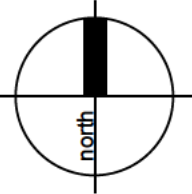


OAK TREE RETIREMENT VILLAGES

APRIL 2022



LOCATION MAP



Drawing Schedule

Name	Drawing Number	Revision
Cover Sheet	L000	F
Tree Management Plan	L001	F
Existing Tree Schedule	L002	E
Landscape Plan - Level 01	L101	F
Landscape Plan - Level 03	L102	E
Precedent Images	L201	E
Indicative Plant Schedule	L301	E

Statutory & Regulatory Guidelines

- The City of Lake Macquarie*
- Lake Macquarie Environmental Plan (LEP) 2014 .
 - Lake Macquarie Development Control Plan (DCP) 2014.
 - Lake Macquarie Development Control Plan (DCP) 2014, Part 10: Mount Hutton Area Plan.

Site Calculations

Item	Area	Percentage
Total Site (Including RE1 Zone)	15 665m ²	
Total Site (Excluding RE1 Zone)	11 293m ²	
Deep Soil Planting Area (Excluding RE1 Zone)	2852m ²	
Deep Soil Planting Area - Along Wilson Rd		
Including Street Reserve (Excluding RE1 Zone)	434m ²	
Deep Soil Planting Zones		
(Excluding RE1 Zone)	3286m ²	29%
Deep Soil Planting Zones		
(Including RE1 Zone)	7658m ²	48%

Site Description:

The subject site is located at Lot 13 (DP11260) and the street address is 72 Willsons Road, Mount Hutton, NSW 2290.

The existing topography of the site has a considerable cross fall from the approximate high point RL 30.82 located on the south-west corner to the approximate low point RL 23.50 located in the north-west corner of the site with a fall of approximately 7.32 metres.

A single storey dwelling with three separate covered car ports occupies the site. These will be demolished as part of this proposal. The existing vegetation is minimal and consists of expanses of exotic turf species and exotic garden beds at the front and rear of the subject site.

Local Context/Character:

The existing street character of Willsons Road is a mix of commercial buildings and single/ two storey residential buildings. Willsons Road has no street tree plantings, however several mature exiting trees along both sides of the Road. The street character is predominantly a concrete footpaths with a mix of vegetated and turf verge areas. The existing vegetation occur within the front garden areas of the residential lots and within the front setbacks of existing commercial buildings. The plantings are a mix of exotic and native species.

The only apparent infrastructure associated with the street are overhead powerlines located on the south side of Willsons Road.

The subject site is located to close proximity to Tingira Hills Care Community, Anglican Care Greenmount Gardens, Lake Macquarie Tavern and Lake Macquarie Square.

Proposed Development:

The proposed development will include a three level, 72 residential unit building. There is a basement level carpark and the driveway entry to this car park is located to the south of the site with access to Willsons Road.

The common open space and public domain areas associated with this development and are as follows:

Common Open Space Areas:

The common open space areas of this development will be located on level 01 & 02, and for communal use by all residents of this residential building development.

The landscape intent for the common space terrace areas will include the following:

1.Circulation

- Establish a path hierarchy for main pedestrian access, egress and maintenance paths,
- Segregation of pedestrian paths from vehicular roads and driveways,
- Implementation of 1:14 ramps (with handrails) 1:20 ramps (no handrails) to AS1428.1 Access & Mobility, and
- Main pedestrian circulation path widths to be a minimum 1500mm width to allow mobile & less mobile residents to easily pass each other.

2. Connectivity

- Regular rest stops with bench seats (including arm rests), and
- Implementation of intersection nodes where paths intersect, and which may include way-finding signage, congregation nodes and seating.

3. Amenity

- Shade/amenity tree planting in deep soil zones (where practical)
- Passive recreation areas such as break-out spaces, small paved courtyards for activities such as meditation, functions and communal barbeques etc.
- External structures & furniture elements that include fixed pergola structures & park seats
- Common open space areas to be located in areas that provide suitable solar access
- Raised garden beds and/or buffer planting to provide a physical separation between private open space terrace areas and common open space terrace areas.

Public Domain Areas:

Public domain works with this residential flat building development will include street improvement works to Willsons Road.

These public domain improvement works will include the following:

- New in situ concrete footpaths to Council standards
- New street tree planting and tree pits to Council standards
- New turf verge and/or verge planting to Council standards

Species selection and location of all verge plantings will be in respect to existing/proposed services and infrastructure, on street car parking and car door openings.

