APPENDIX A

PLANTING SPECIES & FORM GUIDANCE

TREES & LARGE SHRUBS

Plant name	Common names	Form	Height (m)	Spread (m)	Size	Native or Exotic	Flood Tolerant	Drought Tolerant	Climatic Suitability 2070	Hardiness	CoPP Urban Forest Officer Comments
Acacia brownii	Heath Wattle	shrub	3-8	3-6	Small-Medium	Native to Australia	Yes	Very good	suitable	High	Unsure of flood tolerance, average with waterlogging. Expect 1.5m x 1-2m size. 100% a shrub and not a tree, low growing and prostrate irregular form
Acacia dealbata	Silver Wattle	shrub, tree	10-15	5-10	Medium	Native to Australia	Yes	Average	suitable	High	Expect 5-7m spread, will end up a tree unless pruned not to be or of bad form. Hardy but best with sufficient water and prone to borer attack and gall wasp
Acer buergerianum	Trident Maple	tree	6-10	5-8	Medium	Exotic (Asia)	No	Average	suitable	High	Expect 10m x 6m, Very good waterlogging tolerance so may be reasonable with flood. Average tolerances and requires reasonable moisture to perform well to mature establishment.
Agonis flexuosa	West Australian Weeping Peppermint	shrub, tree	6-15	4-8	Medium	Native to Australia	No	Very good	marginal	Medium	Expect 10m x 6m, will end up a tree unless pruned not to be or of bad form.
Allocasuarina verticillata	Drooping She Oak	tree	6-15	4-10	Medium	Native to Australia	No	Very good	marginal	Medium	Expect 5-10m x 3-7m, moderately good with waterlogging so flood tolerance may be reasonable, moderately good with compaction, ability to nodulate with soil actinomycetes for N-fixation and can exist in poor soils
Angophora costata	Sydney Red Gum	tree	20-30	15-25	Large	Native to Australia	No	Very good	unsuitable	Low	Expect 20m x 12-15m, reasonable hardy low maintenance species other than with prolonged wet
Banksia integrifolia	Coast Banksia	shrub, tree	5-25	3-8	Medium-Large	Native to Australia	No	Very good	suitable	High	Expect 10-15m x 6m unless maintained not to be a tree or in a hostile site
Banksia marginata	Silver Banksia	shrub, tree	2-12	2-8	Small-Medium	Native to Australia	No	Very good	suitable	High	Expect 4-6m x 3-5m, less hardy than B. integrifolia
Brachychiton populneus	Kurrajong	tree	10-20	6-12	Medium-Large	Native to Australia	No	Very good	suitable	High	Expect 10m x 8m, hardy in dry but not tolerant of poorly draining soils
Callistemon citrinus	Lemon Scented Bottlebrush	shrub, tree	3-7	3-5	Small-Medium	Native to Australia	No	Very good	marginal	Medium	Expect 3-4m x 3-4m, more shrub less tree. Very good waterlogging, drought and compaction tolerance thus reaonably hardy and may be reasonable with flood
Callistemon viminalis	Weeping Bottlebrush	shrub, tree	4-8	3-6	Small-Medium	Native to Australia	No	Moderately good	suitable	High	Reliable, however slow to form a tree in Victoria, poor performance in very hot sites. Many cultivars exist, 'Prolific' cultivar flowers insanely
Corymbia eximia	Yellow Bloodwood	tree	10-20	5-12	Medium-Large	Native to Australia	Yes	Very good	marginal	Medium	Expect 8-14m x 4-8m. Better with dry than wet, tolerant of flooding if soil is fast draining. Considered robust and low maintenance
Corymbia ficifolia	Flowering Gum	shrub, tree	8-15	5-10	Medium	Native to Australia	Yes	Very good	suitable	High	A tree, not a shrub. Poor with waterlogging, only flood tolerant if on fast draining soils
Corymbia maculata	Spotted Gum	tree	20-40	10-20	Large	Native to Australia	Yes	Moderately good	suitable	High	Expect ~10m width. Shade can be very dappled, index should be lower when in comparison to a broad leaf spreading species
Cupaniopsis anacardioides	Tuckeroo	tree	8-15	4-10	Medium	Native to Australia	No	Very good	suitable	High	Good stock selection for branch structure is important for future shape and form
Eucalyptus leucoxylon	Yellow Gum	tree	10-30	6-15	Medium-Large	Native to Australia	No	Very good	marginal	Medium	One of the most widely used Eucalypts for street trees across melbourne. 'Connata' a widely used cultivar, ~20m tall. Dwarf cultivar 'Euky dwarf' ~6.5m tall. 6 subspecies
Eucalyptus macrorhyncha	Red Stringybark	tree	10-30	6-20	Medium-Large	Native to Australia	No	Very good	marginal	Medium	Shade can be very dappled, index should be lower when in comparison to a broad leaf spreading species

Plant name	Common names	Form	Height (m)	Spread (m)	Size	Native or Exotic	Flood Tolerant	Drought Tolerant	Climatic Suitability 2070	Hardiness	CoPP Urban Forest Officer Comments
Eucalyptus melliodora	Yellow Box	tree	10-30	6-20	Medium-Large	Native to Australia	No	Very good	suitable	High	Expect 15m spread. Shade can be very dappled, index should be lower when in comparison to a broad leaf spreading species
Eucalyptus microcarpa	Grey Box	tree	10-25	10-15	Medium-Large	Native to Australia	No	Very good	suitable	High	Uncommonly used in urban areas, large deep roots can be problematic
Eucalyptus obliqua	Messmate Stringybark	tree	20-50	15-30	Large	Native to Australia	Yes	Average	marginal	Medium	Unsure of flood tolerance, expected to be fairly average for waterlogging tolerance however with size will consume a lot of water which may lend partly to a percieved better flooding tolerance. Can grow very large (90m), too large for use in urban areas other than big parks. Can also develop a mallee form and a significant ligonotuber
Eucalyptus ovata subsp. ovata	Swamp Gum	tree	8-20	6-12	Medium-Large	Native to Australia	Yes	Average	unavailable	Medium	Tolerant of compacted and wet soils, not super large, may be an ideal native candidate for high watertable balaclava
Eucalyptus pauciflora	Snow Gum	shrub, tree	8-20	6-15	Medium-Large	Native to Australia	Yes	Average	unsuitable	Low	Subspecies Pauciflora has been used as a street tree successfully
Eucalyptus radiata	Narrow Leaved Peppermint	tree	15-30	10-20	Large	Native to Australia	No	Very good	marginal	Medium	Can reach 40m, considered a low water user, suits a wide range of soil and climates
Eucalyptus sideroxylon	Red Ironbark	tree	15-25	10-15	Large	Native to Australia	No	Very good	suitable	High	Resilient and drought tolerant. Moderately alkaline tolerant. Monitor with age for safety. Underused across CoPP
Eucalyptus viminalis	Manna Gum	tree	15-50	10-30	Large	Native to Australia	Yes	Average to poor	unsuitable	Medium	Common riparian revegetation species. Best with deep soils and reasonable drainage. Subspecies pryoriana is smaller, spreading and grows from gipsland toward Melbourne and has a low water use rating however not better than average with waterlogging
Fraxinus ornus	Flowering Ash	tree	10-15	8-10	Medium	Exotic (Europe)	No	Moderately good	marginal	Medium	Can seed prolifically and be weedy. Suited to S.Aus conditions but generally requires good formative pruning
Fraxinus pennsylvanica Cimmzam Cimmaron	Cimmaron Green Ash	tree	12-15	10-12	Medium	Exotic (North America)	No	Average to good	unavailable	Medium	Used as replacement for F. oxycarpa around albert park. Reportedly robust with very good branch structure. Low maintenance other than required powerline related pruning and training.
Jacaranda mimosifolia	Jacaranda	tree	10-15	8-12	Medium	Exotic (South America)	No	Average	suitable	High	Not similar in appearance, but considered a good plane tree alternative by some in the industry.
Lagerstroemia indica	Crepe Myrtle	shrub, tree	3-8	3-5	Small-Medium	Exotic (Asia)	No	Moderately good	suitable	High	Over 700 in use across CoPP, lovely when able to grow to its larger size and when in flower
Leptospermum laevigatum	Coast Tea Tree	shrub, tree	3-8	3-6	Small-Medium	Native to Australia	No	Very good	suitable	High	Most likely not a great tree for street use due to its common gnarled form, maybe useable in wide NS streets.
Livistona australis	Cabbage Palm	palm	15-25	6-10	Large	Native to Australia	Yes	Average	marginal	Medium	Very good with waterlogging, may be a viable alternative to Phoenix canariensis where palms are an important aesthetic but fusarium is a problem, however a waste of space for a location that can house a shade providing tree
Lophostemon confertus	Queensland Box	tree	10-25	6-15	Medium-Large	Native to Australia	No	Moderately good	suitable	High	Expect 15m x 10m, can appear poorly in dry sites, best with summer irrigation
Malus ioensis Plena	Pink Flowering Crab Apple	tree	5-8	4-6	Medium	Exotic (Asia)	No	Average	unavailable	Medium	Best in full sun on good quality soil. Formative prune when young. Will require summer irrigation. Seeds are poisonous in large quantities, but infrequently produced by the 'Plena' cultivar that is in use across CoPP.
Melaleuca lanceolata	Moonah	shrub, tree	3-10	2-8	Small-Medium	Native to Australia	Yes	Very good	unsuitable	Low	Average waterlogging tolerance. Very tolerant of salt spray and saline soil. Should persist without extra irrigation
Melaleuca linariifolia	Narrowleaf Paperbark	shrub, tree	6-10	4-6	Medium	Native to Australia	Yes	Very good	suitable	High	Very good with wet and dry, has been widely used as a street tree, but considered to not spread enough for shade provisions. Not reccomended due to tendency to break apart and its vigorous roots
Melia azedarach Elite	White Cedar	tree	10-15	8-10	Medium	Exotic (Asia)	No	Very good	unavailable	Medium	Low fruiting cultivar. Wood can be brittle, splitting can occur. Schedule 2, Regulation 24.3 Sewerage Act and may be planted in any street or road in any drainage area provided they are not planted closer than 3.5 metres to any sewer main or connection
Morus alba	Silkworm Mulberry	shrub, tree	10-15	10-15	Medium	Exotic (Asia)	No	Moderately good	suitable	High	Cultivar 'Chaparral' for dwarf, weeping and non fruiting, 'Pendula' for weeping form seen in many shopping strips like clarendon st

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Olea europaea Tolley's Upright	Tolley's Upright Olive	tree	6-12	3-6	Medium	Exotic (Mediterranean)	No	Very good	unavailable	Medium	Wide use of olives in CoPP streets, Tolley's Upright is low fruiting, some areas of CoPP have residents who harvest the olives
Phoenix canariensis	Canary Island Palm	palm	15-20	10-15	Large	Exotic (Canary Islands)	No	Very good	suitable	High	Fusarium, no longer an option to plant outside of strong heritage locations, however mature palm transplant is the preference over planting small which creates stock and price issues
Pistacia chinensis	Chinese Pistachio	tree	8-15	6-10	Medium	Exotic (Asia)	No	Very good	suitable	High	Requires formative pruning. Dioecious, preference to male plants to avoid fruit litter.
Platanus orientalis Insularis Autumn Glory	Autumn Glory Plane	tree	20-30	15-25	Large	Exotic (Europe)	Yes (not prolonged)	Moderately good	unavailable	Low	Cultivar 'Digitata' used in CoPP, higher resistance to Anthracnose than other platanus
Platanus x acerifolia	London Plane Tree	tree	20-30	15-25	Large	Exotic (North America)	Yes (not prolonged)	Moderately good	unavailable	Medium	Considered to have reasonable future proofing, will tolerate some poor situations once established. Will cause significant infrastructure damage if planting site is not well prepared or of sufficient size. Roots will spread far.
Pyrus calleryana	Ornamental Pear	tree	8-15	6-10	Medium	Exotic (Asia)	No	Moderately good	suitable	High	Many cultivars, newer varieties preffered due to increased tolerances and better structural strength. Decent overall tolerances. Many cultivars of varying form to suit different street typologies
Quercus acutissima	Sawtooth Oak	tree	15-25	15-20	Large	Exotic (Asia)	No	Average	unavailable	Low	Expect 20m x 15m at most, unless in a very good spot. Very bad with coastal exposure. Best in cooler climates
Quercus palustris	Pin Oak	tree	15-25	10-15	Large	Exotic (North America)	Yes	Average	suitable	High	A large tree used in streets in southern Australia. Some trees retain dead leaves well into winter. Good with waterlogging
Syzygium floribundum	Weeping Lilly Pilly	tree	10-25	5-12	Medium-Large	Native to Australia	Yes	Moderately good	unsuitable	Low	Can reach 20m in its habitat, but not expected in urban areas. Best with sufficient water on good soils. Common street and park tree. Hard prune to rejuvinate.
Tristaniopsis laurina	Water Gum	tree	7-20	4-8	Medium-Large	Native to Australia	Yes	Moderately good	suitable	High	Formative prune and train to single stem for street use, can be slow to mature.
Ulmus parvifolia	Chinese Elm	tree	10-15	10-15	Medium	Exotic (Asia)	Yes	Moderately good	suitable	High	Resistant to Elm Leaf Beetle. Older trees appear inclined to lose large limbs, require formative pruning
Ulmus procera	English Elm	tree	30-35	20-30	Large	Exotic (Europe)	Yes	Average	unsuitable	Medium	Not expected to be a continued species for use, more prone to pest issues and not considered climate proof. Prone to suckering prolifically, tendency to die back drought, vulnerable to threat of Dutch Elm Disease, Elm leaf beetle need to be managed. If pushing an elm like tree use Ulmus davidiana var. japonica x pumila 'Sapporo Autumn Gold', Ulmus parvifolia, Ulmus minor x parvifolia 'Frontier', Celtis sp., Zelkova sp. as alternatives.
Washingtonia robusta	Cotton Palm Washington Palm, Mexican fan palm	palm	15-30	3-5	Large	Exotic (USA)	No	Very good	suitable	High	Not good waterlogging tolerance, there may be the possibility for fusarium oxysporum f.sp. canariensis to infect in which would rule this species out as a Phoenix canariensis replacement species
Acacia melanoxylon	Blackwood	Tree	12-25	6-10	Medium	VIC, QLD, NSW, SA, TAS. Widespread coastal to inland distribution	Yes	Moderately good			Reported as underutilised. Long lived, not as fast as other Acacia. No irrigation needed once established
Acacia binervia	Coast Myall	Tree, shrub	5-16	5-16	Small-Medium	VIC - Eastern, upper Snowy River. NSW - Central tablelands, Central western slopes.	No	Moderately good			Better ULE than most Acacia, up to 50 years. Reasonable plant for dry sites. Good stock selection needed as with good formative pruning to maintain a good shape for street use.
Casuarina cunninghamiana	River Sheoak	Tree	20-30	8-12	Large	QLD, NSW, ACT - Northern QLD to southern NSW coastal to inland (for subsp. Cunninghamiana)	Yes	Moderately good			Best with sufficient water, High water table balaclava contender. Grow best with sufficient water, fixates atmospheric nitrogen.
Corymbia citiriodora	Lemon-scented Gum	Tree	20-35	12-18	Large	QLD, NSW - North central coastal QLD to northeast NSW. Naturalised in VIC, inland QLD, WA, NSW	No	Moderately good			Very attractive when given large sites to fully develop, can show fast growth when young. Can hybridise with C.maculata. Smaller cultivars exist. Sensitive to poorly drained soils and shows foliar chlorosis in alkaline soils that is exacerbated by cold weather.

