name Native or Exotic Evergreen or Deciduous Approx. Height at Maturity Other	<i>Cupaniopsis anacardioides</i> Tuckeroo Native Evergreen 8m Orange Fruits		










Botanical Name Common Name Native or Exotic Evergreen or Deciduous Approx. Height at Maturity Other	<i>Delonix regia</i> Royal Poinciana/Flamboyant Tree Exotic Evergreen 8m Striking red flowers	(Image sourced from google)	
Botanical Name Common Name Native or Exotic Evergreen or Deciduous Approx. Height at Maturity Other	<i>Elaeocarpus reticulatus</i> Blueberry Ash Native Evergreen 7m Blue Fruits		
Botanical Name Common Name Native or Exotic Evergreen or Deciduous Approx. Height at Maturity Other	<i>Eucalyptus botryoides</i> Bangalay Native (Indigenous) Evergreen 20m Rough Bark		
Botanical Name Common Name Native or Exotic Evergreen or Deciduous Approx. Height at Maturity Other	<i>Eucalyptus microcorys</i> Tallowwood Native (Indigenous) Evergreen 15m Upper Branch Bark	(Image sourced from google)	

Botanical Name Common Name Native or Exotic Evergreen or Deciduous Approx. Height at Maturity Other	<i>Eucalyptus resinifera</i> Red Mahogany Native (Indigenous) Evergreen 15m Cream Flowers	(Image sourced from google)	
Botanical Name Common Name Native or Exotic Evergreen or Deciduous Approx. Height at Maturity Other	<i>Eucalyptus sideroxylon</i> Red Ironbark Native Evergreen 17m Black Bark		
Botanical Name Common Name Native or Exotic Evergreen or Deciduous Approx. Height at Maturity Other	<i>Flindersia australis</i> Native Teak Native Evergreen 20m White Flowers		
Botanical Name Common Name Native or Exotic Evergreen or Deciduous Approx. Height at Maturity Other	<i>Fraxinus griffithii</i> Evergreen Ash Exotic Evergreen 5m Drought Tolerant	(Image sourced from google)	

Botanical Name Common Name Native or Exotic Evergreen or Deciduous Approx. Height at Maturity Other	<i>Gordonia axillaris</i> Fried Egg Plant Exotic Evergreen 4m Fried Egg Flowers	(Image sourced from google)	
Botanical Name Common Name Native or Exotic Evergreen or Deciduous Approx. Height at Maturity Other	<i>Harpullia pendula</i> Tulipwood Native Evergreen 12m Yellow Flowers		
Botanical Name Common Name Native or Exotic Evergreen or Deciduous Approx. Height at Maturity Other	<i>Jacaranda mimosifolia</i> Jacaranda Exotic Deciduous 12m Mottled Bark		
Botanical Name Common Name Native or Exotic Evergreen or Deciduous Approx. Height at Maturity	<i>Livistona australis</i> Cabbage Tree Palm Native Evergreen 25m		

Other	Bright Green Fronds		
Botanical Name Common Name Native or Exotic Evergreen or Deciduous Approx. Height at Maturity Other	<i>Lophostemon confertus</i> Brush Box Native Evergreen 12m White Flowers		
Botanical Name Common Name Native or Exotic Evergreen or Deciduous Approx. Height at Maturity Other	<i>Melaleuca linarifolia</i> Gold Blossom Tree Native Evergreen 8m White flowers	(Image sourced from google)	
Botanical Name Common Name Native or Exotic Evergreen or Deciduous Approx. Height at Maturity	<i>Melaleuca quinquenervia</i> Broad-Leaved Paperbark Native Evergreen 20m	(Image sourced from google)	