Planting Design Strategy:

The planting design strategy for this residential flat building development to include the following:

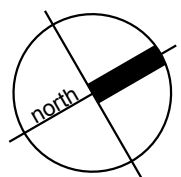
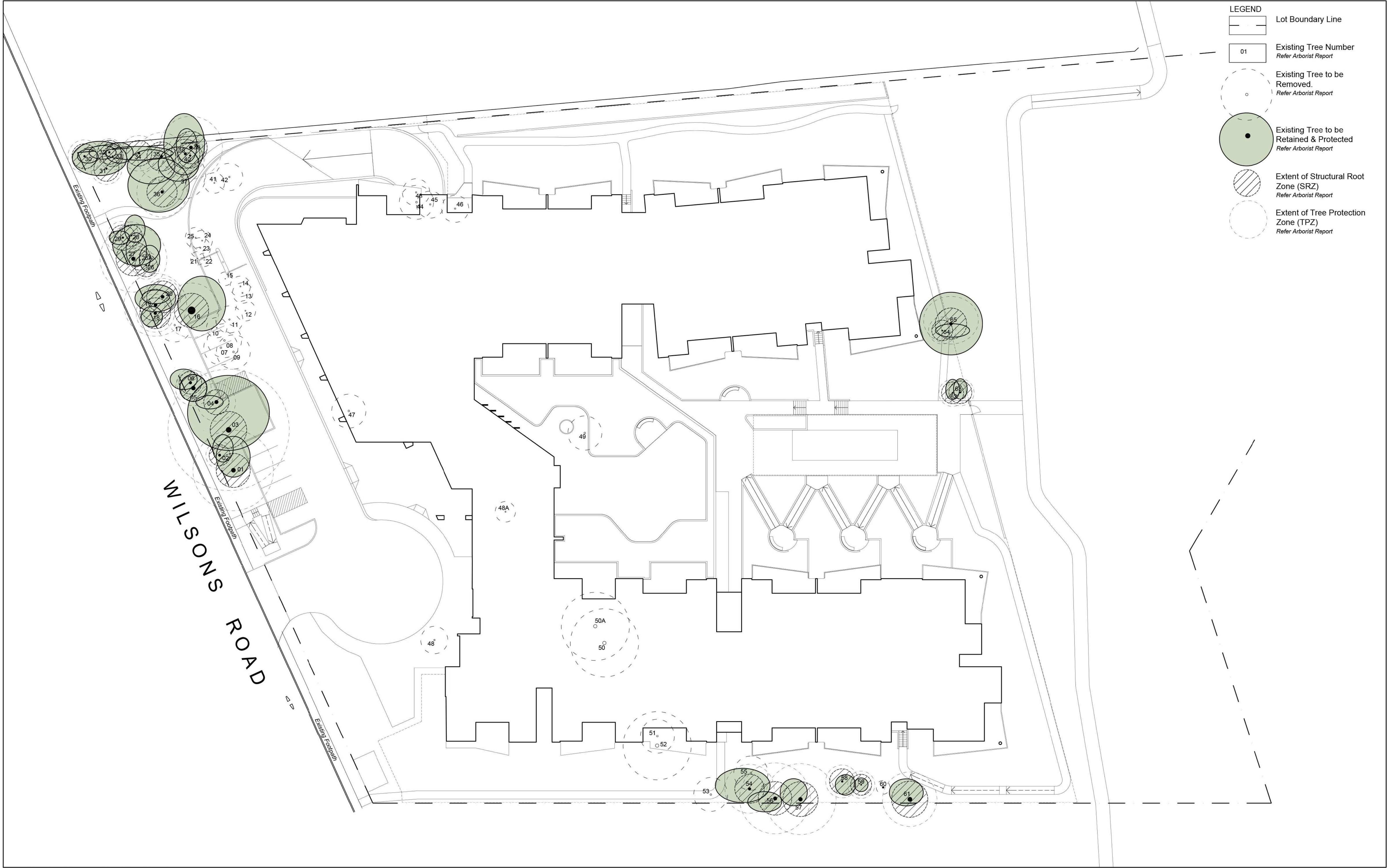
- Tree planting within appropriate deep soil zones to reduce bulk & scale of the development
- Screen planting to provide privacy and buffer between POS and common open space areas
- Evergreen tree planting to provide shade & amenity
- Deciduous tree planting to allow for solar access & seasonal change
- A broad planting palette to include a variety native species & exotic species to provide colour, texture, aroma & form
- Implementation of some indigenous species to encourage canopy corridor links and biodiversity

With the proposed landscape design for this development we would implement the following safety planting initiatives:

- Avoid planting tree species that are prone to potential limb drop
- Avoid planting species close to paths and hard paved areas that are known for excessive flower and foliage drop that may cause potential slip hazards
- Avoid planting species that are known for invasive root structure that may cause damage to existing infrastructure and damage paths & hard paved areas, which may cause potential trip hazards
- Avoid planting species that are known to be toxic or may cause respiratory, allergy and/or skin irritations

Shrub species, sizing & locations are to ensure that passive surveillance is maintained at building, carpark & driveway entries path and all plantings are to be layered to with smaller groundcovers and shrubs adjacent to paths and buildings in accordance with Crime Prevention Through Environmental Design (CPTED) principles.