Plant name	Common names	Form	Height (m)	Spread (m)	Size	Native or Exotic	Flood Tolerant	Drought Tolerant	Climatic Suitability 2070	Hardiness	CoPP Urban Forest Officer Comments
Eucalyptus cephalocarpa	Mealy Stringybark, Silver Stringybark	Tree	8-20	8-15	Medium-Large	VIC - Dividing range foothills east of Melb to NSW border	Yes	Very good			Viable trial species. Difficulty sourcing has prevented its use in CoPP. High water table balaclava contender
Eucalyptus macrandra	Long-flowered Marlock	Tree	3-8	4-10	Small-Medium	WA origin	Yes	Very good			Performs well in Melbourne streets in both sandy and clay soils. ULE in vic may be somewhat low. Monitor with age. Has been planted in Woodstock street in 2023
Eucalyptus michaeliana	Hillgrove Gum	tree	10-20	8-12	Medium-Large	NSW endemic, QLD, From St albans and Wollomombi into SE QLD	No	Very good			Can grow in a range of soils, sand to clay. Used as a street tree in ACT and Hawkesbury, should tolerate melbourne winters. Drought tolerant. Reportedly develops hollows well, unknown branch attachment strength.
Eucalyptus ovata	Swamp Gum	Tree	10-20	5-10	Medium	VIC and NSW	Yes	Average			Tolerant of wet and compacted soils, also occur on higher slopes and can be drought resistant. High water table balaclava contender
Eucalyptus platypus	Round-leaved Moort	Tree	9	5-10	Medium	Coastal WA, Albany to Esperance on clay soils	No	Very good			Performs well in East Aus for a WA species. Size control with pruning.
Hakea laurina	Pin-cushion Hakea, Kodjet	Tree, shrub	3.5-5	3	Small	WA - Southern sandplains	No	Moderately good			Reportedly long lived, used successfully in melbourne streetscapes.
Hakea salicifolia	Willow-leaved Hakea	Tree	6	3-4	Small	NSW and QLD	Yes	Average			Widely planted in urban situations. Sensitive to high soil phosphorus levels. Successful for a time, older specimens have been dying in large numbers (May be related to prolonged drought or Low ULE)
Acer x freemanii	Autumn Blaze Maple, Jeffers Red Maple, Freeman's Maple	Tree	13 m	10	Medium	Exotic	Yes	Average			Plane Tree alternative. Hybrid between A. rubrum and A. saccharinum. Well structured medium sized tree. Rich and dominant red autumn colour.
Acer truncatum x platanoides	Pacific Sunset Maple, Warren Red Maple	Tree	10-15	6-10	Medium-Large	Exotic	No	Average			Plane Tree alternative. Cultivar 'Taggerty Sunset' more upright and predictable form. Has performed well in some difficult situations, will need support to establishment in poor sites. Stunning autumn colours.
Celtis occidentalis	American Hackberry	Tree	10-15	5-7	Medium-Large	Exotic	No	Moderately good			Reasonably tolerant of dry and warm conditions. Weakly naturalised near the Yarra river in Heidelberg, Melbourne. Potential weed risk
Ginkgo biloba	Maidenhair tree, Ginkgo	Tree	15-25	8-10	Medium	Exotic	No	Moderately good			Reported to be very pollution tolerant, dioecious species, never use female plants in public landscapes or for aesthetic purposes as the false fruit (gymnosperm) creates an awful smell
Gleditsia triacanthos	Honey Locust	Tree	10-15	6-10	Medium	Exotic	No	Moderately good			Ideal if not planted near open space with reveg or green corridor intentions, can be invasive. Tough and useful fast growing urban tree, although can have brittle wood and thorns, many cultivars (including thornless), 'Inermis' and 'Sunburst' has been used in CoPP
Liquidambar styraciflua	Liquidambar, Sweet Gum	Tree	20-25	10-15	Average	Exotic	Yes	Average			Many cultivars. 'Worplesdon' has been used in CoPP
Quercus lobata	Valley Oak	Tree	10-30	10-25	Medium-Large	Exotic	Yes	Average to poor			Infrequetly grown in Aus, tolerances are still somewhat unknown for Vic conditions. Tolerates hot summers and seasonal flooding. May prove as a more future proof Oak for use in warming climates in areas with high water tables, but good draining soil. In its habitat taps into ground water, and will need a reliable water supply if in drier areas.
Quercus macrocarpa	Burr Oak	Tree	20-25	20-25	Large	Exotic	No	Moderately good			Successfully used in Canberra streets, suspected the used range were sources from drier habitats in their native range. Large amounts of acorn production can be normal, and may pose tripping and slipping hazards on hard surfaces.
Zelkova serrata		Tree	20	15	Large	Exotic	No	Average			Good public space tree, however has had variable performance in Melbourne streets worth investigating. 'Green Vase' is a popular cultivar in southern Australia for public plantings that has reasonable performance.

GRASSES, FORBS AND GROUNDCOVERS

Plant name	Common names	Form	Height (m)	Spread (m)	Size	Native or Exotic	Flood Tolerant	Climatic Suitability 2070	Hardiness
Atriplex cinerea	Coast Saltbush	shrub	0.5-3.0 m	1-3 m	Small	Native to Australia	Yes	suitable	High
Chenopodium nutans	Nodding Saltbush	shrub	0.5-2.0 m	0.5-1.5 m	Small	Native to Australia	Yes		High
Chrysocephalum apiculatum	Common Everlasting	herbaceous	0.2-0.5 m	0.3-1.0 m	Small	Native to Australia	No	suitable	High
Xerochrysum viscosum	Sticky Everlasting	herbaceous	0.3-0.5 m	0.3-0.5 m	Small	Native to Australia	No	suitable	High
Carpobrotus rossii	Pigface	herbaceous	0.1-0.3 m	1-2 m	Small	Exotic (South Africa)	Yes	suitable	High
Wahlenbergia communis	Tufted Bluebell	herbaceous	0.2-0.5 m	0.2-0.5 m	Small	Native to Australia	No		Medium
Linum marginale	Native Flax	herbaceous	0.3-1.0 m	0.3-0.5 m	Small	Native to Australia	No		Low
Brachyscome parvula	Coast Daisy	herbaceous	0.2-0.5 m	0.2-0.5 m	Small	Native to Australia	No		Low
Arthropodium strictum	Chocolate Lily	herbaceous	0.3-1.0 m	0.3-1.0 m	Small	Native to Australia	No		Low
Dichondra repens	Kidney Weed	groundcover	0.05-0.1 m	0.5-2.0 m	Small	Native to Australia	No	suitable	High
Spinifex sericeus	Rolling Spinifex	groundcover	0.2-0.6 m	0.5-1.5 m	Small	Native to Australia	Yes	suitable	High
Myoporum parvifolium	Creeping Boobialla	groundcover	0.05-0.3 m	1-3 m	Small	Native to Australia	No	suitable	High
Pelargonium australe	Austral Storks Bill	groundcover	0.3-1.0 m	0.3-1.0 m	Small	Exotic (South Africa)	No	suitable	High
Kennedia prostrata	Running Postman	groundcover	0.05-0.3 m	1-3 m	Small	Native to Australia	No	suitable	High
Austrostipa flavescens	Coast Spear Grass	grass	0.5-1.0 m	0.5-1.0 m	Small	Native to Australia	No	marginal	Medium
Dianella longifolia	Flax Lily	grass	0.5-1.0 m	0.5-1.0 m	Small	Native to Australia	No	suitable	High
Dianella revoluta	Blue Flax Lily	grass	0.3-0.7 m	0.3-0.7 m	Small	Native to Australia	No	suitable	High
Lomandra longifolia	Mat Rush	grass	0.5-1.0 m	0.5-1.0 m	Small	Native to Australia	Yes	suitable	High
Lomandra filiformis	Wattle Mat Rush	grass	0.3-0.6 m	0.3-0.6 m	Small	Native to Australia	Yes	suitable	High

Plant name	Common names	Form	Height (m)	Spread (m)	Size	Native or Exotic	Flood Tolerant	Climatic Suitability 2070	Hardiness
Themeda triandra	Kangaroo Grass	grass	0.5-1.0 m	0.5-1.0 m	Small	Native to Australia	No	suitable	High
Poa labillardieri	Common Tussock Grass	grass	0.3-1.2 m	0.3-0.8 m	Small	Native to Australia	No	suitable	High
Poa morrisii	Velvet Tussock Grass	grass	0.3-0.8 m	0.3-0.8 m	Small	Native to Australia	No	suitable	High
Rytidosperma caespitosum	Common Wallaby Grass	grass	0.3-0.6 m	0.3-0.5 m	Small	Native to Australia	No	unsuitable	Medium
Austrodanthonia geniculata	Kneed Wallaby Grass	grass	0.2-0.6 m	0.2-0.6 m	Small	Native to Australia	No		Medium
Distichlis distichophylla	Australian Salt Grass	grass	0.2-0.5 m	0.3-1.0 m	Small	Native to Australia	Yes		High
Microlaena stipoides	Weeping Grass	grass	0.2-0.6 m	0.3-0.8 m	Small	Native to Australia	No		Medium

SUPPORTING SPECIES SELECTION NOTES

Species Name

Some species can have a range of cultivars and grafted options that can influence tolerances, size and form. This can make some non-viable species suitable for sites that the normal species would generally not be considered suitable. It is worth investigating when a certain character or avenue planting is dominant through an area or street and is wishing to be maintained

Height

*Note that listed sizes are most likely not the final outcome in urban sites unless a very formidable species. Urban constraints often causing a bonsai like effect, as well with urban tree maintenance often limiting size

Flooding tolerance

*Flooding tolerance can be vague, duration of flooding tolerance is important. Waterlogging tolerance better describes ability to exist in soils at and above field capacity. For the purpose of Balaclava high water tables, consider carefully.

Drought tolerance

*In the context of 500-700mm annual rainfall. Drought defined as a shortfall of rainfall for an extended period. Tolerance mechanisms vary and are worth investigating, don't assume a listed good tolerance means a plant will just exist and hold on, often paired with a survival mechanism such as shedding of limbs in some tree species or defoliation. Often hard to fully conceptualise in urban scenarios, nearby irrigated gardens, high water tables and leaking water mains and/or stormwater networks will provide irrigation that is unknown, which is unreliable and difficult to be planned for. The same species 10m apart can perform completely differently due to these unknown variables.

Shade index

*Shade index can be misleading, the quality of shade is important for the benefits it provides, many natives may have large canopies however provide dappled shade, which is much less effective compared to the solid shade provided by broadleaf species.

APPENDIX C

WALK QUALITY RESEARCH METHODOLOGY

SWINBURNE UNIVERSITY OF TECHNOLOGY

WALK QUALITY RESEARCH METHODOLOGY

BUILDING THE DIGITAL TWIN AND INTEGRATING WALK-QUALITY

This work is linked to 'Walk-Quality' project. This initiative is led by Prof. Marcus White, Tianyi Yang, and Dave O'Reily from Swinburne University of Technology, and Dr Nano Langenheim, Prof. Mark Stevens, Dr Robyn Scofield, Associate Prof. Steven Livesly and Dr Sachith Seneviratne from the University of Melbourne.

The project aims to enhance the 'walk-quality' of urban areas by developing a design platform that evaluates various factors influencing pedestrian experiences.

The project is funded by the Australian Research Council (ARC) Linkage Grant (LP190100089) and industry partners. The platform considers key urban design elements such as pedestrian accessibility, slope, thermal comfort, pedestrian risk, and pollution. By analysing these factors, the tool aims to improve urban environments for pedestrians, making walking safer, more convenient, and comfortable for everyone.

This cross-disciplinary study involves collaboration with partners from the University of Melbourne, the Transport Accident Commission (TAC), Glen Eira Council, engineering consultancy, Maribyrnong Council, and VicRoads. The research is conducted at Swinburne's iHUB facility, which supports smarter urban planning, design, and management. For more detailed information, you can visit the project's official website: Walk-Quality.com

We have built a 3D context model of entire municipal areas of suitable accuracy for assessing shading and over-shadowing impacts for different times of the year. Footpath and crossing data have been generated partially through use of machine learning and partially through manual GIS/CAD generation covering 17000 segments of footpaths and 6300 crossings (Figure 3).

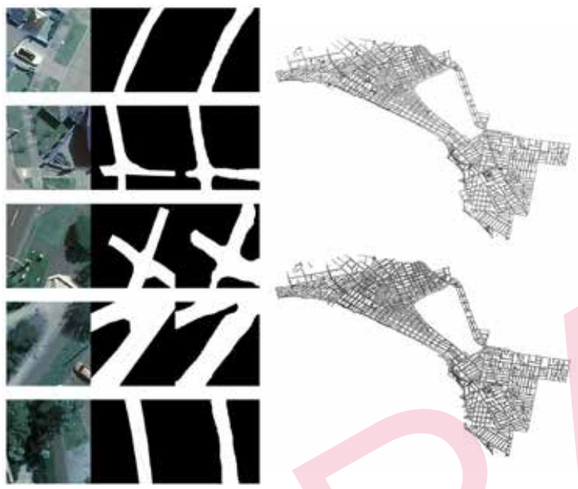


Figure 1: above, examples of the mask output from the best performing fine-tuning model. The model is pre-trained as the backbone of DINO-MCina self-supervised manner and then fine-tuned on footpath segmentation task training set with 1000 remote sensing images. Right, visualisation of the whole generated network with top right image of the ground truth footpath network, and bottom right showing the generated footpathetwork using our pipeline (Wanyan et al. 2023).

3D BUILT FORM MODEL FOR SHADOWS

The 3D built form model were generated from building extraction is done in three stages. Firstly, with Semantic Segmentation – recognising building pixels on an aerial image using deep neural networks (DNNs). Secondly, polygonization, by converting building pixel detections into polygons derived from Bing Maps imagery between 2014 and 2024 including Maxar, Airbus, and IGN imagery (available for download Bing Maps Global Building Footprints and use under ODbL).

The third stage of model development involved were estimating building heights by combining Open Street Map building height data, LiDAR data, and Bing Global Building height data derived from trained neural network to estimate height above ground using imagery paired with height measurements, with the average height of an overall building stored as a height attribute within a building polygon. We wrote a simple script to take the building height attribute and extrude the building outline polygon by that height attribute value to create a simple 3D building volume. Note that this model does not account for complex roof types or include the canopy of the building, so it should be used as a guide only. These 3D modelled buildings were used for shadow casting.

3D TREES MODELS FOR SHADOWS:

The process involved processed nearly 200,000 trees categorising species grouping and scaling for 3D model generation. Tree-shade shade maps were generated using 3D models with accurate height and canopy extent from geolocated trees (3D tree-form models) independently to the building shade. The trees-model was developed using the council (CoPP) GIS public tree point data, augmented with the Vicmap Vegetation imagery derived urban tree point data for location, height and canopy sizes. Newly planted small trees, which were not included in the CPP data or captured by Vicmap Vegetation imagery, are excluded from the model. The inclusion of trees within the private realm ensures a more comprehensive representation of those contributing to street shading.

The trees-model was processed in four stages. Firstly, to simplify, the GIS records of the 400 unique tree species planted across the municipality were categorised into six groups using a visual similarity approach. Each species was categorised as 'conifer', 'deciduous', 'eucalypt', 'evergreen exotic', 'evergreen native' or 'palm'. Where no species data was available, trees were categorised as 'undefined'. As no species data is available for the private realm trees, these trees were also categorised as 'undefined' (Figure 2).

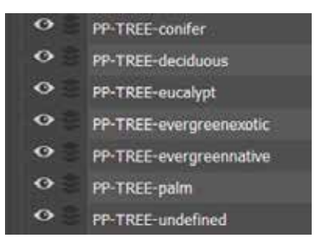


Figure 2: Categorisation of species as either 'conifer', 'deciduous', 'eucalypt', 'evergreen exotic', 'evergreen native' or 'palm'.

Secondly the categorisation was then used to assign which '3D tree-form model' would pass to each of the 46,500 tree points as they were exported from the GIS environment to the 3D modelling environment. We used Autodesk Civil 3D™ Map import process and the query builder to generate blocks representing each tree point from the GIS data with the attribute for canopy width controlling x,y scale and the attribute for height controlling the block elevation (Figure 5).

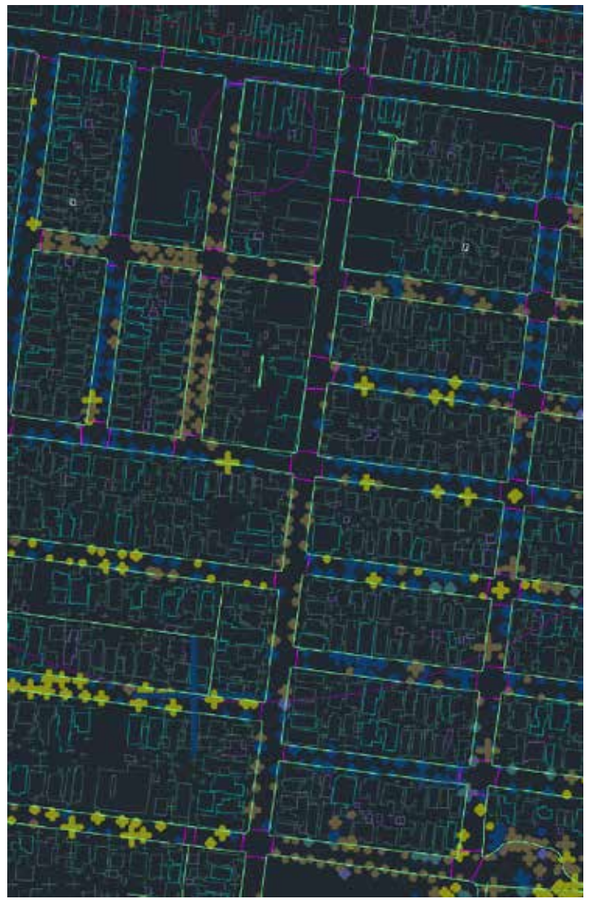


Figure 3: Screengrab of tree categorisation of nearly 200,00 trees, and 17000 segments of footpaths and 6300 crossings.