Other	Thick paper-like bark		
Botanical Name Common Name Native or Exotic Evergreen or Deciduous Approx. Height at Maturity Other	<i>Platanus orientalis</i> Oriental Plane Exotic Deciduous 20m Brown Seeds		
Botanical Name Common Name Native or Exotic Evergreen or Deciduous Approx. Height at Maturity Other	<i>Sapium sebiferum</i> Chinese Tallow Tree Exotic Deciduous 10m Waxy Green Leaves		
Botanical Name Common Name Native or Exotic Evergreen or Deciduous Approx. Height at Maturity Other	<i>Syzygium luehmannii</i> Riberry Native Evergreen 6m White Flowers		
Botanical Name	<i>Tristaniopsis laurina</i>		

<p>Common Name Native or Exotic Evergreen or Deciduous Approx. Height at Maturity Other</p>	<p>Water Gum Native (Indigenous) Evergreen 10m Glossy Leaves</p>		
<p>Botanical Name Common Name Native or Exotic Evergreen or Deciduous Approx. Height at Maturity Other</p>	<p><i>Ulmus parvifolia</i> Chinese Elm Exotic Deciduous 12m Mottled Bark</p>		
<p>Botanical Name Common Name Native or Exotic Evergreen or Deciduous Approx. Height at Maturity Other</p>	<p><i>Washingtonia robusta</i> Mexican Fan Palm Exotic Evergreen 20m Shiny Green Fronds</p>		
<p>Botanical Name Common Name Native or Exotic Evergreen or Deciduous Approx. Height at Maturity Other</p>	<p><i>Xanthostemon chrysanthus</i> Golden Penda Native Evergreen 8m Yellow Flowers</p>		





## 9.0 Appendices

### APPENDIX 1 - TREE PLANTING RISK ZONES IN STREETS

	<b>ZONE A</b>  <b>Most constraints (Greatest risk)</b>	<b>ZONE B</b>  <b>Moderate constraints (Moderate risk)</b>	<b>ZONE C</b>  <b>Fewest constraints (Minimum risk)</b>
<b>Electrical &amp; telecommunications</b>	<ul style="list-style-type: none"> <li>▪ Uninsulated low and high voltage wires</li> <li>▪ Bushfires area</li> </ul>	<ul style="list-style-type: none"> <li>▪ Bundled cables (ABC)</li> <li>▪ Insulated cables</li> </ul>	<ul style="list-style-type: none"> <li>▪ No power lines</li> </ul>
<b>Below ground services typical layouts</b>	<ul style="list-style-type: none"> <li>▪ Fibre optic cables</li> <li>▪ High voltage power</li> </ul>	<ul style="list-style-type: none"> <li>▪ Water mains</li> <li>▪ Gas mains</li> <li>▪ Stormwater</li> </ul>	<ul style="list-style-type: none"> <li>▪ No underground services</li> </ul>
<b>Slope</b>	<ul style="list-style-type: none"> <li>▪ Steep slope</li> </ul>	<ul style="list-style-type: none"> <li>▪ Moderate slope</li> </ul>	<ul style="list-style-type: none"> <li>▪ Generally flat land</li> </ul>
<b>Paved areas</b>	<ul style="list-style-type: none"> <li>▪ Area wholly paved</li> <li>▪ Surface wholly sealed</li> <li>▪ Brick pavers laid on sand bedding</li> </ul>	<ul style="list-style-type: none"> <li>▪ Partially paved areas</li> <li>▪ Non-reinforced concrete</li> </ul>	<ul style="list-style-type: none"> <li>▪ Grass up to 6m</li> </ul>
<b>Verge width</b>	<ul style="list-style-type: none"> <li>▪ Less than 3.0m</li> </ul>	<ul style="list-style-type: none"> <li>▪ From 3m to 4m</li> </ul>	<ul style="list-style-type: none"> <li>▪ 4m or wider</li> </ul>
<b>Building setback</b>	<ul style="list-style-type: none"> <li>▪ None</li> </ul>	<ul style="list-style-type: none"> <li>▪ Less than 6m</li> </ul>	<ul style="list-style-type: none"> <li>▪ 6m or greater</li> </ul>
<b>Street lighting</b>	<ul style="list-style-type: none"> <li>▪ Over pedestrian crossings</li> <li>▪ Traffic intersections</li> </ul>	<ul style="list-style-type: none"> <li>▪ Street lighting other than crossings and intersections</li> </ul>	<ul style="list-style-type: none"> <li>▪ No street lighting</li> </ul>
<b>Safety signage i.e traffic signs</b>	<ul style="list-style-type: none"> <li>▪ Dual carriageways</li> <li>▪ Arterial roads</li> <li>▪ High density residential streets</li> </ul>	<ul style="list-style-type: none"> <li>▪ Medium density residential streets</li> <li>▪ Arterial roads in rural zones</li> </ul>	<ul style="list-style-type: none"> <li>▪ Low density rural/residential streets</li> </ul>
<b>Traffic</b>	<ul style="list-style-type: none"> <li>▪ Heavy vehicles</li> <li>▪ Public transport in heavy volumes</li> </ul>	<ul style="list-style-type: none"> <li>▪ Public transport in moderate volume</li> <li>▪ Heavy vehicles in moderate volumes</li> </ul>	<ul style="list-style-type: none"> <li>▪ Public transport in low volume</li> <li>▪ Residential traffic in low volume</li> <li>▪ Cul-de-sacs</li> </ul>
<b>Soils</b>	<ul style="list-style-type: none"> <li>▪ Severely compacted</li> <li>▪ Shallow</li> <li>▪ Reactive clay</li> <li>▪ Acid sulphate</li> <li>▪ Poor drainage</li> </ul>	<ul style="list-style-type: none"> <li>▪ Moderately compacted</li> <li>▪ Urban fill</li> <li>▪ Moderate drainage</li> </ul>	<ul style="list-style-type: none"> <li>▪ Undisturbed soil</li> <li>▪ Deep profile</li> <li>▪ Medium texture</li> <li>▪ Good natural drainage</li> </ul>
<b>Water table</b>	<ul style="list-style-type: none"> <li>• High</li> </ul>	<ul style="list-style-type: none"> <li>• Moderate depth</li> </ul>	<ul style="list-style-type: none"> <li>• Deep water table</li> </ul>