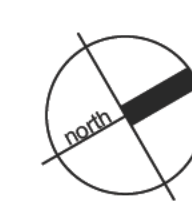
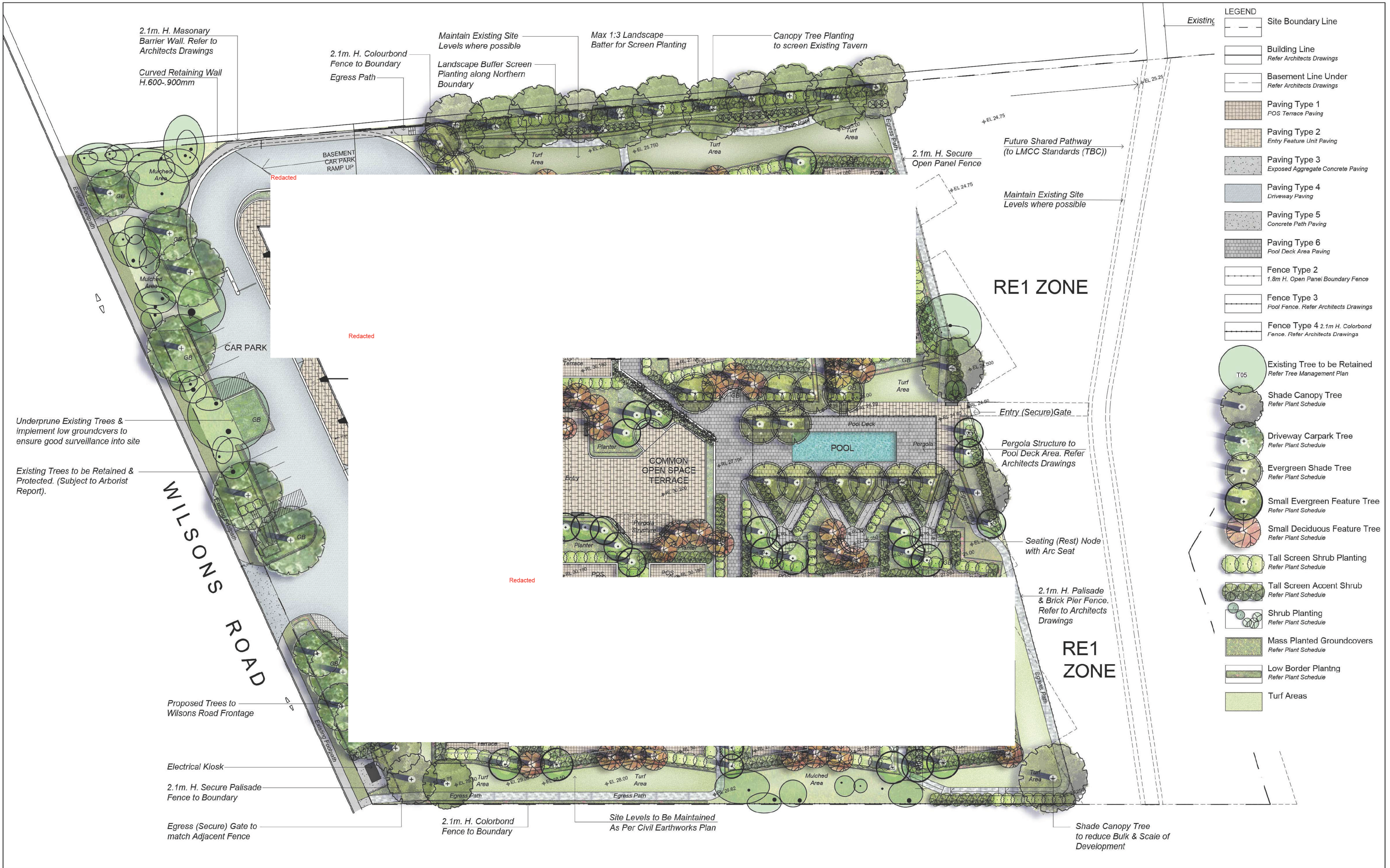
All proposed plant species selection has been considered in terms of soil types, species hardiness and on-going watering maintenance requirements. Predominantly low water use species (both native & exotic) have been grouped in regard to watering requirements and to reduce reliance on use of potable water.