Thirdly, the 3D tree-form models were assigned to the point locations and coded to inherit the scaling properties of the AutoCAD blocks, while maintaining an average urban tree trunk height of 2.5m (scaling parameters are applied to the canopy section of the tree-form model). Scaled tree-point data was import as point from CIVIL3D with points coming in with block scale (X and Y) with height representing Z=canopy top height. Run script – read the Z value of the object and store as a Z height as a Z scale 'multiplier'. Points for all trees (except palms) should be moved down in the Z direction by 2.5 metres with canopy scaled to fit into 1x1x1m box. Scale should be adjusted (trunk height of 2.5m) (assuming the canopy begins at 2.5m) (Figure 4).

The tree-form models were built with moderately high polygon-density to allow enough realism to produce both traditional design imagery for qualitative visual decision-making support and simultaneously shade quantification for different street configurations, different times of day, and at different times of year (Figure 5).

Fourthly, from this model, shade maps of tree planting scenarios at children's head height (1.2 m) are 'rendered out', using a texture baking technique which captures shadows of objects in isolation, on a surface. The shade maps were rendered out at 1.6km by 1.6km at 8000x8000 pixels (each pixel =200mm) as 'geo-tiles' (geo-referenced to MGA2020/55).

The high-resolution tiles can be used for detailed analysis and also down-sized for merging with vector base footpaths for percentage shaded footpath calculations and visualisation (Figures 7, 8 and 9).

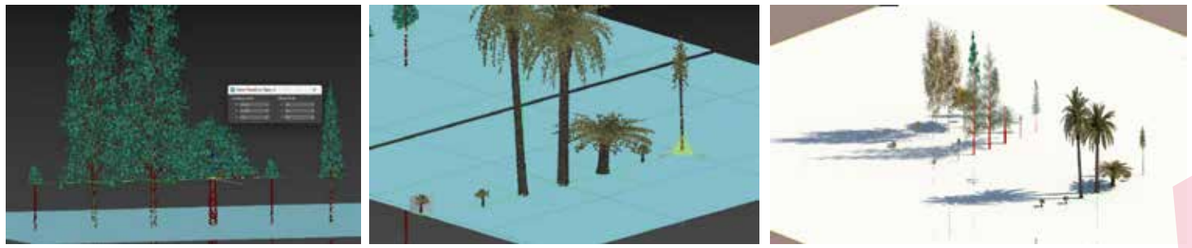


Figure 4: Tree models with canopy extents fit to 1x1x1 box upscaled based on canopy width and elevation data.

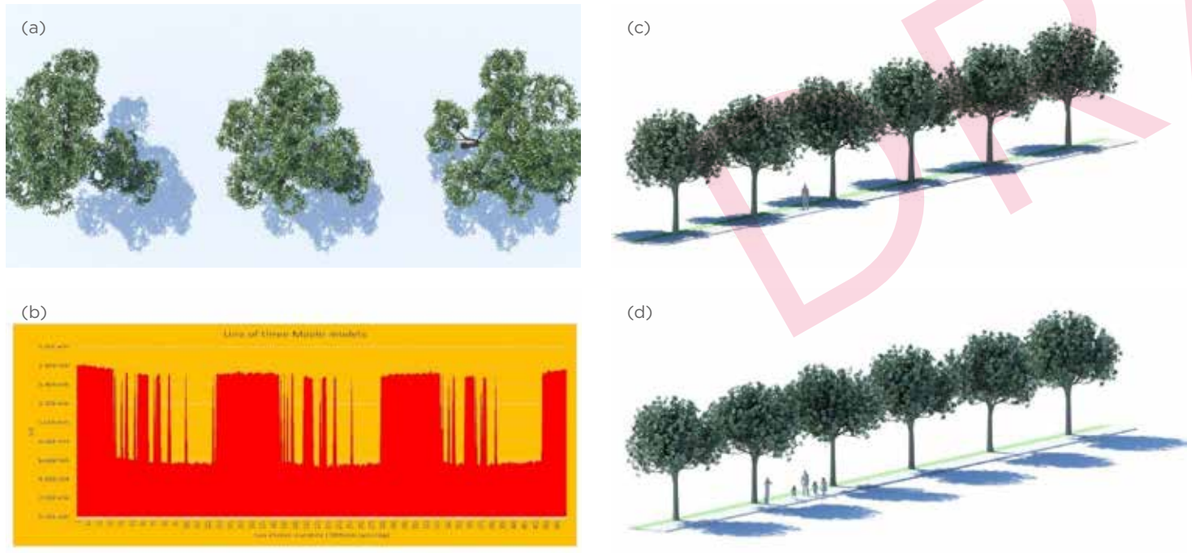


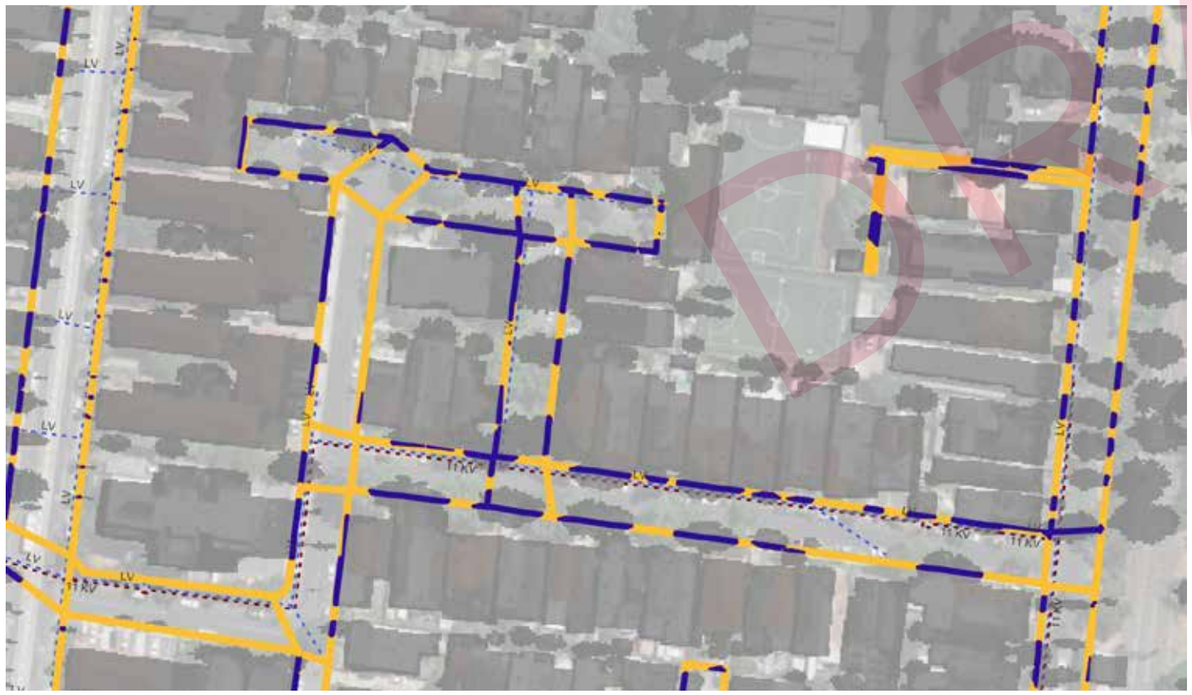
Figure 5: 3D Tree models (a) used to calculate time-based shadows measuring lux along footpaths (b). Shade can be assessed for different times of day, for example a north-south running street casting shadows on the footpath shading people at 12pm (c), or casting shade that misses the footpath and people walking at 3.30pm (d).

Figure 6 (above): Aerial perspective view of 3D building, tree and shade model.

Figure 7 (below): Down-scaled shadow map calculated for 3.30pm December 22.

Figure 8 (above): Down-scaled shadow map calculated for 3.30pm December 22 intersected with footpath vector data. Yellow footpath areas show footpath that is fully in shade, blue shows footpaths in shadow.

Figure 9 (below): Detailed plan view showing 3.30pm December 22 intersected with footpath vector data with yellow footpath areas show footpath that is fully in shade, blue shows footpaths in shadow, with dotted lines showing overhead powerline dataset.



INTEGRATING SHADE MAP WITH PEDESTRIAN CATCHMENTS

We've developed a tool (expanding upon our PedestrianCatch.com tool) that calculates walking access catchments, or 'ped-sheds,' while factoring in shade quality. This tool helps determine whether key destinations, such as air-conditioned buildings or well-vegetated community areas, are within a comfortable and safe ten-minute walk. Using a model that samples the shade maps produced in the earlier steps along footpaths, the tool evaluates tree shade coverage and sets a threshold for maximum direct sun exposure. This ensures that walking routes are not only accessible but also shaded enough to protect pedestrians, especially children, from excessive heat and UV radiation.

Walking catchments that integrate shading and pedestrian crossing wait times were generated for key destinations, measuring maximum direct sun exposure limits of 2, 4, 6, 8, and 10 minutes, as illustrated in Figure 10. Here, direct sunlight exposure acts as a limiting factor, influencing pedestrians to prioritise shaded pathways to minimise exposure to harsh sunlight. The resulting 10-minute walking catchment, which illustrates how far pedestrians can comfortably walk without significant sun exposure, is constrained primarily by the connectivity of the pedestrian network and street crossing points.

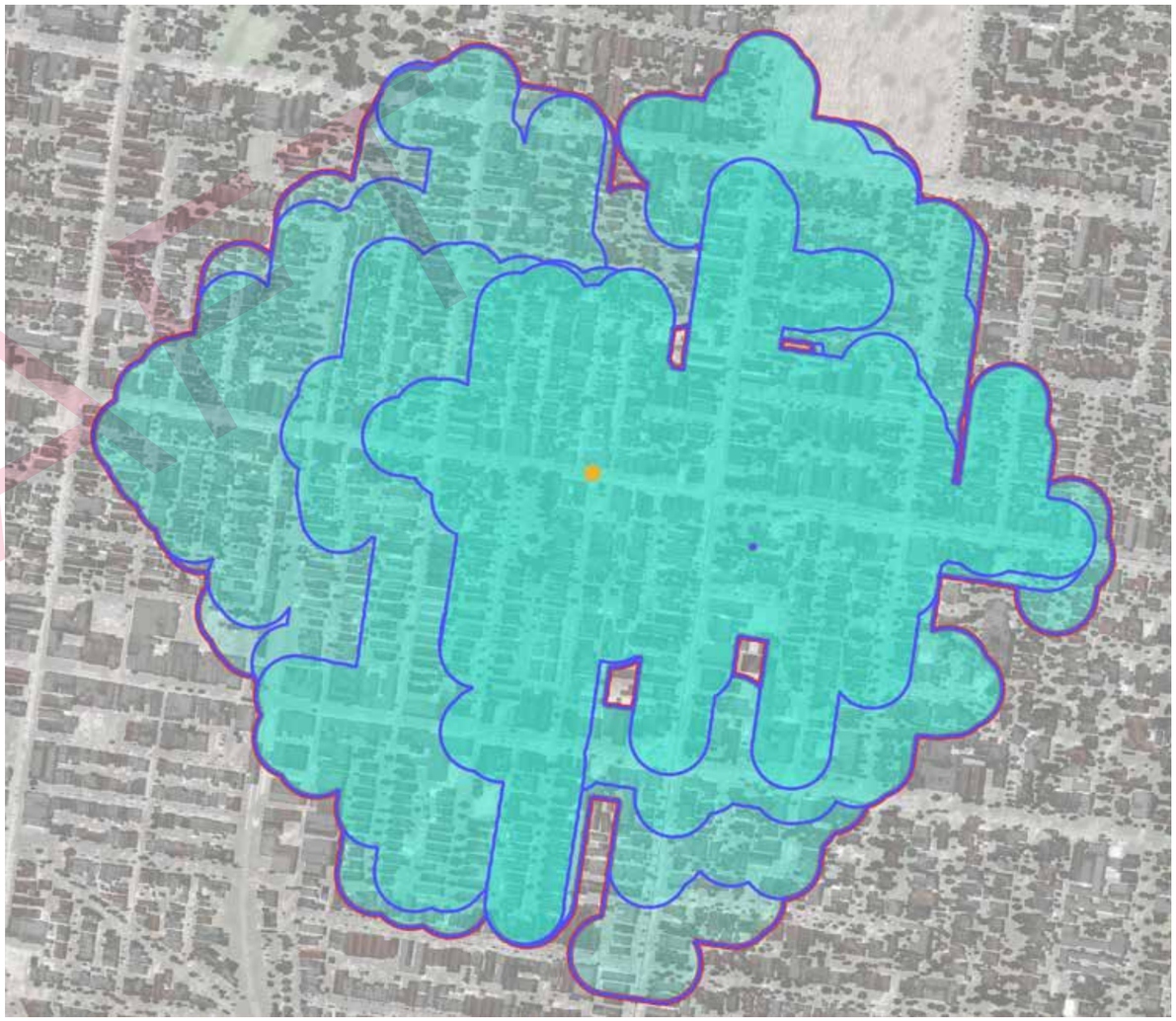


Figure 10: Pedestrian catchments for Inkerman Street on December 22nd at 3:30 pm. The shaded areas in light blue represent walking catchments with direct sun exposure limits of 2, 4, 6, and 8 minutes, while the red boundary outlines the full 10-minute exposure limit catchment (as though the entire walk is within shade).

TRAFFICKED ROUTES AND PRIORITY ROUTES

By simulating all possible pedestrian routes from key destinations under defined sun-exposure limits, we produced datasets indicating pedestrian route utilisation for each scenario. This analysis identifies street segments most frequently traversed by pedestrians, represented visually through colour-gradient mapping (Figure 11 and Figure 12). Routes with higher pedestrian density are represented by colours at the red and orange end of the spectrum, indicating priority streets that require shade improvements or infrastructure enhancements. Conversely, less-utilised street segments are shown in colours at the blue end of the spectrum. Analysing these patterns helps highlight routes significantly influenced by shading conditions, thereby informing targeted interventions such as tree planting, shade infrastructure, and other improvements to pedestrian amenities.

VISUALISING SHADE IMPACT – 'DIFFERENCES' LAYER

To clearly visualise the impact of shading on pedestrian route selection, we generated a comparative analysis between the 4-minute and 10-minute direct sun exposure scenarios for each destination. The differences between these scenarios were visualised using a gradient colour scale.

To clarify how these differences were calculated, explanatory diagrams (Figure 13, Figure 14 and Figure 15) demonstrate the method applied.

Figure 13 illustrates the resulting 10-minute walking catchment, representing how far pedestrians can comfortably walk without significant sun exposure. In this diagram, pedestrian route usage density is indicated by colour: the most frequently utilised pedestrian routes appear in red and orange, gradually transitioning through yellow, green, and blue along routes extending outward, reflecting progressively lower pedestrian density.

In contrast, Figure 14 illustrates the 4-minute direct sun exposure scenario. Here, pedestrians limit their direct sunlight exposure to a maximum of four minutes, prioritising shaded routes. Due to the limited availability of adequately shaded paths, pedestrian accessibility is notably reduced compared to the 10-minute scenario, impacting connecting pathways between both shaded and less-shaded areas.

Figure 15 shows a simplified example of the difference calculation method, highlighting hypothetical variations in pedestrian route usage between the 4-minute and 10-minute direct sun exposure scenarios. Route segments shown in red represent the greatest differences in pedestrian usage between scenarios, indicating street segments are strongly influenced by shading availability. Such differences can help target areas for strategic tree planting and urban shading improvements.