## APPENDIX 2 - TREE PLANTING SITE CHARACTERISTICS

	<b>A Most Constraint</b>	<b>B Moderate Constraint</b>	<b>C Least Restraint</b>
<b>Climate</b>	<ul style="list-style-type: none"> <li>▪ Frontline salt wind exposure</li> <li>▪ Prevailing wind exposure</li> <li>▪ Rain shadow</li> <li>▪ Extensive sealed ground surface</li> </ul>	<ul style="list-style-type: none"> <li>▪ Second line coastal salt influence</li> <li>▪ Moderate wind exposure</li> <li>▪ Partial rain shadow</li> <li>▪ Partial ground surface sealed</li> </ul>	<ul style="list-style-type: none"> <li>▪ Minimum salt influence</li> <li>▪ Minimal wind exposure</li> <li>▪ No rain shadow</li> <li>▪ Minimal ground surface sealed</li> </ul>
<b>Slope</b>	<ul style="list-style-type: none"> <li>▪ Steep slope</li> </ul>	<ul style="list-style-type: none"> <li>▪ Moderate slope</li> </ul>	<ul style="list-style-type: none"> <li>▪ Minor slope to flat land</li> </ul>
<b>Aspect</b>	<ul style="list-style-type: none"> <li>▪ Southern &amp; western exposure</li> </ul>	<ul style="list-style-type: none"> <li>▪ Either southern or western exposure</li> </ul>	<ul style="list-style-type: none"> <li>▪ Northern &amp; eastern exposure</li> </ul>
<b>Street – Width &amp; Usage</b>	<ul style="list-style-type: none"> <li>▪ Narrow; CBD residential &amp; commercial;</li> <li>▪ Arterial –high traffic volume</li> </ul>	<ul style="list-style-type: none"> <li>▪ Non CBD; narrow residential &amp; commercial;</li> <li>▪ Suburban collector roads – medium volume traffic</li> </ul>	<ul style="list-style-type: none"> <li>▪ Average to wide residential/ commercial</li> <li>▪ Wide residential</li> </ul>
<b>Soil – Type and Drainage</b>	<ul style="list-style-type: none"> <li>▪ Reactive clay</li> <li>▪ Poor drainage</li> <li>▪ Salinity</li> </ul>	<ul style="list-style-type: none"> <li>▪ Non-reactive clay</li> <li>▪ Average drainage</li> </ul>	<ul style="list-style-type: none"> <li>▪ Free draining open textured soil</li> </ul>
<b>Services &amp; Assets (Kerb &amp; channel, fences, hard surfaces, etc.)</b>	<ul style="list-style-type: none"> <li>▪ Above and below ground utilities and / or assets</li> </ul>	<ul style="list-style-type: none"> <li>▪ Above or below ground utilities and / or assets.</li> </ul>	<ul style="list-style-type: none"> <li>▪ No utility services</li> </ul>