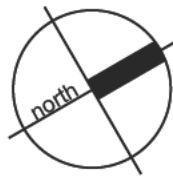
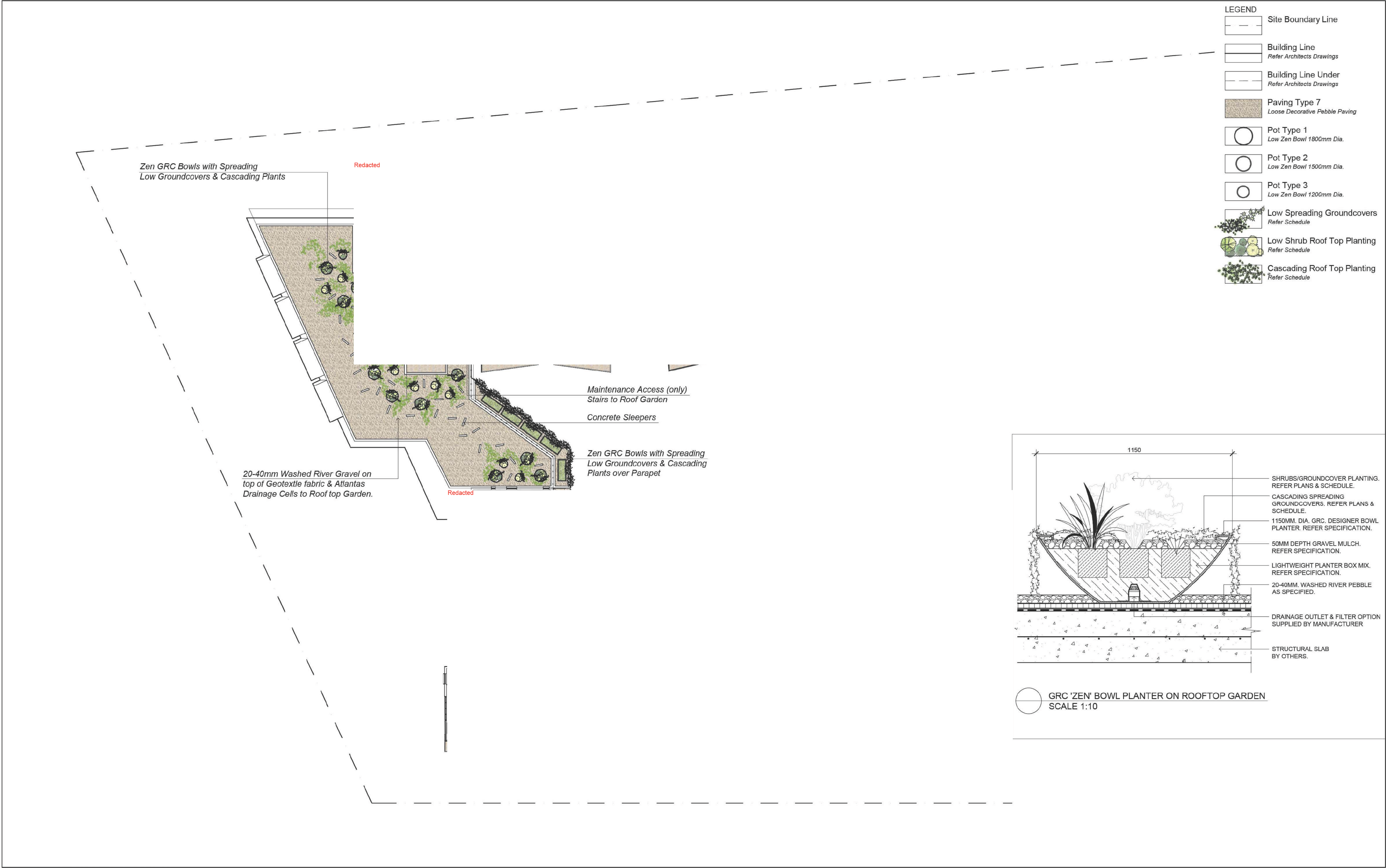