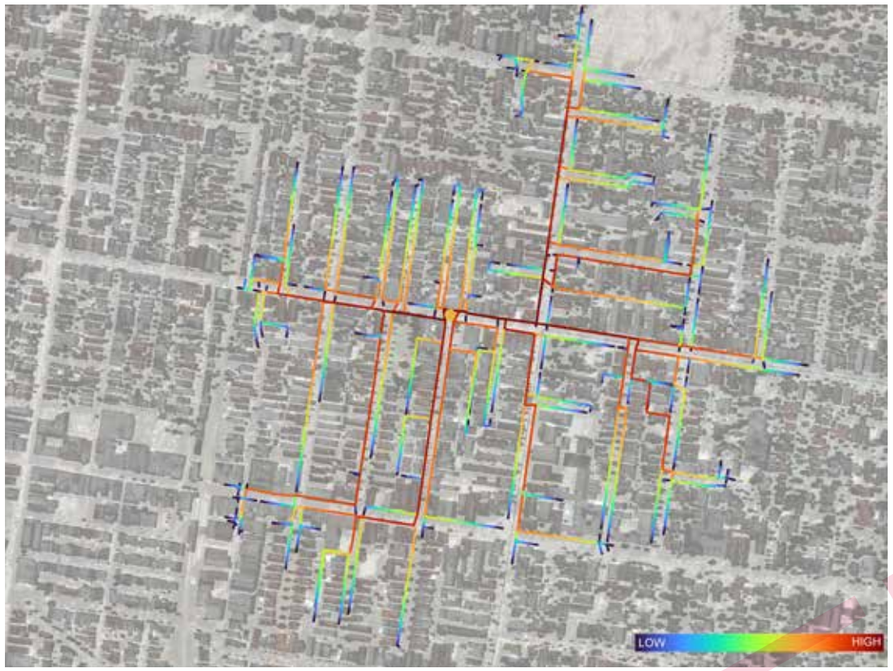


Figure 11 (above): Pedestrian route usage density for Inkerman Street with a maximum direct sun exposure limit of 4 minutes, simulated for December 22nd at 3:30 pm. The colour spectrum ranges from red, represent streets with higher pedestrian traffic density, through to dark blue, indicate routes with lower usage.

Figure 12 (above): Pedestrian route usage density for Inkerman Street with a maximum direct sun exposure limit of 10 minutes, simulated for December 22nd at 3:30 pm. The colour spectrum ranges from red, represent streets with higher pedestrian traffic density, through to dark blue, indicate routes with lower usage.

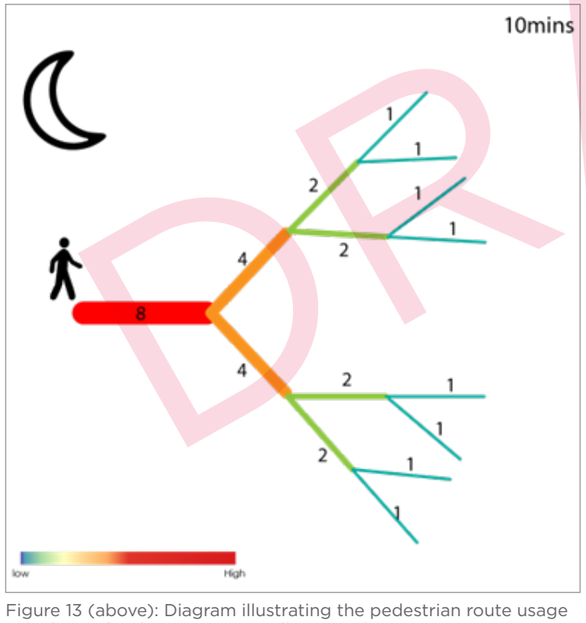


Figure 13 (above): Diagram illustrating the pedestrian route usage calculation for the 10-minute walking catchment scenario. Route segments are colour-coded by pedestrian density, with red and orange indicating the highest frequency of use, progressively transitioning to blue as pedestrian usage decreases along branching paths.

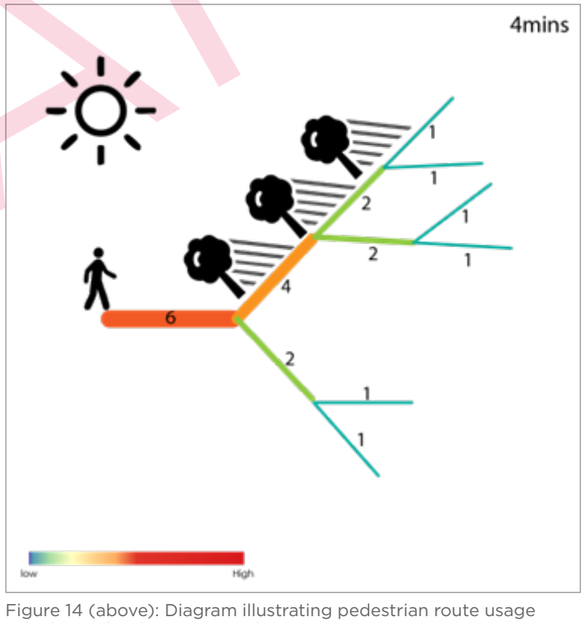


Figure 14 (above): Diagram illustrating pedestrian route usage calculation for the 4-minute direct sun exposure scenario. Route segments lacking sufficient shade (indicated by sun exposure symbols) become less accessible, leading pedestrians to prioritise shaded routes. This reduces the accessible pedestrian catchment area, impacting route density compared to the 10-minute scenario.

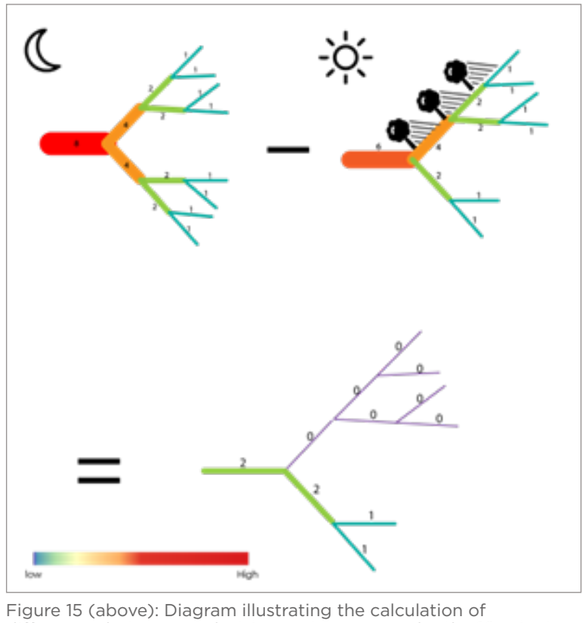


Figure 15 (above): Diagram illustrating the calculation of differences between pedestrian route usage under the 10-minute and 4-minute direct sun exposure scenarios. The upper diagrams show the route density for each scenario, and the lower diagram visualises the resulting differences.

Figure 16 illustrates an applied example of this calculation for Inkerman Street on December 22nd at 3:30 pm, specifically highlighting differences between the 4-minute and 10-minute scenarios. Finally, to provide a comprehensive view, differences calculated for all key destinations were combined into an overall visualisation, as shown in Figure 17. This visualisation identifies street segments consistently impacted by insufficient shading across multiple pedestrian catchments, guiding targeted urban interventions such as strategic tree planting and shade infrastructure enhancement.

Figure 16 (top): Visualisation of pedestrian route usage differences for Inkerman Street on December 22nd at 3:30 pm, comparing the 4-minute and 10-minute direct sun exposure scenarios. Route segments in red indicate areas with the highest difference in pedestrian activity between the scenarios, highlighting streets significantly impacted by insufficient shading and therefore prioritised for additional tree planting or shade infrastructure.

Figure 17 (bottom): Combined visualisation of pedestrian route usage differences across all key destinations, highlighting overall street segments most affected by insufficient shading between the 4-minute and 10-minute direct sun exposure scenarios.

APPENDIX D

BACKGROUND DOCUMENT SUMMARIES, CASE STUDIES & BEST PRACTICE

KEY STRATEGIC DOCUMENTS

DOCUMENT REVIEW

A review of existing Council strategies and reports and similar projects in other locations was undertaken to inform the UFPP. These documents helped identify Councils aspirations for the functionality and hierarchy of streets and their various attributes.

For example, whether streets were identified as active travel corridors or potential bio-links, where the most substantial changes in residential density are forecast, and which streets have already been identified as being a priority for additional street tree planting. Some of the key implications from these documents have been summarised over the following pages.

Key documents that were reviewed in detail:

- Urban Forest Strategy, 2024 - 2040
- City of Port Phillip Housing Strategy, 2024 - 2039
- Places for People - Public Space Strategy, 2022 – 2032
- Public Space Strategy - Technical Report
- Integrated Transport Strategy, 2018-28
- Carlisle Street Activity Centre Structure Plan, 2009
- Council Plan & Budget, 2021 – 2031
- Parking Management Policy, 2020
- Nature Strip and Street Gardening Guidelines, 2022
- Urban Forest Strategy Background and Benchmarking Report
- Greening Port Phillip Street Tree Planting Program (2017-2022)

The following supporting documents were also considered:

- Greening Port Phillip - Various Documents
  - › An Urban Forest Approach, 2010
  - › Developing our new Urban Forest Strategy Testing the Draft Vision and Principles - Summary of Stage 1B Engagement (Draft 1, 26 September)
  - › Urban Forest Strategy Developing Evidence Based Targets. Information from Community Workshops
  - › Urban Forest Mid-Term Review and Report
  - › Urban Forest Strategy Stages 1, 1B, 2, & 2A Engagement Findings Report
  - › Urban Forest Strategy Strategic Directions: Inclusion of Community engagement feedback on the Vision and Principles
- Nature Strip Guidelines (2022). Analysis of phase one community engagement results
- Draft Public Space Strategy - Summary Engagement Report (2020)
- City of Port Phillip Housing Strategy Phase 3 - Feedback on the Draft Strategy Engagement Report
- Street Tree Planting Program (2017-2022)
- Permeability Baseline Assessment and Tool Development
- Permeability in the Private Realm
- Draft Public Space Strategy Summary Engagement Report
- South Melbourne Street Tree Planting
- City of Port Phillip Tree Ledger
- Protecting Vegetation in the Private Realm- Discussion Paper
- Cooling South Melbourne.
- Bothwell Street Biolink Plan, 2022
- Green Line Proposal (Green Line Alliance), 2022
- Inkerman Street Crash Statistics, 2023
- Inkerman Street Road Safety Audit, 2021
- Inkerman Street Project Impact Assessment, 2023
- Inkerman Street Safe Travel Corridor Report
- Inkerman Street Safety Improvement Project
- Elwood Foreshore Biodiversity Constraints Assessment, 2020
- Biodiversity Study and Action Plan - Background Research Discussion Paper, 2020
- Biodiversity Study and Action Plan - Implementation Plan, 2020

STRATEGIC CONTEXT MAPS

The strategic and policy aspiration for the study area have been summarised under three themes:

- placemaking, land use and development
- movement networks
- green and blue functions.

The UFPP examines how each category contributes to the broader goals of the project, considering factors such as density, sustainable transport, public realm activation, and the integration of green spaces. Through this integrated approach, the design solutions within the UFPP will be contextually appropriate and achievable.

URBAN FOREST STRATEGY, 2024-2040

The City of Port Phillip's Urban Forest Strategy (2024 to 2040) provides a comprehensive framework for the development and management of Port Phillip's urban forest. The urban forest encompasses all trees, shrubs, and groundcovers on both public and private land, including gardens, parks, green roofs, and industrial areas. The Urban Forest Strategy highlights the importance of greenery in enhancing quality of life, boosting biodiversity and habitat, reducing air pollution, mitigating heat and flood risks, reducing stormwater costs, and increasing property values. Urban vegetation also creates employment opportunities and can be an important way of reflecting the indigenous landscape of the place.

Developed with community input, the Urban Forest Strategy outlines a vision where vegetation and green spaces are healthy and abundant, biodiversity is valued and supported, and nature connects people.

The Strategy is structured around five guiding principles:

1. Prioritising tree retention and introducing resilient plant species to address climate vulnerabilities.
2. Fostering collaboration among Council, community, and industry partners to care for urban greenery.
3. Emphasising biodiversity and habitat creation.
4. Investing in integrated urban greening across various landscape types.
5. Valuing the urban forest as a long-term asset critical to community well-being and neighbourhood character.

The Strategy also identifies key challenges to a healthy urban forest, such as climate change, urban heat, invasive weeds and plant diseases, human population growth pressures, spatial constraints, and biodiversity loss.

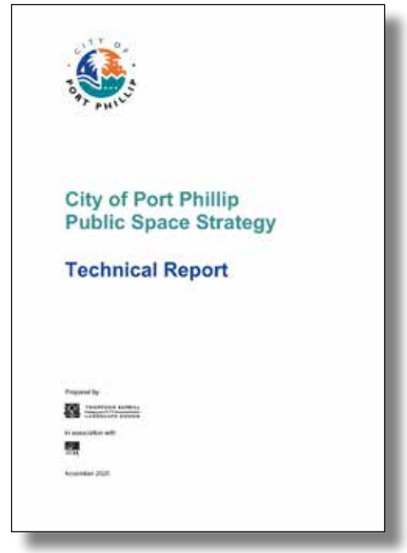
The Strategy offers a comprehensive body of research that supports canopy targets, and details approaches to vegetation diversity, water management and sustainable use of maintenance resources.

This provides the framework within which the Urban Forest Precinct Plans will operate, by honing in to a more detailed, streetscape-scale proposal for improving the urban forest.

The core objectives of the Urban Forest Strategy are:

- Increased canopy cover on public and private land for a liveable, sustainable, equitable and vibrant city.
- A cooler and greener city, which is resilient to more severe weather and changes in rainfall.
- Our community is engaged, trees and plants are valued, and we build partnerships to green our urban environment across all land types.
- A well-managed forest, including healthy trees and tree quality, pest and disease management and succession planning for iconic species and locations.
- A biodiverse urban forest with diverse species, healthy ecosystems, and habitat.

The UFPP supports these objectives by providing details on how to implement increased trees and biodiversity outcomes.



CITY OF PORT PHILLIP HOUSING STRATEGY (2024-2039)

The City of Port Phillip Housing Strategy sets out a 15-year plan to guide housing growth while strengthening resilience, quality of life, and community diversity. It designates areas for substantial, moderate, incremental, and minimal change, aligning with broader Council strategies on transport, economic growth, and sustainability.

UFPP Considerations:

- Areas marked for substantial change, such as the Carlisle Street Major Activity Centre (MAC), present opportunities to integrate street tree planting and urban greening as part of the gradual changes.
- Property consolidation in areas of growth may allow for increased canopy cover through coordinated landscaping and open space initiatives.
- Streets experiencing minimal change provide stability for long-term tree planting and maintenance strategies.

INTEGRATED TRANSPORT STRATEGY (2018-2028)

The Integrated Transport Strategy outlines a 10-year plan to improve transport connections within the City of Port Phillip. It prioritises sustainable and active transport, improves public transport access, and optimises infrastructure to accommodate population growth while preserving quality of life.

UFPP Considerations:

- Streets must balance canopy expansion with maintaining space for trams, buses, active transport and private vehicles.
- Opportunities exist to explore increased tree planting along transport routes identified in the Strategy to encourage cycling, walking and public transport usage across CoPP.
- Where land is not managed by Council such as state roads and rail, the UFPP will identify advocacy opportunities.
- The UFPP informs integrated transport planning by identifying streetscape interventions that enhance safety, shade, cooling, and overall user experience.

PLACES FOR PEOPLE - PUBLIC SPACE STRATEGY (2022–2032)

The Places for People – Public Space Strategy provides a vision for enhancing public spaces in Port Phillip. It establishes principles ensuring public spaces are equitable, abundant, versatile, and innovative.

UFPP Considerations

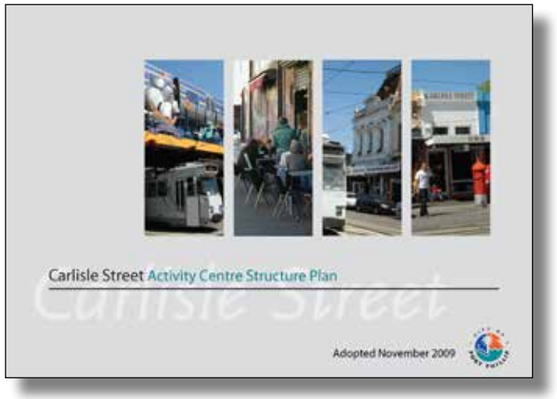
- Several streets, including those in the Alma Road and Chapel Street area, are identified for additional street trees to improve canopy cover and pedestrian experience.
- The strategy supports the integration of more tree planting within new public spaces, such as those being acquired by CoPP (e.g., 43 & 49 Pakington Street).
- Opportunities exist to partner with the Southern Metropolitan Cemeteries Trust for additional tree planting and biodiversity improvements.
- Initiatives like temporary street closures (e.g., Dickens Street) and carpark repurposing can provide space for tree canopy enhancements and urban greening.