## APPENDIX 3 - RISK MANAGEMENT AND NEW TREE PLANTING

### RISK MANAGEMENT OPTIONS FOR NEW TREE PLANTING

Many tree related problems are caused by inadequate tree selection and placement. The wrong tree in the wrong place can cause major problems including:

- roots blocking and cracking sewer and storm water pipes
- lifting and cracking pavements and roads
- damaging foundations
- poor traffic visibility
- pedestrian access problems
- interruptions to power supply

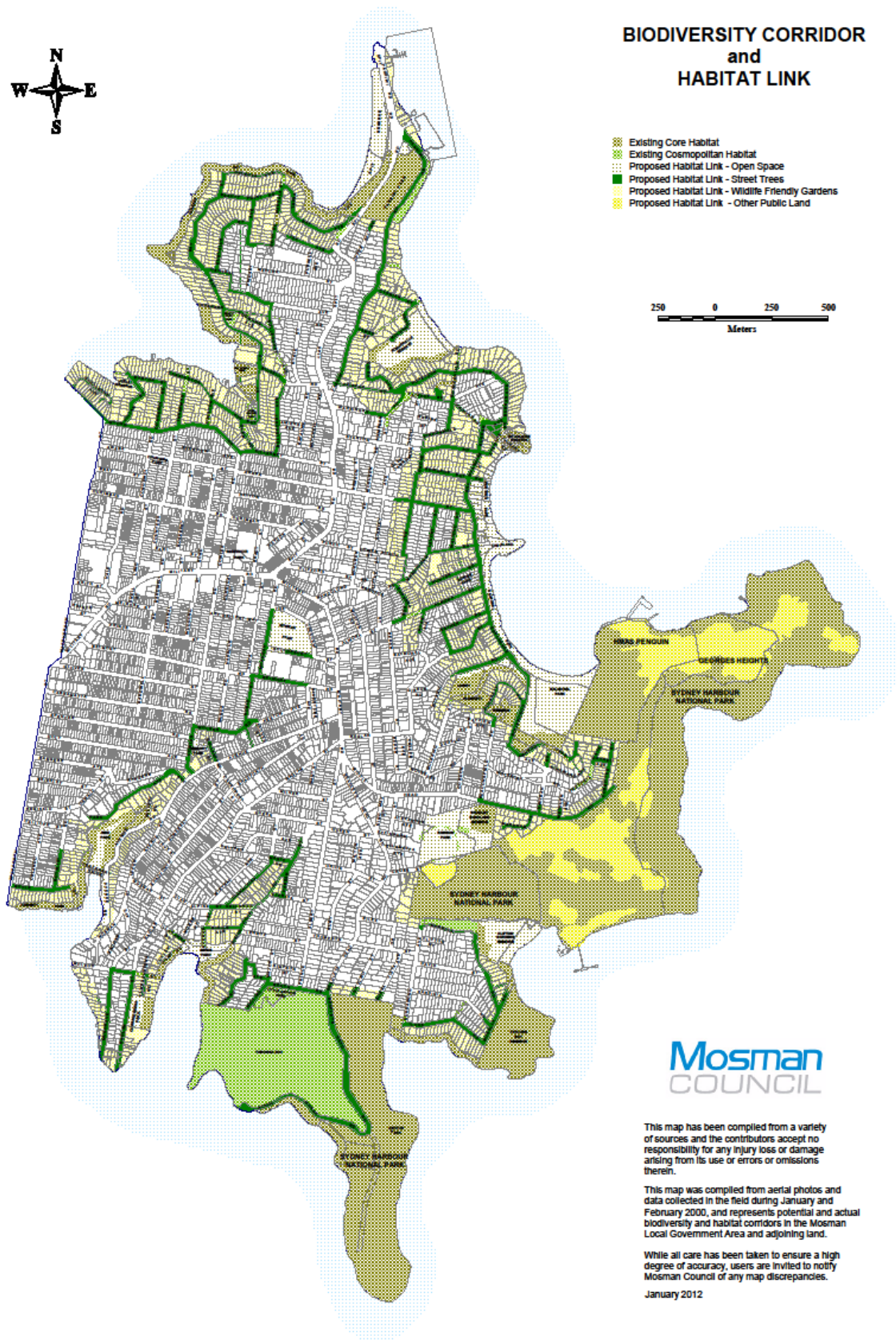
### RISK MANAGEMENT CONTROL STRATEGIES

Control Strategy	Description
<b>Root barriers</b>	Where required the installation of root barriers to manufacturer's specification at the time of planting will assist tree roots to develop away from services, pavements and other structures. NOTE OF CAUTION: Tree root barriers do require periodic monitoring as roots deflected downwards will return to the surface if soil oxygen levels are not sufficient to support growth at depth. Roots can also grow over the barrier in some situations.
<b>Soil compaction</b>	Proper compaction of the soil when back filling trenches or around utility easements and house footings will direct tree roots away from these areas. By achieving and maintaining compaction to 95% root growth can be inhibited through the deprivation of oxygen.
<b>Pseudo street trees</b>	Residents could be encouraged to plant suitable trees within their boundaries in preference to street tree planting. This might allow larger species to be used, and reduce pressure on pavements and services, providing adequate distance is kept from assets.