EXISTING TREE SCHEDULE

Tree No	Botanical Name	Common Name	HGT (m)	Retain/ Remove	Spread (m) NSEW	DGL (mm)	TPZ Radius (m)	SRZ Radius (m)	Comments
1	Angophora costata	Smooth –barked Apple	23	Retain	5172	520	5.9	2.51	Good. No significant structural defects
2	Eucalyptus saligna	Sydney Blue Gum	7	Retain	3121	60	2.0	1.53	Good. No significant structural defects
3	Angophora costata	Smooth –barked Apple	17	Retain	8366	610	8.9	2.69	Fair. No impacts expected
4	Eucalyptus saligna	Sydney Blue Gum	17	Retain	1113	250	2.8	1.85	Good. No significant signs of dieback
5	Eucalyptus saligna	Sydney Blue Gum	8	Retain	2222	280	2.6	1.94	Good. No significant signs of dieback or decline
6	Angophora costata	Smooth –barked Apple	8	Retain	2113	190	2.0	1.65	Good. No significant structural defects.
7	Eucalyptus saligna	Sydney Blue Gum	16	Remove	1111	170	2.0	1.57	Good. No significant structural defects
8	Eucalyptus saligna	Sydney Blue Gum	16	Remove	4222	430	3.7	2.32	Good. No significant structural defects
9	Corymbia maculata	Spotted Gum	17	Remove	3121	290	2.8	1.97	Good. No significant signs of dieback
10	Corymbia maculata	Spotted Gum	12	Remove	2112	250	2.3	1.85	Good. No significant signs of dieback
11	Eucalyptus saligna	Sydney Blue Gum	12	Remove	3121	310	2.3	2.02	Fair. Suppressed canopy orientated to the north
12	Angophora costata	Smooth –barked Apple	8	Remove	3111	190	2.0	1.65	Fair. Suppressed canopy orientated to the north
13	Corymbia citriodora	Lemon- scented Gum	7	Remove	1111	150	2.0	1.49	Good. No significant signs of dieback or decline
14	Corymbia citriodora	Lemon- scented Gum	13	Remove	2111	210	2.2	1.72	Good. No significant structural defects
15	Corymbia citriodora	Lemon- scented Gum	13	Remove	2111	210	2.0	1.72	Good. No significant structural defects
16	Eucalyptus saligna	Sydney Blue Gum	12	Retain	5352	520	4.4	2.51	Good. No significant signs of dieback
17	Eucalyptus saligna	Sydney Blue Gum	12	Retain	2256	780	7.2	2.98	Poor. Dying tree Crown density <20%
18	Melaleuca linariifolia	Flax leafed Paper Bark	7	Retain	1212	400	2.8	2.25	Fair. No significant signs of dieback
19	Corymbia citriodora	Lemon- scented Gum	22	Retain	3133	430	4.6	2.32	Good. No significant signs of dieback
20	Eucalyptus saligna	Sydney Blue Gum	13	Retain	1113	430	2.7	2.32	Good/Fair. No significant signs of decline
21	Eucalyptus saligna	Sydney Blue Gum	7	Remove	1341	198	2.0	1.68	Good/Fair. No significant signs of dieback
22	Corymbia citriodora	Lemon- scented Gum	12	Remove	2122	210	2.0	1.72	Good. No significant structural defects
23	Corymbia citriodora	Lemon- scented Gum	12	Remove	2122	250	2.5	1.85	Good. No significant signs of dieback or decline
24	Corymbia maculata	Spotted Gum	7	Remove	2112	300	2.5	2.00	Good/Fair. No significant signs of dieback
25	Corymbia citriodora	Lemon- scented Gum	7	Remove	1112	160	2.0	1.53	Good. No significant signs of dieback or decline
26	Corymbia citriodora	Lemon- scented Gum	8	Retain	3121	190	2.0	1.65	Good. No significant signs of dieback or decline
26A	Corymbia maculata	Spotted Gum	8	Retain	4112	150	2.0	1.49	Good. No significant signs of dieback or decline
27	Corymbia citriodora	Lemon- scented Gum	23	Retain	5143	520	4.9	2.51	Good. No significant signs of dieback
28	Corymbia citriodora	Lemon- scented Gum	7	Retain	3121	170	2.0	1.57	Good. No significant structural defects
29	Corymbia maculata	Spotted Gum	8	Retain	1112	250	2.4	1.85	Poor/Fair. No significant signs of dieback
30	Corymbia citriodora	Lemon- scented Gum	12	Retain	1121	240	2.4	1.82	Good/Fair. No significant signs of decline
31	Corymbia citriodora	Lemon- scented Gum	7	Retain	4135	250	2.3	1.85	Good/Fair. No significant signs of dieback
32	Corymbia citriodora	Lemon- scented Gum	12	Retain	1113	220	2.0	1.75	Good. No significant signs of dieback
33	Angophora costata	Smooth –barked Apple	6	Retain	2131	160	2.0	1.53	Good/Fair. No significant signs of decline
34	Corymbia citriodora	Lemon- scented Gum	13	Retain	1155	260	2.6	1.88	Good. No significant structural defects