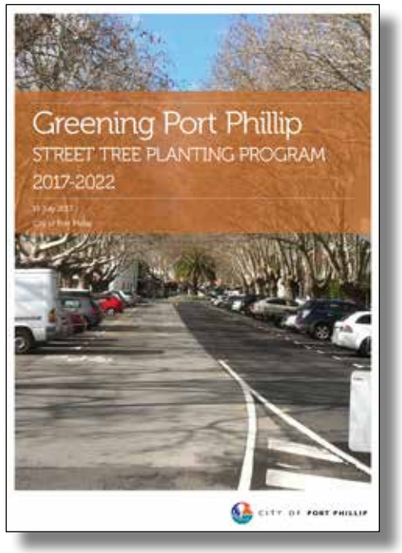
PUBLIC SPACE STRATEGY - TECHNICAL REPORT (2020)

The Public Space Strategy – Technical Report informed the Public Space Strategy. It assessed current public space provision, identifies future needs, and details guidelines for the equitable and strategic management of open spaces.

UFPP Considerations

- The technical report assists with understanding the broader network of open spaces and how people use and move between them.
- Opportunities exist to uplift the canopy in existing open spaces, as identified in the Report, through targeted tree planting and design interventions.





CARLISLE STREET ACTIVITY CENTRE STRUCTURE PLAN, (2009)

The Carlisle Street Activity Centre Structure Plan provides a framework for managing growth in response to economic and lifestyle trends. It aligns with the superceded Melbourne 2030 (now replaced by Plan Melbourne), focusing on increased residential density, a broader mix of activities, and improved public transport and walkability within the activity centre.

UFPP Considerations

- The Structure Plan proposes specific streets for new planting/greening, the UFPP should further support these recommendations.
- Areas that are identified for a greater pedestrian activity may need additional focus on providing shade.

GREENING PORT PHILLIP STREET TREE PLANTING PROGRAM (2017-2022)

The Greening Port Phillip Street Tree Planting Programme outlined a five-year plan to improve the City's urban forest through strategic tree planting. It supports the broader Greening Port Phillip vision by increasing canopy cover, reducing the Urban Heat Island effect, improving biodiversity, and enhancing public amenity.

UFPP Considerations

- The UFPP can support the Programme's goal of increasing canopy cover by integrating tree planting and green infrastructure into developments.
- This strategy provided a detailed tree species list which was used as the starting point for the UFPP species lists.

OTHER RESOURCES

CASE STUDIES

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APPENDIX E

STREETS & TREES ATTRIBUTES TABLES

STREET ATTRIBUTES TABLE

EZI_RDNAME	St Type	Council Rd	Dvlpmnt Pl	Rd % in 400m AC	Bike Route	PTV Stops	CANOPY %	CANOPY CVR	St Length	St Area m²	Street Wid	Orientatn	Pwrln Lctn	No. Lanes	Crrgwy Wdt	Srpls Wdth	XOvers	Parking1	Parking2	Parking3	Parking4	Parking5
ST KILDA ROAD	9-Major Movement	N	N	100	Y	Y	20.42	Medium	395	23870	60.4	N-S	E	8	43.5	N	Y	12%	57%	19%	2%	10%

Road Name
Street Type
Whether road is owned by CoPP
Whether there is an existing process underway to reconfigure the street
Percentage of street within 400m walking distance of an activity centre
Whether the street forms part of the existing or planned cycle network
Whether the street contains public transport stops
Existing canopy coverage (measured from GIS data)
Existing canopy cover (0-15% = low, 15-30% = medium, >30% = high)
Length of street segment (m)
Length x width of street expressed as an area (m²)
Street width (m)
Approximate orientation of street centreline
Where existing powerlines are generally located
Number of traffic lanes
Approximate carriageway width
Potential that there is surplus width in the road for interventions based off number of traffic lanes and street carriageway width
Whether there are regular vehicle driveways/crossovers

Council-provided GIS street parking data which was sorted into categories. For each category parking provision was calculated as a % of total street parking spaces.

	Parking1	Parking2	Parking3	Parking4	Parking5
General Categories	Unrestricted	high time limit	low time limit	permit only	no parking
GIS parking types sorted under categories	Unrestricted Parking	10hour, 4hour, 2hour	5min, 10min, 15min, 30min, 60min, 90min	Permit Zone	No stopping No stopping with times Clearway with times Bus Zone Loading Zone Mail Zone Taxi Zone

EZI_RDNAME	St Type	Council Rd	Dvlpmnt Pl	Rd % in 400m AC	Bike Route	PTV Stops	CANOPY %	CANOPY CVR	St Length	St Area m²	Street Wid	Orientatn	Pwrln Lctn	No. Lanes	Crrgwy Wdt	Srpls Wdth	XOvers	Parking1	Parking2	Parking3	Parking4	Parking5
ST KILDA ROAD	9-Major Movement	N	N	100	Y	Y	20.42	Medium	395	23870	60.4	N-S	E	8	43.5		Y	12%	57%	19%	2%	10%
BRIGHTON ROAD	9-Major Movement	N	N	100	Y	Y	12.87	Low	815	49251	60.4	N-S	E, W	8	44		Y	68%	9%	16%	4%	3%
DANDENONG ROAD	9-Major Movement	N	N	35.28	N	Y	30	High	1633	99665	61.0	E-W	N	8	46.75		Y	76%	5%	12%	0%	7%
HOTHAM STREET	8-Moderate Movement	N	N	53.99	N	Y	5.17	Low	1889	38583	20.4	N-S	E, W*	4	10.5		Y	44%	4%	0%	0%	52%
DICKENS ROAD	7-Unique	Y	N	99.33	Y	N	24.83	Medium	68	1393	20.5	Other	N	0	14.45		N	38%	9%	47%	0%	6%
DICKENS STREET	7-Unique	Y	N	100	Y	N	24.83	Medium	52	1009	19.4	Other	N	2	7.45		N	38%	9%	47%	0%	6%
BOTHWELL STREET	7-Unique	Y	Y	99.97	N	N	30	High	247	4958	20.1	Other	S	2	13		Y	98%	0%	0%	2%	0%
OAK GROVE	7-Unique	Y	N	100	N	N	6.05	Low	214	4309	20.1	E-W	S	2	7.65		Y	43%	57%	0%	0%	0%
PAKINGTON STREET	7-Unique	Y	N	100	N	N	12.8	Low	403	8116	20.1	E-W	N	2	7.85		Y	33%	26%	16%	25%	0%
CARDIGAN STREET	7-Unique	Y	N	68.32	N	N	7.81	Low	239	4341	18.2	E-W	N	1	6.3		Y	100%	0%	0%	0%	0%
CARLISLE STREET	6-High Street	N	Y	100	Y	Y	7.39	Low	1125	22655	20.1	E-W	N, S	2	10.6		N	10%	6%	58%	8%	18%
CHAPEL STREET	6-High Street	Y	N	82.48	Y	Y	6.75	Low	1624	32876	20.2	N-S	E, W	2	11		Y	45%	7%	29%	3%	16%
ORRONG ROAD	5-Boulevard	Y	N	100	Y	Y	8.84	Low	841	16747	19.9	N-S	E	2	8.6		Y	37%	0%	29%	0%	34%
NIGHTINGALE STREET	5-Boulevard	Y	N	100	Y	N	12.53	Low	355	7114	20.0	E-W	S	2	7.6		N	27%	27%	23%	23%	0%
INKERMAN STREET	5-Boulevard	Y	Y	76.23	Y	N	5.36	Low	2076	41431	20.0	E-W	N	2	10.9		Y	42%	12%	28%	0%	18%
WILLIAM STREET	5-Boulevard	Y	N	100	Y	N	11.61	Low	475	9845	20.7	N-S	E*, W*	2	7.15		Y	57%	22%	13%	3%	5%
ALMA ROAD	5-Boulevard	Y	N	23.96	Y	N	17.54	Medium	1628	32867	20.2	E-W	S	2	10.1		Y	73%	0%	0%	4%	23%
ALEXANDRA STREET	5-Boulevard	Y	N	7.47	Y	N	8.96	Low	814	16393	20.1	N-S	E	2	9.1		Y	99%	0%	1%	0%	0%
WESTBURY STREET	5-Boulevard	Y	N	57.13	Y	N	9.44	Low	1164	23533	20.2	N-S	E*, W*	2	10.35		Y	74%	0%	24%	0%	2%
HUGHENDEN ROAD	5-Boulevard	Y	N	98.57	N	N	26.6	Medium	311	6259	20.1	E-W	N	2	10.25		Y	100%	0%	0%	0%	0%
GROSVENOR STREET	5-Boulevard	Y	N	77.08	N	N	11.61	Low	792	15705	19.8	E-W	S*, N*	2	7.65		Y	92%	0%	0%	8%	0%
ALBION STREET	5-Boulevard	Y	N	19.54	N	N	17.79	Medium	187	3755	20.1	E-W	N	2	5.85		Y	100%	0%	0%	0%	0%
ALBION STREET	5-Boulevard	Y	N	19.54	N	N	17.79	Medium	121	2430	20.1	E-W	N	2	5.85		Y	100%	0%	0%	0%	0%
MONTAGUE AVENUE	4-Green Street	Y	N	100	N	N	23.95	Medium	171	2608	15.3	N-S	E	1	4		Y	100%	0%	0%	0%	0%
WENDEN GROVE	4-Green Street	Y	N	76.95	N	N	14.63	Low	140	2117	15.1	E-W	S	1	3.65		Y	100%	0%	0%	0%	0%
HOLROYD COURT	4-Green Street	Y	N	99.41	N	N	45.52	High	40	726	18.2	N-S	E	2	5.6		Y	100%	0%	0%	0%	0%
HOLROYD AVENUE	4-Green Street	Y	N	100	N	N	39.18	High	174	2659	15.3	N-S	E	1	3.85		Y	100%	0%	0%	0%	0%
WESTBURY CLOSE	4-Green Street	Y	N	100.03	N	N	25.62	Medium	209	3185	15.2	N-S	E	1	3.7		Y	74%	0%	24%	0%	2%
NOTTAGE STREET	4-Green Street	Y	N	82.04	N	N	46.88	High	101	1537	15.2	E-W	S	1	3.6		Y	100%	0%	0%	0%	0%
WESTBURY GROVE	4-Green Street	Y	N	24.99	N	N	26.55	Medium	212	3237	15.3	E-W	S	1	4.05	Y	Y	74%	0%	24%	0%	2%
WESTBURY GROVE	4-Green Street	Y	N	24.99	N	N	26.55	Medium	64	977	15.3	E-W	S	1	4.05	Y	Y	74%	0%	24%	0%	2%
HOLROYD AVENUE	4-Green Street	Y	N	100	N	N	45.52	High	209	3194	15.3	E-W	N	1	3.85		Y	100%	0%	0%	0%	0%
WAVENHOE AVENUE	4-Green Street	Y	N	0	N	N	21.67	Medium	243	3732	15.4	E-W	S	1	4.05	Y	Y	100%	0%	0%	0%	0%
HAWSLEIGH AVENUE	4-Green Street	Y	N	100	N	N	21.41	Medium	210	3148	15.0	N-S	E	1	5.15	Y	Y	49%	0%	51%	0%	0%
SOMERS STREET	4-Green Street	Y	N	100	N	N	25.59	Medium	107	1634	15.3	N-S	W	1	3.9		Y	100%	0%	0%	0%	0%
DEAN AVENUE	4-Green Street	Y	N	100	N	N	56.45	High	209	3181	15.2	E-W	N	1	3.35		Y	100%	0%	0%	0%	0%
BOONDARA GROVE	4-Green Street	Y	N	0	N	N	24.84	Medium	168	2555	15.2	N-S	E	1	4.2	Y	Y	100%	0%	0%	0%	0%
RAGLAN STREET	4-Green Street	Y	N	34.25	N	N	26.05	Medium	430	6557	15.2	N-S	W	1	5.15	Y	Y	86%	0%	0%	14%	0%
CARLISLE AVENUE	4-Green Street	Y	N	100	N	N	24.96	Medium	210	3208	15.3	N-S	E	1	3.25		Y	10%	6%	58%	8%	18%
HERTFORD STREET	4-Green Street	Y	N	0	N	N	13.15	Low	106	1620	15.3	E-W	S	1	3.6		Y	100%	0%	0%	0%	0%
SUNHILL COURT	4-Green Street	Y	N	0	N	N	16.62	Medium	91	1397	15.3	E-W	S	1	3.9		Y	100%	0%	0%	0%	0%
RAITH COURT	4-Green Street	Y	N	0	N	N	16.86	Medium	76	1156	15.2	N-S	E	1	4		Y	100%	0%	0%	0%	0%
RAVENS GROVE	4-Green Street	Y	N	0	N	N	41.03	High	168	2552	15.2	N-S	E	1	3.33		Y	100%	0%	0%	0%	0%
MARNE STREET	4-Green Street	Y	N	0	N	N	46.88	High	161	2464	15.3	N-S	E	1	3.35		Y	100%	0%	0%	0%	0%