<b>Design of new roads and pathways</b>	The design of new roads and footpaths should be undertaken with consideration for tree planting on the nature strip or in the road pavement to ensure appropriate allocation of space.
<b>Provision of aeration and irrigation</b>	Where there is to be continuous paving around a tree, the installation of an aeration and irrigation system should be considered. Where irrigation is installed and properly operating, a tree root system will be proportionally smaller than without irrigation.
<b>Pavement openings</b>	Pavement openings at the base of the tree should be as large as possible to reduce the future impact of buttressing roots on pavements. Position of the tree should be a good distance (e.g 1m) from the kerb line to reduce the likelihood of future cracking.



### BIODIVERSITY CORRIDOR and HABITAT LINK

- Existing Core Habitat
- Existing Cosmopolitan Habitat
- Proposed Habitat Link - Open Space
- Proposed Habitat Link - Street Trees
- Proposed Habitat Link - Wildlife Friendly Gardens
- Proposed Habitat Link - Other Public Land



This map has been compiled from a variety of sources and the contributors accept no responsibility for any injury loss or damage arising from its use or errors or omissions therein.

This map was compiled from aerial photos and data collected in the field during January and February 2000, and represents potential and actual biodiversity and habitat corridors in the Mosman Local Government Area and adjoining land.

While all care has been taken to ensure a high degree of accuracy, users are invited to notify Mosman Council of any map discrepancies.

January 2012