35	Corymbia citriodora	Lemon- scented Gum	18	Retain	1425	350	3.5	2.13	Good. No significant signs of dieback
36	Corymbia citriodora	Lemon- scented Gum	17	Retain	5345	390	3.7	2.23	Good. No significant signs of dieback
37	Corymbia citriodora	Lemon- scented Gum	16	Retain	5243	350	3.2	2.13	Good. No significant structural defects
38	Corymbia citriodora	Lemon- scented Gum	7	Retain	1424	350	2.8	2.13	Good/Fair. No significant signs of decline
39	Corymbia citriodora	Lemon- scented Gum	23	Retain	5424	450	4.6	2.37	Good. No significant signs of decline
40	Corymbia citriodora	Lemon- scented Gum	6	Retain	4112	240	2.2	1.82	Good. No significant signs of decline
41	Corymbia citriodora	Lemon- scented Gum	6	Remove	2121	220	2.2	1.75	Good. No significant signs of decline
42	Corymbia citriodora	Lemon- scented Gum	12	Remove	5232	290	2.9	1.97	Good. No significant signs of decline
43	Eucalyptus tereticornis	Forest Red Gum	8	Retain	3112	260	2.4	1.88	Good. No significant signs of decline
44	Eucalyptus spp.	Eucalyptus Tree	7	Retain	1213	250	2.0	1.85	Good. No significant signs of decline
45	Eucalyptus tereticornis	Forest Red Gum	14	Retain	4444	370	3.5	2.18	No significant signs of dieback or decline
46	Eucalyptus tereticornis	Forest Red Gum	8	Retain	3233	260	2.4	1.88	No significant signs of dieback or decline
47	Melaleuca linariifolia	Flax leafed Paper Bark	7	Retain	3333	500	4.6	2.47	Good. No significant signs of dieback or decline
48	Schefflera actinophylla	Umbrella Tree	7	Remove	2332	550	4.8	2.57	Good. No significant signs of dieback or decline
48A	Cinnamomum camphora	Camphor Laurel	7	Remove	3322	300	2.5	2.00	Good. No significant signs of dieback or decline
49	Cinnamomum camphora	Camphor Laurel	12	Remove	430	5.0	2.32	1.88	Good.No significant structural defects
50	Melaleuca linariifolia	Flax leafed Paper Bark	6	Remove	4333	550	6.4	2.57	Good. No significant signs of dieback or decline
50A	Cinnamomum camphora	Camphor Laurel	6	Remove	2212	300	2.4	2.00	Good/Fair. No significant signs of dieback or decline
51	Pittosporum undulatum	Native Daphne	8	Remove	1213	300	2.4	2.00	Good/Fair. No significant signs of dieback or decline
52	Melaleuca linariifolia	Flax leafed Paper Bark	8	Remove	3223	550	5.0	2.57	Good/Fair. No significant signs of dieback or decline
53	Melaleuca armillaris	Bracelet Honey Myrtle	7	Remove	5111	320	3.1	2.05	Good. Dieback of some small branches
54	Melaleuca quinquenervia	Broad leafed Paper Bark	6	Retain	3235	360	3.6	2.15	Good. No significant signs of dieback
55	Melaleuca armillaris	Bracelet Honey Myrtle	8	Remove	1115	300	2.6	2.00	Good/Fair. Dieback of some small branches but no significant signs of decline
56	Melaleuca linariifolia	Flax leafed Paper Bark	6	Retain	1214	500	5.2	2.47	Good. No significant signs of dieback or decline
57	Melaleuca linariifolia	Flax leafed Paper Bark	6	Retain	3113	550	5.2	2.57	Good/Fair. No significant signs of dieback or decline
58	Melaleuca linariifolia	Flax leafed Paper Bark	5	Retain	1221	250	2.4	1.85	Good. No significant signs of dieback or decline
59	Melaleuca linariifolia	Flax leafed Paper Bark	5	Retain	1111	160	2.0	1.53	Good. No significant structural defects
60	Melaleuca linariifolia	Flax leafed Paper Bark	5	Retain	1111	250	2.2	1.85	Good/Fair. No significant signs of dieback or decline
61	Melaleuca linariifolia	Flax leafed Paper Bark	5	Retain	3123	600	4.0	2.67	Good/Fair. No significant signs of dieback or decline
62	Eucalyptus spp.	Eucalyptus Tree	7	Retain	2111	180	2.0	1.61	Good. No significant signs of dieback or decline
63	Eucalyptus robusta	Swamp Mahogany	7	Retain	2111	200	2.0	1.68	Good. No significant signs of dieback or decline.
64	Eucalyptus spp.	Eucalyptus Tree	5	Retain	1141	160	2.0	1.53	Good. No significant signs of dieback or decline.
65	Eucalyptus robusta	Swamp Mahogany	8	Retain	4344	420	4.6	2.30	Good/Fair. No significant signs of dieback or decline