EZI_RDNAME	St Type	Council Rd	Dvlpmnt Pl	Rd % in 400m AC	Bike Route	PTV Stops	CANOPY %	CANOPY CVR	St Length	St Area m²	Street Wid	Orientatn	Pwrln Lctn	No. Lanes	Crrgwy Wdt	Srpls Wdth	XOvers	Parking1	Parking2	Parking3	Parking4	Parking5
PENLEIGH COURT	4-Green Street	Y	N	0	N	N	32.4	High	66	1009	15.3	E-W	N	1	3.4		Y	100%	0%	0%	0%	0%
HAMMERDALE AVENUE	4-Green Street	Y	N	0	N	N	9.92	Low	231	3504	15.2	N-S	W	1	3.55		Y	100%	0%	0%	0%	0%
PALM COURT	4-Green Street	Y	N	0	N	N	19.54	Medium	62	947	15.3	N-S	W	1	3.9		Y	100%	0%	0%	0%	0%
MURCHISON STREET	4-Green Street	Y	N	0	N	N	41.69	High	327	6343	19.4	E-W	N	1	5.4	Y	Y	100%	0%	0%	0%	0%
GLEN EIRA AVENUE	3-Typical Street	Y	N	100	Y	N	11.05	Low	313	4763	15.2	N-S	E	2	6.25		N	69%	31%	0%	0%	0%
ORANGE GROVE	3-Typical Street	Y	N	100	N	N	13.13	Low	345	5389	15.6	N-S	E	2	5.85		N	50%	49%	1%	0%	0%
BALSTON STREET	3-Typical Street	Y	N	99.91	N	N	14.32	Low	345	5493	15.9	N-S	E	1	5.5	Y	Y	53%	44%	2%	0%	0%
WANDO GROVE	3-Typical Street	Y	N	76.22	N	N	14.43	Low	198	3002	15.2	N-S	E	1	5.35	Y	Y	100%	0%	0%	0%	0%
GLENMARK AVENUE	3-Typical Street	Y	N	100	N	N	32.13	High	77	1178	15.3	N-S	W	1	5.5	Y	N	0%	0%	68%	32%	0%
ELM GROVE	3-Typical Street	Y	N	100	N	N	6.59	Low	280	4234	15.1	E-W	N	2	6.25		N	8%	92%	0%	0%	0%
CAMDEN STREET	3-Typical Street	Y	N	100	N	N	15.31	Medium	342	5334	15.6	N-S	E	2	6.25		Y	4%	64%	31%	1%	1%
LAMBERT GROVE	3-Typical Street	Y	N	100	N	N	10.01	Low	99	1506	15.2	E-W	N	1	5.55	Y	Y	81%	0%	0%	0%	19%
GOURLAY STREET	3-Typical Street	Y	N	57.83	N	N	7.51	Low	428	6472	15.1	E-W	S	2	5.85		Y	100%	0%	0%	0%	0%
CELESTE COURT	3-Typical Street	Y	N	27.4	N	N	17.5	Medium	73	1110	15.2	E-W	N	1	4.3	Y	Y	100%	0%	0%	0%	0%
WILGAH STREET	3-Typical Street	Y	N	0	N	N	12.03	Low	430	6535	15.2	N-S	E	1	4.15	Y	Y	100%	0%	0%	0%	0%
TE-ARAI AVENUE	3-Typical Street	Y	N	85.77	N	N	15.02	Medium	137	2093	15.3	N-S	W	1	3.75		Y	100%	0%	0%	0%	0%
GODFREY AVENUE	3-Typical Street	Y	N	0	N	N	24.63	Medium	200	3076	15.4	E-W	N	1	5.5	Y	Y	100%	0%	0%	0%	0%
SYCAMORE GROVE	3-Typical Street	Y	N	100	N	N	9.88	Low	80	1220	15.2	E-W	N	2	5.9		Y	43%	57%	0%	0%	0%
DUKE STREET	3-Typical Street	Y	N	100	N	N	8.98	Low	213	3134	14.7	E-W	N	2	6.5		N	0%	0%	96%	0%	4%
SYCAMORE GROVE	3-Typical Street	Y	N	100	N	N	16.64	Medium	280	4270	15.2	E-W	N	2	5.9		Y	43%	57%	0%	0%	0%
THE AVENUE	3-Typical Street	Y	N	78.74	N	N	8.06	Low	451	6794	15.1	E-W	N	2	6.35		Y	98%	0%	2%	0%	0%
MOOLTAN AVENUE	3-Typical Street	Y	N	24.21	N	N	21.54	Medium	154	2413	15.7	E-W	N	1	4		Y	100%	0%	0%	0%	0%
KALYMNA GROVE	3-Typical Street	Y	N	0	N	N	19.93	Medium	207	3149	15.2	N-S	E	2	5.85		Y	100%	0%	0%	0%	0%
KURRAJONG AVENUE	3-Typical Street	Y	N	0	N	N	12.41	Low	151	2303	15.3	E-W	N	2	5.65		Y	100%	0%	0%	0%	0%
LANSDOWNE ROAD	3-Typical Street	Y	N	19.84	N	N	25.16	Medium	829	12661	15.3	N-S	W	1	4.75	Y	Y	100%	0%	0%	0%	0%
BLENHEIM STREET	3-Typical Street	Y	N	100	N	N	11.75	Low	347	4990	14.4	N-S	W	2	5.8		Y	49%	0%	11%	41%	0%
GRAYLINGS GROVE	3-Typical Street	Y	N	0	N	N	19.23	Medium	112	1709	15.3	E-W	N	1	3.65		Y	100%	0%	0%	0%	0%
ARGYLE STREET	3-Typical Street	Y	N	0	N	N	5.59	Low	75	1087	14.5	E-W	N	1	5	Y	Y	58%	0%	26%	16%	0%
GRAYLINGS AVENUE	3-Typical Street	Y	N	0	N	N	46.51	High	73	1103	15.1	N-S	W	1	5.3	Y	Y	100%	0%	0%	0%	0%
FULTON STREET	3-Typical Street	Y	N	0	N	N	9.9	Low	355	5386	15.2	E-W	S	2	6.8		Y	83%	0%	0%	0%	17%
JOHNSON STREET	2-Narrow Street*	Y	N	0	N	N	14.31	Low	153	2071	13.5	E-W	S	1	4.65	Y	Y	11%	50%	0%	0%	39%
NELSON STREET	2-Narrow Street*	Y	N	100	N	N	12.45	Low	344	4760	13.8	N-S	W	1	4.75	Y	Y	0%	37%	24%	37%	2%
ROSAMOND STREET	2-Narrow Street	Y	N	100	N	N	3.83	Low	162	1978	12.2	E-W	N	1	4.55	Y	N	3%	46%	0%	48%	3%
ROSAMOND STREET	2-Narrow Street	Y	N	100	N	N	9.32	Low	114	1392	12.2	E-W	N	1	4.55	Y	N	3%	46%	0%	48%	3%
BOWEN STREET	2-Narrow Street	Y	N	100	N	N	16.21	Medium	134	1687	12.6	N-S	E	1	4.3	Y	N	62%	38%	0%	0%	0%
WOODSTOCK STREET	2-Narrow Street	Y	N	100	N	N	8.26	Low	487	5940	12.2	N-S	E	1	4.8	Y	N	43%	23%	32%	0%	2%
BRUNNING STREET	2-Narrow Street	Y	N	100	N	N	18.02	Medium	51	631	12.4	E-W	S	1	4.05	Y	Y	100%	0%	0%	0%	0%
BRUNNING STREET	2-Narrow Street	Y	N	100	N	N	18.02	Medium	269	3327	12.4	E-W	S	1	4.05	Y	Y	100%	0%	0%	0%	0%
MARLBOROUGH STREET	2-Narrow Street	Y	N	100	N	N	16.99	Medium	113	1372	12.1	E-W	N	1	4.7	Y	N	20%	25%	10%	41%	3%
MALAKOFF STREET	2-Narrow Street	Y	N	100	N	N	3.62	Low	212	2578	12.2	N-S	E	1	4.85	Y	N	2%	0%	55%	43%	0%
SEBASTOPOL STREET	2-Narrow Street	Y	N	100	N	N	14.4	Low	211	2536	12.0	N-S	E	1	4.3	Y	Y	97%	0%	0%	0%	3%
LESLIE STREET	2-Narrow Street	Y	N	100	N	N	5.93	Low	212	2559	12.1	N-S	E	1	4.2	Y	Y	73%	0%	7%	16%	4%
ALFRED STREET	2-Narrow Street	Y	N	100	N	N	20.37	Medium	160	2025	12.7	E-W	N	1	4.6	Y	N	0%	0%	67%	24%	9%
MARTIN STREET	2-Narrow Street	Y	N	100	N	N	8.98	Low	167	2037	12.2	E-W	S	1	4.2	Y	Y	0%	35%	59%	0%	6%

EZI_RDNAME	St Type	Council Rd	Dvlpmnt Pl	Rd % in 400m AC	Bike Route	PTV Stops	CANOPY %	CANOPY CVR	St Length	St Area m²	Street Wid	Orientatn	Pwrln Lctn	No. Lanes	Crrgwy Wdt	Srpls Wdth	XOvers	Parking1	Parking2	Parking3	Parking4	Parking5
PRENTICE STREET	2-Narrow Street	Y	N	100	N	N	6.48	Low	212	2580	12.2	N-S	W	1	4.2	Y	Y	100%	0%	0%	0%	0%
KING STREET	2-Narrow Street	Y	N	67.05	N	N	3.09	Low	217	2545	11.7	N-S	E	1	4.8	Y	Y	89%	11%	0%	0%	0%
CREWS STREET	2-Narrow Street	Y	N	100	N	N	0	Low	77	935	12.1	E-W	S	1	4.5	Y	Y	0%	0%	56%	44%	0%
MARLBOROUGH STREET	2-Narrow Street	Y	N	100	N	N	11.71	Low	162	1967	12.1	E-W	N	1	4.7	Y	Y	20%	25%	10%	41%	3%
EVELYN STREET	2-Narrow Street	Y	N	39.87	N	N	6.94	Low	213	2675	12.6	N-S	E	1	4.6	Y	Y	100%	0%	0%	0%	0%
CHUSAN STREET	2-Narrow Street	Y	N	100	N	N	13.42	Low	172	2180	12.7	N-S	E	1	3.75		Y	43%	53%	0%	0%	5%
LINTON STREET	2-Narrow Street	Y	N	100	N	N	24.86	Medium	175	2118	12.1	N-S	E	1	3.85		Y	43%	58%	0%	0%	0%
EDWARD STREET	2-Narrow Street	Y	N	100	N	N	6.69	Low	103	1138	11.1	E-W	N	1	3.85		Y	17%	56%	27%	0%	0%
PHILLIPS STREET	2-Narrow Street	Y	N	0	N	N	3.78	Low	126	1888	15.0	N-S	W	1	5.25	Y	Y	27%	0%	73%	0%	0%
PILLEY STREET	2-Narrow Street	Y	N	0	N	N	21.4	Medium	68	850	12.5	N-S	E	1	4.1	Y	Y	61%	39%	0%	0%	0%
PILLEY STREET	2-Narrow Street	Y	N	0	N	N	21.4	Medium	139	17375	12.5	N-S	E	1	4.1	Y	Y	61%	39%	0%	0%	0%
WILLIAM PLACE	2-Narrow Street	Y	N	100	N	N	0	Low	27	318	11.8	E-W	N/A	2	6.65		Y	57%	22%	13%	3%	5%
SHIRLEY GROVE	2-Narrow Street	Y	N	0	N	N	16.79	Medium	165	1897	11.5	N-S	W	1	4.2	Y	Y	100%	0%	0%	0%	0%
GIBBS STREET	1-Micro Street	Y	Y	100	N	N	30	High	102	3264	32.1	Other	N	2	16		N	86%	0%	0%	14%	0%
GIBBS STREET	1-Micro Street	Y	N	100	N	N	18.97	Medium	127	1581	12.4	N-S	E	1	4.75	Y	N	86%	0%	0%	14%	0%
STUART STREET	1-Micro Street	Y	N	100	N	N	0	Low	46	376	8.2	E-W	S	1	4.6	Y	Y	0%	0%	71%	0%	29%
LYNOTT STREET	1-Micro Street	Y	N	100	N	N	11.17	Low	78	812	10.4	N-S	E	1	2.85		N	0%	0%	100%	0%	0%
GIBBS STREET	1-Micro Street	Y	N	100	N	N	4.82	Low	78	787	10.1	N-S	E	1	3.15		Y	86%	0%	0%	14%	0%
JERVOIS STREET	1-Micro Street	Y	N	89.38	N	N	7.95	Low	269	2956	11.0	N-S	E	1	3.9		Y	100%	0%	0%	0%	0%
YOUNG STREET	1-Micro Street	Y	N	78.82	N	N	9.92	Low	232	2373	10.2	N-S	W	1	3.4		Y	96%	0%	4%	0%	0%
CHARLES STREET	1-Micro Street	Y	N	100	N	N	0	Low	45	336	7.5	E-W	N/A	1	3.3		Y	17%	67%	17%	0%	0%
QUEEN STREET	1-Micro Street	Y	N	62.7	N	N	3.78	Low	210	2096	10.0	N-S	E	1	3.5		Y	38%	0%	57%	0%	6%

STREET ATTRIBUTES: OPPORTUNITIES & CONSTRAINTS

Attribute	How might the attribute impact ability to deliver tree canopy?
Council owned road	Whether CoPP can take a responsibility role or play an advocacy role in delivery.
Extent of existing canopy	Helps identify streets which lack canopy cover, which can be used inform action priorities in combination with the other measured attributes.
Whether there is an existing process underway to masterplan street	Whether the UFPP defers to a separate planning or implementation process to deliver canopy. For example, a streetscape plan is being developed for Carlisle Street, this plan will consider planting to a more detailed level than the UFPP.
Within 400m walking distance of activity centre (round to 1 decimal)	People are more likely to choose walking in these streets, therefore it is more important to ensure a comfortable pedestrian environment with ample shading.
Larger area (and impact) of road reserve (width x length)	This is a relatively crude calculation to helps identify streets which may offer more canopy uplift due to their spatial magnitude.
Whether street is designated cycling route	People are more likely to cycle in these streets due to the improve cycle amenity, therefore it is more important to ensure a comfortable cycling environment with ample shading.
Street orientation & Overhead powerline location	To be considered in combination with overhead powerlines locations. Overhead powerlines impede canopy growth due to the need to maintain clearance and remove tree branches. If large unimpeded trees can be planted to the north or west of the road carriageway then more road surface can be shaded, which may consequently reduce urban heat island effects.
Street has public transport stops (tram or bus)	Waiting areas and transport shelters located along the kerbside reduces space for planting trees.
Whether street has driveway crossovers	Vehicle crossovers limited the unencumbered space along footpaths for trees.
The number of traffic lanes and surplus trafficable width (carriageway width minus parking lanes)	Provides a baseline for how traffic currently utilises the carriageway space. Reducing trafficable lanes may require additional technical transport advice and be unpopular with the community. If the trafficable space/width for vehicles is more than 1 lane, but less than 2 lanes, then there is potentially surplus road surface available for reconfiguration of the street (widths ranging 3.3m-6m). There is a similar opportunity for trafficable widths greater than 2 lanes (widths greater than 6m)
Width of existing kerb	A wider kerb offers more potential for tree planting without disrupting pedestrian movement.
Whether street contains flood overlay	If a street is prone to flooding, then flood resilient tree species and WSUD could be considered depending on the context.
Street parking	This will consider whether on-street parking is unrestricted, time-restricted, permitted, restricted or non-existent. If the community has an expectation for on-street parking it may be more difficult to consider radical changes to the street functionality. CoPP provided LatStudios with a GIS dataset mapping parking locations and types of parking. We used this to rank parking locations from easiest to intervene to hardest.
Walk Quality Scores	The Walk Quality analysis by Swinburne University ties into the movement network by illustrating where there are gaps in the provision of shade for walking catchments from key activity nodes, thus identifying the priority streets for shade improvements. These priority Walk Quality streets were identified as: Alma Rd, Nelson St, Camden St, Glen Eira Ave, Oak Grove, William St, Inkerman St and Carlisle St as a high priority, with Landsdowne Rd, Westbury St, Marlborough St, Rosamond St and Nightingale St as medium priority streets to improve walkability.
Abutting building heights	Similar to Building setbacks, lower adjacent building heights may offer more growing room for any road reserve trees overhanging private property and vis-versa for trees in private property.
Heat vulnerability	The heat vulnerability assessment is to identify areas where we might expect high vulnerability to heat waves. The map shows areas with higher UHI relative to baseline; in combination with selected land cover attributes and demographic characteristics.
Permeability	Dataset appears to contain inaccuracies. Highlights which streets may have better existing growing conditions. Impacts the amount of rainfall which permeates into the ground versus stormwater. If more rainfall is able to reach the tree root zones, then growing conditions may be improved.
Underground utilities locations	Underground services are vital to consider for design of tree root zones and any potential reconfiguration of road cross-sections.
Age & Health (old - more reason to replace...)	Trees that are reaching the end of their lifespan need to have a succession plan. Trees which are low health and are struggling to meet canopy expectations (based on the species and growing conditions) could be replaced to attempt to increase canopy faster.
Building setbacks from road reserve	Larger setbacks may offer more growing room for any road reserve trees overhanging private property and vis-versa for trees in private property.
Redevelopment sites and likely magnitude of redevelopment	Larger sites or consolidation of smaller sites may unlock opportunities for planting in adjacent streetscapes. Proponents of developments may be able to contribute to or deliver street trees. If developments provide off-street parking, then on street parking could be reduced in favour of more trees.
Heritage overlays on street or abutting building	The planning requirements of areas covered by Heritage Overlays may influence detailed design for streetscape interventions.
Area of Cultural Sensitivity	All detailed design projects should involve engagement with Traditional Owners, particularly to better understand areas of cultural sensitivity. Plant species are also intrinsically linked to cultural sensitivity and the selection of species should be cognisant of cultural needs and designated Areas of Cultural Sensitivity.

FURTHER UPDATES TO OCCUR FOR FINAL DRAFT

TREE ATTRIBUTES TABLE

The following table summarises the tree species present on each street within the neighbourhood, providing a total count and average age for each species per street.