DGL Diameter At Ground Level
TPZ Tree Protection Zone
SRZ Structural Root Zone



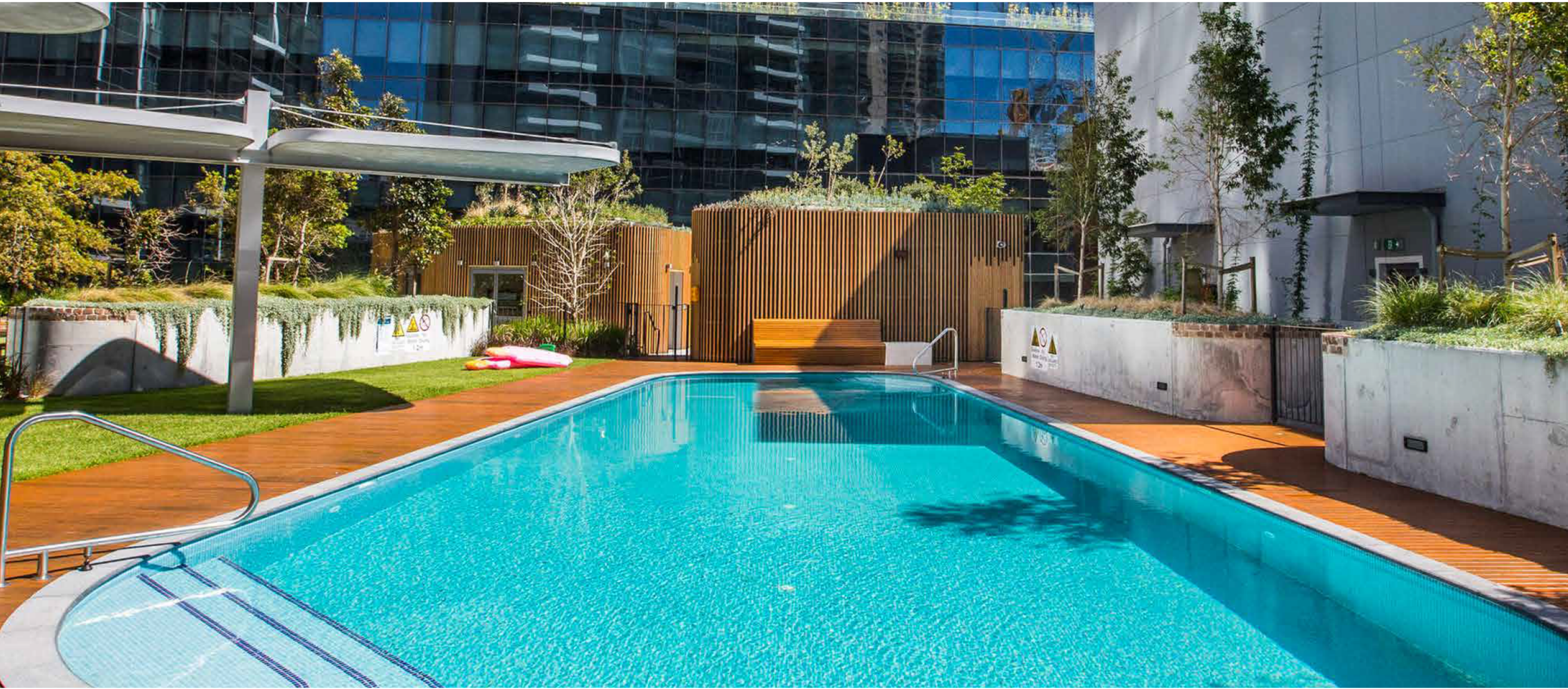




PATHWAYS & CIRCULATION



BUFFER & SCREEN PLANTING



COMMUNAL LANDSCAPED AREAS

Image	Botanical Name	Common Name	Mature Height (m.)	Mature Spread (m.)	Pot Size	Comments
Shade Amenity Trees						
01	<i>Brachychiton populneus</i> *	Kurrajong	15	5	75L	Stakes and ties
02	<i>Cupaniopsis anacardioides</i> *	Tuckeroo	8	6	75L	Stakes and ties
	<i>Elaeocarpus obovatus</i> *	Hard Quandong	10	6	75L	Stakes and ties
	<i>Elaeocarpus reticulatus</i> *	Blueberry Ash	10	5	75L	Stakes and ties
03	<i>Waterhousia floribunda</i> 'Sweeper'	Weeping Lilly Pilly	10	7	75L	Stakes and ties
	<i>Syzigium australe</i> *	Bush Cherry	15	7	75L	Stakes and ties
	<i>Syzigium paniculatum</i> *	Magenta Lillypilly	15	10	75L	Stakes and ties
	<i>Tristaniopsis 'Luscious'</i> *	Luscious Water Gum	8	5	75L	Stakes and ties
04	<i>Xanthostemon chrysanthus</i>	Golden Penda	10	5	75L	Stakes and ties
Driveway Car Park Trees						
	<i>Corymbia maculata</i> *	Spotted Gum	30	10	75L	
	<i>Corymbia eximia</i> 'Nana'	Yellow Bloodwood	7	5	75L	
	<i>Eucalyptus gummifera</i> *	Red Bloodwood	35	15	75L	
	<i>Eucalyptus piperita</i> *	Sydney Peppermint	20	12	75L	
	<i>Lophostemon confertus</i>	QLD Brush Box	10	6	75L	
Small Evergreen Feature Tree						
	<i>Angophora hispida</i> *	Dwarf Apple	6	4	45L	
	<i>Backhousia citriodora</i>	Lemon Myrtle	8	5	45L	
05	<i>Buckinghamia celissimia</i>	Ivory Curl Flower	8	2	45L	
	<i>Callistemon salignus</i> *	Willow Bottlebrush	5	4	45L	
	<i>Harpullia pendula</i>	Tulipwood	6	4	45L	
06	<i>Leptospermum petersonii</i>	Lemon Scented Tea Tree	5	2	300mm	Squirrel Glider Habitat
Small Deciduous Trees						
	<i>Acer x freemanii</i> 'Jeffersred'	Autumn Blaze	10	8	75L	Stakes and ties
	<i>Fraxinus angustifolia</i> 'Raywood'	Claret Ash	7	5	75L	Stakes and ties
	<i>Lagerstroemia indica</i> x <i>L. fauriei</i>	Crepe Myrtle	5	3-4	75L	Stakes and ties
07	<i>Magnolia</i> x <i>soulangiana</i>	Magnolia	6	4	75L	
	<i>Pyrus calleryana</i> 'Capital'	Capital Pear	10	3	75L	Stakes and ties
Tall Screen Shrubs > 1.5m						
08	<i>Acmena smithii</i> 'Red Alert'	Red Alert Lily Pily	4	2	300mm	
	<i>Banksia ericifolia</i> *	Heath-leaved Banksia	4	4	300mm	
	<i>Banksia robur</i> *	Swamp Banksia	2	2	300mm	
	<i>Grevillea banksii</i> 'Alba'	White Banks Grevillea	2.5	2	500mm	Squirrel Glider Habitat
	<i>Hakea bakeriana</i>	Hakea	2	1.5	300mm	Squirrel Glider Habitat
	<i>Leptospermum polygalifolium</i>	Tantoon	2	1.5	300mm	Squirrel Glider Habitat
	<i>Photinia</i> spp.	Christmas Cherry	3	2	180mm	
09	<i>Syzigium australe</i> 'Pinnacle'	Pinnacle Narrow Lilly Pilly	7.5	1.5	300mm	
10	<i>Viburnum odoratissimum</i>	Sweet Viburnum	4	2	300mm	
Shrubs < 1.5m						
	<i>Acacia terminalis</i>	Sunshine Wattle	1	1	200mm	Squirrel Glider Habitat
	<i>Banksia oblongifolia</i>	Fern-leaved Banksia	1	1	200mm	Squirrel Glider Habitat
	<i>Callistemon 'Better John'</i>	Better John Bottlebrush	1.2	0.9	200mm	
	<i>Grevillea lanigera</i>	Soft Leaved Grevillea	1	1	200mm	
11	<i>Raphiolepis indica</i> 'Apple Blossom'	Apple Blossom Hawthorn	1	1	200mm	
	<i>Westringia fruticosa</i> 'Zena'	Westringia 'Zena'	1.2	1.2	200mm	
Tall Accent Shrubs						
12	<i>Dyopsis lutescens</i>	'Golden Cane' Palm	3	1.5	300mm	
13	<i>Rhaphis excelsa</i>	Tall Lady Palm	3	1.5	300mm	
	<i>Stretlitzia Reginae</i>	Bird of Paradise	2	1	300mm	
14	<i>Thysanolaena maxima</i>	Tiger Grass	2.5	1	300mm	
Accent Shrubs						
	<i>Arthropodium cirratum</i>	NZ Rock Lily	0.6	1	200mm	
15	<i>Lomandra 'Lime Tuff'</i>	Lomandra Lime Tuff	0.6	0.6	300mm	
Mass Planted Groundcovers						
	<i>Brachysome multifida</i> *	Cut-leaved Daisy	<0.5	0.5	140mm	
	<i>Carpobrotus glaucescens</i> *	Pigface	<0.5	1.5	140mm	
	<i>Convolvulus cneorum</i>	Silver Bush	0.5	1	140mm	
	<i>Dianella caerulea</i> 'Little Jess'	Little Jess Flax Lily	0.4	0.4	140mm	
	<i>Dichondra repens</i>	Kidney Weed	0.1	1.5	100mm	
	<i>Ficinia nodosa</i> *	Knobby Club-Rush	0.5	0.5	140mm	
16	<i>Liriope muscari</i> 'Isabella'	Isabella Fine Leaf Liriope	0.4	0.5	140mm	
	<i>Myoporum parvifolium</i> 'Yareena'	Yareena Creeping Boobialla	0.1	1	140mm	
17	<i>Poa labillardieri</i> 'Kingsdale'	Blue Tussock Grass	0.45	0.45	140mm	
18	<i>Westringia 'Mundi'</i>	Westringia 'Mundi'	0.6	1.5	140mm	
Low Border Planting						
	<i>Carex albul</i> a 'Frosted Curls'	New Zealand Hair Sedge	0.6	0.6	140mm	
	<i>Chrysocepalum apiculatum</i> 'Desert Flame'	Yellow Buttons	0.5	0.3	140mm	
19	<i>Lomandra confertifolia</i> 'Wingarra'	Lomandra Wingarra	0.4	0.6	140mm	
20	<i>Viola hederacea</i>	Native Violet	0.1	0.3	140mm	
Cascading Planting						
21	<i>Casuarina glauca</i> 'Cousin It'	Cousin It	0.3	1	140mm	
	<i>Hardenbergia violacea</i> 'Meema'	Meema Snake Vine	0.5	2	140mm	
	<i>Rosmarinus officinalis</i> 'Blue Lagoon'	Blue Lagoon Rosemary	0.3	1	140mm	
Shade Tolerant Planting						
22	<i>Asplenium australasicum</i>	Birds Nest Fern	1	1	140mm	
	<i>Blechnum nudum</i>	Fishbone Water Fern	0.7	0.5	140mm	
	<i>Macrozamia communis</i>	Burrawang	1	1.5	140mm	
23	<i>Philodendron 'Xanadu'</i>	Xanadu Dwarf Philodendron	0.8	0.8	140mm	
	<i>Pteris tremula</i>	Tender Brake	1	0.8	140mm	
Climbers						
24	<i>Cissus antarctica</i>	Kangaroo Vine	6		140mm	
	<i>Hardenbergia violacea</i> *	False Sarsparilla	5		140mm	
25	<i>Hibbertia scandens</i> *	Climbing Guinea Flower			140mm	
	<i>Pandorea pandorana</i> *	Wonga Wonga Vine			140mm	

*As Recomendend in Lake Macquarie Development Control Plan (DCP) 2014, Part 10: Mount Hutton Area Plan.