Species	Average Age (years)	No. of Trees
Public Open Space / Other		
Acacia baileyana	5	1
Acacia boormanii	19	2
Acacia floribunda	29.71	7
Acacia implexa	31.78	9
Acacia mearnsii	25	1
Acacia melanoxylon	26.4	5
Acacia paradoxa	25	3
Acacia prominens	75	1
Acacia sp.	55	2
Acer Buergeranum	45	1
Acer buergerianum	25	2
Acer negundo	30	1
Acer palmatum	8	2
Acmena smithii	27.4	15
Agathis robusta	18	1
Agonis flexuosa	65	5
Ailanthus altissima	15	1
Allocasuarina cunninghamiana	19.67	3
Allocasuarina littoralis	9	1
Allocasuarina torulosa	29	5
Allocasuarina verticillata	12.36	11
Angophora costata	14	3
Araucaria bidwillii	14.81	21
Araucaria cunninghamii	15.15	26
Araucaria heterophylla	45.5	2
Arbutus unedo	43.33	3
Arbutus x andrachnoides	65	1
Banksia ericifolia	50	2
Banksia integrifolia	19.5	2
Brachychiton acerifolius	12.5	4
Brachychiton populneus	46.2	5
Brachychiton rupestre	18.33	6
Bursaria spinosa	25.67	3
Callistemon citrinus	23	2
Callistemon phoeniceus	30	1
Callistemon sp.	10.33	6
Callistemon viminalis	12.2	5
Callistemon viminalis 'KPS'	16	1
Calodendron capense	42.1	10
Calothamnus sp.	31.67	3
Camellia japonica	55	1
Camellia sasangua	15	1
Casuarina cunninghamiana	28	6
Catalpa bignonoides	35	2
Cedrus deodara	85	6
Ceratonia siliqua	85	1
Cercis siliquastrum	18.5	4
Cinnamomum camphora	55	1
Citrus limon	14.43	7
Coprosma repens	20	1
Cordyline australis	25	1
Corymbia citriodora	22.55	31
Corymbia ficifolia	22.91	22
Corymbia maculata	34.84	122
Cotoneaster glaucophyllus	25	2
Cotoneaster salicifolius	21	2
Crataegus sp.	35	1
Cupressus arizonica	37.5	2
Cupressus glauca	25	1
Cupressus sempervirens	25	1
Cupressus sp.	65	6
Cussonia spicata	29	3
Elaeocarpus reticulatus	13.29	7
Erythrina indica	4	1
Eucalyptus botryoides	69.77	13
Eucalyptus caesia	13	5
Eucalyptus camaldulensis	83.19	21
Eucalyptus cladocalyx	83.33	6
Eucalyptus elata	35	1
Eucalyptus globulus	65	4
Eucalyptus leucoxylon	23.47	19
Eucalyptus leucoxylon 'Conata'	25	1
Eucalyptus macrorhyncha	55	2
Eucalyptus melliodora	27.6	15
Eucalyptus nicholii	45	1
Eucalyptus ovata	20	1
Eucalyptus pauciflora subsp paucif	13	1
Eucalyptus saligna	75	2
Eucalyptus sideroxylon	34.55	11
Eucalyptus sp.	28.08	13
Eucalyptus torquata	10	2
Eucalyptus viminalis	75	1
Fagus sylvatica	23	1
Ficus carica	25	2
Ficus macrophylla	50.63	8
Fraxinus angustifolia	28.5	2
Fraxinus excelsior	40	2
Fraxinus oxycarpa	43	5
Grevillea robusta	63.68	22
Hakea sp.	7	5
Hibiscus syriascus	4.67	3
Hymenosporum flavum	20.8	5
Ilex aquifolium cv	47.5	4
Jacaranda mimosaefolia	13.5	2
Lagerstroemia indica	14.95	20
Lagunaria patersonii	55	1
Laurus nobilis	5	3
Leptospermum laevigatum	35.83	6
Ligustrum lucidum	30	5
Ligustrum ovalifolium Aurea	27	1
Liquidambar styraciflua	30.25	4
Livistonia australia	15	1
Lophostemon confertus	30	2
Luma apiculata	45	1
Macadamia tetraphylla	37.5	2
Magnolia grandiflora	35.67	6
Magnolia sp.	4	4
Malus ioensis	25	1
Melaleuca armillaris	41	5
Melaleuca linariifolia	40.5	4
Melaleuca styphelioides	44.81	31
Melia azedarach	17.90	31
Metrosideros excelsa	28.33	3
Michelia doltsopa	23.5	2
Morus alba Pendula	13	2
Nerium oleander	26.67	3
Olea europaea subsp europaea	40.98	47
Phoenix canariensis	60.38	8
Photinia serrulata	30	1
Pinus	13	2
Pinus canariensis	20.43	7
Pinus halepensis	31	10
Pinus patula	95	2
Pinus radiata	115.12	33
Pittosporum eugenioides	30	1
Pittosporum James Stirling	15	1
Pittosporum sp.	30	1
Pittosporum undulatum	21	2
Platanus insularis	24.5	2
Platanus occidentalis	38.33	3
Platanus orientalis Digitata	34.62	13
Platanus X acerifolia	43.09	34
Podocarpus elatus	34	2
Populus nigra Italica	45	1
Populus x canadensis Aurea	37.5	4
Prunus cerasifera	16	1
Prunus laurocerasus	35	1
Prunus sp.	16	2
Pyrus calleryana	23.4	5
Pyrus Calleryanna Capital	11	1
Pyrus communis	25	2
Pyrus nivalis	20	1
Pyrus ussuriensis	20	1
Quercus bicolor	75	1
Quercus canariensis	59	4
Quercus palustris	8.88	8
Quercus robur	36.83	6
Quercus suber	54.33	3
Robinia pseudoacacia	7.4	5
Schinus molle	55.54	104
Sequoia sempervirens	5.5	2
Solanum aviculare	10.5	2
Sophora microphylla	20	2
Stenocarpus sinuatus	5	1
Syzygium paniculatum	40.4	5
Taxodium distichum	5.95	22
Tilia cordata	32.5	2
To Define	16.1	10
Tristaniopsis laurina	15	1
Ulmus glabra	46.5	2
Ulmus glabra Lutescens	8	1
Ulmus parvifolia	24.5	6
Ulmus procera	59.30	57
Ulmus Sapporo Autumn Gold	6	1
Ulmus x hollandica	58.11	37
Vibernum odorotissimum	11	1
Viburnum Tinus	22.5	2
Virgillia Capensis	35	1
Virgillia oroboides	12.5	2
Washingtonia filifera	37.5	2
Washingtonia robusta	90	2
Zelkova serrata 'Green Vase'	9	3

FURTHER UPDATES TO OCCUR FOR FINAL DRAFT

Species	Average Age (years)	No. of Trees
ALBION STREET		
Acer negundo	45	2
Acmena smithii	46.92	13
Callistemon citrinus	6	1
Corymbia ficifolia	12.7	10
Corymbia maculata	16	1
Eucalyptus ficifolia	15.33	3
Jacaranda mimosaefolia	30	1
Lagunaria patersonii	65	3
Melia azedarach	14.22	9
Metrosideros excelsa	55.5	4
Waterhousea floribunda	25	1
ALEXANDRA STREET		
Acer buergerianum	33.5	2
Gleditsia triacanthos	13	2
Hakea saveolens	26	1
Lophostemon confertus	36.44	39
Nerium oleander	35	1
Phoenix canariensis	8	1
Pistacia chinensis	17.12	43
Platanus X acerifolia	85	7
ALFRED STREET		
Eucalyptus conferruminata	55	1
Eucalyptus globulus	53	5
Eucalyptus leucoxylon	40	2
Eucalyptus melliodora	10.5	2
Lagerstroemia indica	19.29	14
Lagerstroemia indica â€˜Tuscaroraâ€™	8.89	9
ALMA ROAD		
Agonis flexuosa	25	1
Cordyline australis	35	1
Cupressus sempervirens	15.55	38
Eucalyptus leucoxylon	31	3
Eucalyptus leucoxylon 'Conata'	45	1
Eucalyptus sp.	35	1
Gleditsia triacanthos	15.12	51
Gleditsia triacanthos 'Sunburst'	17	1
Lagunaria patersonii	35	5
Ligustrum lucidum	29	1
Magnolia grandiflora	15.32	84
Melia azedarach	4	1
Melia azedarach 'Elite'	4	1
Olea europaea subsp europaea	19	1
Pistacia chinensis	7	1
Platanus X acerifolia	82.78	9

Species	Average Age (years)	No. of Trees
ARGYLE STREET		
Lagerstroemia indica	11.5	4
Pyrus calleryana	5	2
BALSTON STREET		
Angophora hispida	8.17	6
Callistemon citrinus	15	1
Callistemon salignus	15.12	26
Callistemon viminalis 'KPS'	15	1
Cassia sp.	30	1
Ginkgo biloba	10	1
Jacaranda mimosaefolia	7	1
Malus ioensis	21	2
Melaleuca armillaris	40.6	5
Melaleuca linariifolia	45	8
Melaleuca quinquenervia	51.67	3
Ulmus parvifolia	7	1
BLENHEIM STREET		
Lagerstroemia indica	9	4
Leptospermum petersonii	5	1
Melaleuca armillaris	30	1
Melaleuca linariifolia	50	2
Melaleuca quinquenervia	47.5	4
Pyrus calleryana	9	25
Tristaniopsis laurina	18.5	20
Ulmus parvifolia	30	2
BOONDARA GROVE		
Melaleuca linariifolia	47	5
Melaleuca styphelioides	45	1
Platanus occidentalis	37.5	8
Platanus X acerifolia	71.57	7
Prunus Elvins	27	1
BOTHWELL STREET		
Eucalyptus caesia	20	1
Eucalyptus camaldulensis	28.79	14
Eucalyptus leucoxylon	11	2
Eucalyptus melliodora	7	1
Fraxinus oxycarpa	57.5	16
Ginkgo biloba	20	2
Lagerstroemia indica	11	1
BOWEN STREET		
Lagerstroemia indica	31	1
Melaleuca linariifolia	46	10
BRIGHTON ROAD		
Brachychiton acerifolius	8	1
Corymbia ficifolia	21.88	8
Ficus rubiginosa	105	1
Jacaranda mimosaefolia	8	1

Species	Average Age (years)	No. of Trees
Melia azedarach	8	1
Pinus canariensis	85	1
Pinus halepensis	6	1
Platanus X acerifolia	55.26	58
Pyrus calleryana	17.38	13
Ulmus glabra Lutescens	54.29	14
Ulmus procera	50.88	34
Ulmus x hollandica	85	1
BRUNNING STREET		
Cercis siliquastrum	4	1
Jacaranda mimosaefolia	30	1
Melaleuca styphelioides	45	1
Pyrus calleryana	23.72	18
Pyrus Calleryanna Capital	14	1
Pyrus calleryanna Chaunticleer	14	1
Pyrus ussuriensis	29.21	14
CAMDEN STREET		
Allocasuarina torulosa	35	1
Callistemon salignus	35	1
Casuarina cunninghamiana	45	2
Corymbia maculata	45	1
Eucalyptus scoparia	45	3
Eucalyptus sp.	45	1
Gleditsia triacanthos	5	3
Melaleuca linariifolia	44.78	18
Melaleuca quinquenervia	55	1
Melaleuca styphelioides	41.25	4
Robinia pseudoacacia	9	2
Tristaniopsis laurina	31.67	3
Ulmus parvifolia	9	7
CARDIGAN STREET		
Angophora costata	9.5	10
Callistemon salignus	8	1
Corymbia ficifolia	13	2
Corymbia maculata	12	1
Eucalyptus eximia	12.12	17
Eucalyptus leucoxylon	10.5	8
Eucalyptus leucoxylon 'Conata'	15	1
Eucalyptus torquata	5	3
Pistacia chinensis	52.5	2
CARLISLE AVENUE		
Olea europaea subsp europaea	22	1
Platanus X acerifolia	76.54	13
Prunus persica	22	2
CARLISLE STREET		
Araucaria bidwillii	85	1
Cupressus macrocarpa	85	2

Species	Average Age (years)	No. of Trees
Lagerstroemia indica	14.15	20
Lagerstroemia indica â€˜Tuscaroraâ€™	9	3
Ligustrum ovalifolium Aurea	85	1
Melaleuca linariifolia	45	1
Pittosporum eugenioides 'Variegatum'	55	1
Robinia pseudoacacia	18.94	34
CELESTE COURT		
Acacia floribunda	27	1
Acer campestre	9.5	2
Acmena smithii	45	2
Celtis australis	27	1
Lagunaria patersonii	38.75	4
Liquidambar styraciflua	75	1
Nerium oleander	31	1
CHAPEL STREET		
Corymbia ficifolia	36	3
Eucalyptus leucoxylon	30.67	12
Fraxinus ornus	20.67	6
Ulmus parvifolia	7.73	202
Zelkova serrata	6	1
CHUSAN STREET		
Lagerstroemia indica	14.82	22
Melaleuca linariifolia	65	2
Syagrus romanzoffiana	15	1
Tristaniopsis laurina	14.31	13
CREWS STREET		
Pyrus calleryana	9	3
DANDENONG ROAD		
Acacia floribunda	21.63	8
Acacia implexa	14.75	4
Acacia iteaphylla	35	1
Acacia mearnsii	26.5	8
Acacia melanoxylon	7	1
Acacia paradoxa	30	2
Allocasuarina littoralis	7	1
Allocasuarina torulosa	8	1
Allocasuarina verticillata	30	2
Banksia integrifolia	8	2
Brachychiton acerifolius	4	16
Bursaria spinosa	26.44	9
Callistemon sp.	7	1
Corymbia citriodora	25	1
Corymbia maculata	20	1
Cupressus macrocarpa	75	3
Eucalyptus camaldulensis	65	3
Eucalyptus leucoxylon	7	1
Eucalyptus sp.	6	2

FURTHER UPDATES TO OCCUR FOR FINAL DRAFT

Species	Average Age (years)	No. of Trees
Ficus macrophylla	9.5	2
Fraxinus oxycarpa	45	1
Hakea nodosa	25	1
Hakea salicifolia	10	1
Jacaranda mimosaefolia	4	7
Leptospermum laevigatum	30	1
Melaleuca armillaris	34	2
Melaleuca quinquenervia	65	1
Melaleuca styphelioides	25.67	3
Pinus halepensis	10	1
Pistacia chinensis	19	2
Platanus X acerifolia	73.83	72
Pyrus betulaefolia 'Southward Dancer'	7	1
Pyrus calleryana	22	2
Ulmus procera	51.73	22
Ulmus Sapporo Autumn Gold	6	2
DEAN AVENUE		
Fraxinus excelsior	30	1
Fraxinus excelsior Aurea	33	1
Lagerstroemia indica	11	1
Liquidambar styraciflua	84	20
Platanus X acerifolia	11	1
DICKENS ROAD		
Platanus X acerifolia	63.57	7
DICKENS STREET		
Allocasuarina littoralis	25	2
DUKE STREET		
Agonis flexuosa	12	1
Callistemon salignus	8	8
Corymbia ficifolia	35	1
Eucalyptus leucoxylon	55	1
Eucalyptus leucoxylon 'Conata'	12	1
Melaleuca linariifolia	55	12
Melaleuca styphelioides	55	1
EDWARD STREET		
Agonis flexuosa	8.5	6
Tristaniopsis laurina	10.75	4
ELM GROVE		
Callistemon phoeniceus	35	1
Corymbia ficifolia	13.22	18
Eucalyptus ficifolia	16	2
Eucalyptus torquata	5	2
Lophostemon confertus	22.67	9
Melaleuca quinquenervia	45	2
Tristaniopsis laurina	24.38	8
EVELYN STREET		
Pyrus calleryana	17.91	11
Pyrus calleryanna Chauntcleer	8	16

Species	Average Age (years)	No. of Trees
FULTON STREET		
Eucalyptus leucoxylon	26.5	2
Eucalyptus robusta	7	1
Fraxinus oxycarpa	45	1
Lophostemon confertus	24.27	30
Melaleuca quinquenervia	45	1
Tristaniopsis laurina	18.82	11
Waterhousea floribunda	4	1
GIBBS STREET		
Banksia marginata	4.5	4
Callistemon citrinus	6	2
Callistemon salignus	25	1
Callistemon viminalis 'Kings Park Special'	4	5
Cordyline australis	45	1
Eucalyptus caesia	20	2
Eucalyptus camaldulensis	29.71	7
Eucalyptus leucoxylon	18.78	9
Eucalyptus polyanthemos	4.89	9
Eucalyptus scoparia	11.5	2
Fraxinus oxycarpa	58.33	3
Jacaranda mimosaefolia	45	1
Melaleuca nesophila	65	1
Nerium oleander	45	4
Pittosporum eugenioides 'Variegatum'	45	1
Pittosporum undulatum	15	1
Ulmus parvifolia	25.33	3
GLEN EIRA AVENUE		
Callistemon salignus	7.73	11
Fraxinus americana var. appldell autumn applause	8	2
Phoenix canariensis	10	1
Quercus canariensis	14.67	3
Quercus coccinea	8	1
Stenocarpus sinuatus	8	4
Tristaniopsis laurina	10	1
Waterhousea floribunda	37.26	19
GLENMARK AVENUE		
Platanus insularis	21	3
Platanus X acerifolia	39.5	8
GODFREY AVENUE		
Brachychiton acerifolius	21	1
Lagerstroemia indica	15.75	4
Lagerstroemia indica â€˜Tuscaroraâ€™	5	3
Platanus insularis	23	1
Platanus occidentalis	29	1
Platanus orientalis Digitata	30	1
Platanus X acerifolia	63.9	10
Pyrus calleryana	16	1

Species	Average Age (years)	No. of Trees
GOURLAY STREET		
Acacia longifolia	13	1
Acacia sp.	11	1
Agonis flexuosa	15.09	22
Callistemon citrinus	12.67	3
Callistemon salignus	12.42	57
Callistemon viminalis	25	2
Callistemon viminalis 'KPS'	10	1
Fraxinus oxycarpa	7	1
Ginkgo biloba	28.5	2
Lophostemon confertus	32.5	2
GRAYLINGS AVENUE		
Olea europaea subsp europaea	13	1
Platanus X acerifolia	75	5
GRAYLINGS GROVE		
Acmena smithii	41.75	8
Callistemon salignus	12	1
Corymbia ficifolia	5	1
Grevillea robusta	65	1
Jacaranda mimosaefolia	35	1
Lagunaria patersonii	41.67	3
Melaleuca styphelioides	47	5
Olea europaea subsp europaea	18.5	2
Quercus palustris	6	1
GROSVENOR STREET		
Acacia implexa	45	1
Acer negundo	11	3
Acer palmatum	30	2
Acer platanoides	30	1
Acer pseudoplatanus	30	6
Angophora costata	11	1
Banksia integrifolia	11	1
Callistemon salignus	15.11	18
Callistemon viminalis	27.8	5
Callistemon viminalis 'KPS'	10	2
Casuarina cunninghamiana	35	1
Corymbia maculata	31	3
Eucalyptus gunnii	55	1
Eucalyptus leucoxylon	31.57	7
Eucalyptus maculata	11	2
Eucalyptus mannifera	55	1
Eucalyptus polyanthemos	4	1
Eucalyptus scoparia	11	1
Eucalyptus sp.	15	4
Lagerstroemia indica	10.92	12
Lagerstroemia indica â€˜Tuscaroraâ€™	8.33	3
Melaleuca armillaris	49.44	9

Species	Average Age (years)	No. of Trees
Melaleuca linariifolia	53.89	9
Melaleuca styphelioides	42.61	18
Melia azedarach	31.64	14
Pyrus calleryana	11	1
Quercus palustris	27	2
Quercus robur	27	1
HAMMERDALE AVENUE		
Callistemon viminalis 'KPS'	13	2
Melaleuca armillaris	30	3
Melaleuca linariifolia	56.54	13
Melaleuca styphelioides	45	1
Melia azedarach 'Elite'	7	1
Ulmus procera	35	2
HAWSLEIGH AVENUE		
Callistemon salignus	9	1
Melaleuca linariifolia	75	19
Melaleuca styphelioides	55	1
HERTFORD STREET		
Acmena smithii	45.5	12
Waterhousea floribunda	45	1
HOLROYD AVENUE		
Acer campestre 'Queen Elizabeth'	4	1
Acmena smithii	48.63	19
Corymbia ficifolia	12	1
Liquidambar styraciflua	70.63	19
Quercus palustris	61.4	5
Quercus robur	65	1
HOLROYD COURT		
Cinnamomum camphora	78.33	3
Lagunaria patersonii	30	1
Liquidambar styraciflua	13	1
HOTHAM STREET		
Cupressus sempervirens	23.65	77
Cupressus sp.	6	2
Eucalyptus conferruminata	45	1
Eucalyptus eximia	6.15	55
Eucalyptus leucoxylon	15.13	16
Eucalyptus leucoxylon 'Conata'	19.57	47
Eucalyptus leucoxylon 'Eukie Dwarf'	7	1
Eucalyptus sp.	25	1
Eucalyptus torquata	6	2
Melaleuca linariifolia	35	1
Pyrus calleryana	23	2
Pyrus calleryana Chauntcleer	20.2	5
Pyrus Calleryanna Capital	23	1
Pyrus calleryanna Chauntcleer	7	1

FURTHER UPDATES TO OCCUR FOR FINAL DRAFT

Species	Average Age (years)	No. of Trees
HUGHENDEN ROAD		
Liquidambar styraciflua	62.87	23
Metrosideros excelsa	45	1
INKERMAN STREET		
Angophora hispida	7	5
Callistemon viminalis 'Kings Park Special'	8	2
Callistemon viminalis 'KPS'	16.67	18
Corymbia citriodora	9	2
Corymbia maculata	6.8	5
Eucalyptus sideroxylon	65	1
Eucalyptus viminalis	45	1
Lophostemon confertus	38.33	3
Platanus X acerifolia	85	1
Pyrus calleryana	10	1
Pyrus calleryanna Chaunticleer	8	1
Zelkova serrata	4.97	32
Zelkova serrata 'Green Vase'	7.66	235
JERVOIS STREET		
Melaleuca linariifolia	55	3
Melia azedarach	4	1
Melia azedarach 'Elite'	7	15
JOHNSON STREET		
Betula pendula	30	1
Lophostemon confertus	39.07	14
KALYMNA GROVE		
Acer negundo	35	1
Callistemon viminalis	30	1
Fraxinus oxycarpa	47.22	9
Lophostemon confertus	37	12
Melaleuca styphelioides	45	1
Tristaniopsis laurina	21.83	6
Banksia integrifolia	14	1
Corymbia ficifolia	30	1
Eucalyptus cladocalyx	55	1
Eucalyptus leucoxylon	9	2
Eucalyptus sp.	15	1
Grevillea robusta	55	1
Melaleuca armillaris	65	1
Quercus agrifolia	6	7
KURRAJONG AVENUE		
Acmena smithii	43.78	9
Brachychiton acerifolius	21	3
Brachychiton populneus	25.13	8
LAMBERT GROVE		
Acer Buergeranum	6	7
Acer buergerianum	22.38	16
Olea europaea subsp europaea	21	2

Species	Average Age (years)	No. of Trees
LANSDOWNE ROAD		
Acmena smithii	55.67	15
Corymbia ficifolia	35	1
Fraxinus excelsior	45	1
Fraxinus ornus	21	1
Fraxinus oxycarpa	65	2
Fraxinus raywoodii	45	1
Lophostemon confertus	51	5
Melaleuca styphelioides	42.69	13
Olea europaea subsp europaea	25	1
Pyrus calleryana	24.9	20
Quercus ilex	68.33	3
Quercus palustris	62.09	22
Tristaniopsis laurina	13	1
Ulmus parvifolia	9.6	10
Waterhousea floribunda	34.2	5
LESLIE STREET		
Eucalyptus leucoxylon	12	1
Eucalyptus mannifera	5	2
Eucalyptus mannifera 'Little Spotty'	10	2
Eucalyptus scoparia	33.2	5
Olea europaea subsp europaea	20.5	2
LINTON STREET		
Melaleuca linariifolia	61.67	24
LYNOTT STREET		
Robinia pseudoacacia	8	1
MALAKOFF STREET		
Eucalyptus leucoxylon	45	1
Lophostemon confertus	26.38	8
Melaleuca linariifolia	55	1
MARLBOROUGH STREET		
Bursaria spinosa	9	1
Callistemon sp.	9	1
Eucalyptus leucoxylon	22	4
Eucalyptus maculata	8	1
Eucalyptus melliodora	35	1
Eucalyptus polyanthemos	9	1
Eucalyptus scoparia	27	1
Eucalyptus sideroxylon	45	1
Grevillea robusta	35	1
Jacaranda mimosaefolia	21.67	3
Melaleuca armillaris	45	1
Tristaniopsis laurina	7.94	34
Ulmus parvifolia	25	8
Viburnum Tinus	15	1
MARNE STREET		
Acmena smithii	33	1
Fraxinus oxycarpa	54	20
Zelkova serrata 'Green Vase'	6	1

Species	Average Age (years)	No. of Trees
MARTIN STREET		
Callistemon salignus	8	16
Melaleuca linariifolia	55	2
MONTAGUE AVENUE		
Acmena smithii	43.67	9
Fraxinus excelsior Aurea	50	2
Fraxinus oxycarpa	36	2
Quercus palustris	19.14	7
MOOLTAN AVENUE		
Betula pendula	34.6	5
Liquidambar styraciflua	51.91	11
Ulmus parvifolia	45	1
Yucca elephantipes	10	1
MURCHISON STREET		
Brachychiton populneus	6	1
Ficus macrophylla	12	2
Platanus insularis	20	1
Platanus occidentalis	25	1
Platanus X acerifolia	78.24	21
NELSON STREET		
Corymbia citriodora	45	1
Corymbia maculata	25	1
Eucalyptus camaldulensis	55	1
Eucalyptus globulus	65	2
Eucalyptus scoparia	25.67	3
Eucalyptus viminalis	25	1
Lagerstroemia indica	18.5	12
Lagerstroemia indica Tuscarora	9.43	14
NIGHTINGALE STREET		
Callistemon salignus	25	1
Callistemon viminalis	19	1
Eucalyptus leucoxylon	19	1
Eucalyptus pauciflora subsp paucif	23	1
Ligustrum lucidum	9	1
Lophostemon confertus	30	2
Melaleuca linariifolia	65	1
Melia azedarach	32	5
Melia azedarach 'Elite'	6	1
Platanus X acerifolia	65	2
Pyrus calleryana	20.83	23
Ulmus parvifolia	8	2
NOTTAGE STREET		
Acmena smithii	40	2
Fraxinus excelsior	12	1
Quercus palustris	53.43	7
Quercus sp.	85	2

Species	Average Age (years)	No. of Trees
OAK GROVE		
Quercus acutissima	5	11
Quercus canariensis	30.56	9
Quercus coccinea	8	2
ORANGE GROVE		
Corymbia maculata	55	3
Fraxinus oxycarpa	44.75	20
Fraxinus raywoodii	4	1
Platanus X acerifolia	55	1
Pyrus calleryana	22.11	9
Pyrus calleryana Chaunticleer	18	2
Pyrus calleryanna Chaunticleer	9	1
Quercus robur	19	7
Quercus sp.	6	1
ORRONG ROAD		
Fraxinus griffithii	7	1
Fraxinus oxycarpa	44.13	16
Fraxinus raywoodii	45	3
Platanus orientalis Digitata	17	1
Platanus X acerifolia	58.5	12
PAKINGTON STREET		
Acer negundo	55	1
Acer palmatum	23	1
Alnus jorullensis	45	1
Angophora costata	6	1
Angophora hispida	8.25	4
Callistemon viminalis 'KPS'	14	3
Corymbia maculata	9	9
Eucalyptus eximia	13	1
Eucalyptus leucoxylon	33	2
Lophostemon confertus	31.67	3
Lophostemon confertus 'Variegatus'	30	1
Melaleuca armillaris	56.25	8
Melaleuca linariifolia	55	1
Melaleuca sp.	45	1
Melaleuca styphelioides	55.83	12
Michelia doltsopa	21	1
Tristaniopsis laurina	12	9
PALM COURT		
Acer platanoides	6.67	3
Alnus jorullensis	65	3
Eucalyptus leucoxylon	10	3
Eucalyptus torquata	10	3
PENLEIGH COURT		
Acer negundo	45	1
Cassia sp.	8	1
Cotoneaster salicifolius	45	1

FURTHER UPDATES TO OCCUR FOR FINAL DRAFT

Species	Average Age (years)	No. of Trees
Cupressus sp.	9	1
Jacaranda mimosaefolia	50	2
Lagerstroemia indica	14	3
Ligustrum lucidum	15	1
Liquidambar styraciflua	75	1
Malus sp.	17	1
Olea europaea subsp europaea	19	1
Pittosporum eugenioides 'Variegatum'	35	1
Prunus serrulata Shirotae	45	3
Prunus sp.	8	1
To Define	27	1
PHILLIPS STREET		
Lagerstroemia indica	15.67	3
Lagerstroemia indica Tuscarora	7	1
PILLEY STREET		
Acmena smithii	45	4
Eucalyptus pauciflora subsp paucif	55	1
Lophostemon confertus	35	1
Melaleuca linariifolia	65	2
Robinia pseudoacacia	15	1
Tristaniopsis laurina	29.92	13
PRENTICE STREET		
Callistemon salignus	14	1
Lophostemon confertus	27	1
Melaleuca linariifolia	45	1
Melaleuca quinquenervia	45	1
Pistacia chinensis	10.33	3
Prunus cerasifera	13	1
Pyrus Calleryanna Capital	10.83	6
Tristaniopsis laurina	14.43	7
Waterhousea floribunda	23	1
QUEEN STREET		
Fraxinus oxycarpa	35	1
Pyrus calleryana	9	1
Pyrus Calleryanna Capital	7	1
RAGLAN STREET		
Callistemon viminalis	15	11
Casuarina cunninghamiana	6	4
Grevillea robusta	45	1
Platanus X acerifolia	64.47	36
Ulmus parvifolia	4	2
RAITH COURT		
Acmena smithii	85	1
Agonis flexuosa	19.13	8
Callistemon salignus	8	1
Eucalyptus caesia	6	1
Eucalyptus globulus	55	1

Species	Average Age (years)	No. of Trees
RAVENS GROVE		
Platanus X acerifolia	59.53	15
ROSAMOND STREET		
Callistemon salignus	9.4	10
Eucalyptus leucoxylon	8	1
Eucalyptus scoparia	22.5	4
Eucalyptus sp.	18.5	2
Grevillea sp.	25	1
Hakea sp.	4	1
SEBASTOPOL STREET		
Agonis flexuosa	23	1
Cupressus sp.	20.5	2
Eucalyptus mannifera	45	1
Eucalyptus mannifera 'Little Spotty'	10	2
Eucalyptus nicholii	45	1
Eucalyptus polyanthemos	7	1
Eucalyptus scoparia	26.8	5
Ligustrum lucidum	8	1
Lophostemon confertus	40	2
Melaleuca armillaris	16	1
Melaleuca linariifolia	40.75	4
Olea europaea subsp europaea	8	3
To Define	15	1
Ulmus parvifolia	4	2
SHIRLEY GROVE		
Pyrus betulaefolia 'Southward Dancer'	7	18
Pyrus calleryana	21.06	18
SOMERS STREET		
Celtis australis	49.08	12
ST KILDA ROAD		
Callistemon viminalis	15	3
Corymbia citriodora	16	1
Corymbia maculata	44.16	44
Melaleuca styphelioides	52.92	24
Phoenix canariensis	5	1
Platanus insularis	38	2
Platanus occidentalis	35	2
Platanus orientalis Digitata	42.4	5
Platanus X acerifolia	31.62	13
Zelkova serrata	6	1
Zelkova serrata 'Green Vase'	8	2
SUNHILL COURT		
Acmena smithii	41.43	7
Callistemon viminalis	12	1
Lagunaria patersonii	40.25	8
Lophostemon confertus	45	2

Species	Average Age (years)	No. of Trees
SYCAMORE GROVE		
Acer campestre	11	2
Acer pseudoplatanus	20.8	5
Melaleuca linariifolia	59.58	31
Melaleuca styphelioides	45	1
TE-ARAI AVENUE		
Lagunaria patersonii	36.25	4
Liquidambar styraciflua	44.71	7
THE AVENUE		
Grevillea robusta	35	1
Lophostemon confertus	32	3
Malus domestica	45	1
Nerium oleander	29	1
Tristaniopsis laurina	14.92	92
WANDO GROVE		
Fraxinus oxycarpa	42.18	11
Fraxinus raywoodii	45	1
Liquidambar styraciflua	19	1
WAVENHOE AVENUE		
Liquidambar styraciflua	38.96	24
Salix sp.	12	2
WENDEN GROVE		
Acmena smithii	46.33	15
Citrus limon	45	1
Waterhousea floribunda	18	1
WESTBURY CLOSE		
Platanus orientalis Digitata	14	2
Platanus X acerifolia	66.95	19
WESTBURY GROVE		
Acer platanoides	23	1
Callistemon salignus	10	1
Lagunaria patersonii	45	1
Liquidambar styraciflua	45	1
Liquidamber formosana	45	1
Lophostemon confertus	24	2
Melaleuca quinquenervia	45	1
Nerium oleander	45	1
Platanus orientalis Digitata	12	1
Platanus X acerifolia	69.14	21
WESTBURY STREET		
Agonis flexuosa	45	4
Angophora costata	27	2
Callistemon salignus	45	2
Eucalyptus cinerea	45	1
Gleditsia triacanthos	7.5	2
Liquidambar styraciflua	27	1
Lophostemon confertus	35.78	9

Species	Average Age (years)	No. of Trees
Melaleuca armillaris	58.33	3
Melaleuca linariifolia	59	5
Melaleuca quinquenervia	51.14	22
Platanus orientalis Digitata	29.2	5
Platanus X acerifolia	19.33	3
Pyrus calleryana	13.67	3
Robinia pseudoacacia	30	1
Tristaniopsis laurina	17.07	108
Washingtonia robusta	8	1
WILGAH STREET		
Corymbia ficifolia	49.5	2
Fraxinus angustifolia	13.33	3
Fraxinus griffithii	7	3
Fraxinus ornus	25.57	30
Fraxinus oxycarpa	44.67	12
Fraxinus raywoodii	12.29	7
Jacaranda mimosaefolia	23	1
Melaleuca linariifolia	45	1
Melaleuca styphelioides	36.67	3
Melia azedarach 'Elite'	7	1
Tristaniopsis laurina	13	1
Zelkova serrata 'Green Vase'	4	1
WILLIAM STREET		
Callistemon salignus	7	2
Callistemon viminalis	26	11
Callistemon viminalis 'KPS'	10.25	4
Corymbia citriodora	27	2
Corymbia maculata	28	2
Eucalyptus camaldulensis	38.75	4
Eucalyptus leucoxylon	46.17	6
Eucalyptus sp.	29	1
Lophostemon confertus	33.25	4
Melaleuca armillaris	55	1
WOODSTOCK STREET		
Corymbia maculata	55	1
Eucalyptus leucoxylon	13.38	8
Eucalyptus nicholii	30	1
Eucalyptus pauciflora subsp paucif	18.4	5
Eucalyptus sideroxylon	30	1
Eucalyptus sp.	25	1
Eucalyptus tricarpa (sideroxylon)	65	1
Lagerstroemia indica	10.38	8
TOTAL	**30.75 average age (years)**	**5420 total trees**