

Bass Coast

# Residential Canopy Cover Improvement Strategy 2024





### **Acknowledgement of Country**

Bass Coast Shire Council acknowledge the Bunurong as the Traditional Owners and Custodians of the lands and waters, and pays respect to their Elders past, present and emerging, for they hold the memories, the traditions, the culture and Lore. Bass Coast Shire Council celebrates the opportunity to embrace and empower the Aboriginal and/or Torres Strait Island Communities in their diversity. Bass Coast Shire Council will create opportunities for future recognition and respectful partnerships that will honour the Traditional Owners and Custodians, and Aboriginal and/or Torres Strait Islander Peoples.

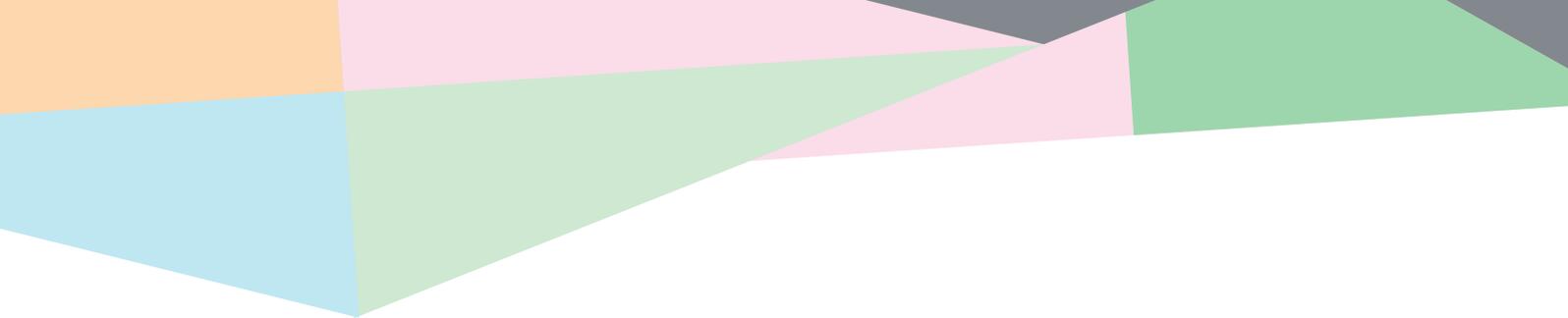
### **Diversity and Inclusion**

Bass Coast Shire Council is committed to providing communications and engagement that is welcoming, safe, accessible and inclusive for our community including First Nations, Culturally and Linguistically Diverse (CALD), Lesbian, Gay Bisexual, Transgender, Queer, Intersex and Asexual (LGBTQIA+) peoples, people with disability and of all ages.



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## Improving Canopy Cover in Residential Areas

*To promote climate responsive landscape design in residential development to support thermal comfort, reduce the urban heat island effect and improve medium density housing.*

### Executive Summary

**This report is guided by the findings of the Bass Coast Urban Forest Strategy, draft Bass Coast Housing Strategy, and draft Neighbourhood Character Study. Recommendations within this report aim to implement actions from these strategies to address the challenge of growing our urban forest in the context of a rapidly growing population where policy supports densification of residential areas.**

Council, through its adoption of the Bass Coast Urban Forest Strategy, is committed to increasing the vegetation in our townships to create our urban forest as it understands a thriving urban forest enhances urban amenity and quality, improves landscape connectivity, and is one of the most efficient and cost-effective mechanisms for building resilience to climate change.



This report recognises changes to the planning scheme are necessary and identifies the appropriate planning provisions to implement the change. However, the specific changes to the planning provisions will be refined and drafted in conjunction with the Housing Strategy, Neighbourhood Character Study, and proposed Residential Development Framework.

The report recommends that Council proactively plan to manage this approaching challenge by nominating quantity of trees, appropriate trees species and planting locations in open space areas for medium density development within the Bass Coast Planning Scheme (the planning scheme).

Recommendations have been established by analysing the size and location of private open spaces in approved medium density housing permits to identify opportunities that can improve canopy cover including specific tree size, locations, and tree numbers without impacting on housing yield. Recommendations are:

### **Recommendations**

1. Variation to Clause 54 & 55 Standards in the Bass Coast Planning Scheme
2. Preparation of an internal guidance document relating to preferred species and assessing landscape plans



## Introduction

**The adoption of the Bass Coast Urban Forest Strategy specifies commitments to increasing the vegetation canopy in the townships to generate our urban forest. The value of regeneration on the Shire is improved amenity, enhanced landscape connectivity in urban areas, and cost-effective climate change resilience.**

An analysis of Bass Coast, in the Urban Forest Strategy, show that the Municipality is on the verge of dropping to below 25% canopy cover which leads to hotter and lower amenity. Wonthaggi and San Remo are considered to have well below desired coverage with under 15%. When considering our community needs it is also vulnerable to consider climate change and the negative implications on health and wellbeing that result in higher temperatures and lower canopy cover.

The urban forest is made up of all vegetation (trees, shrubs, and grasses) within the urban areas, on both private and public land. In this respect, a 'whole of council' approach to the improvement of urban

tree canopy via initiatives on public land (including planting street trees) and private land are equally required to provide an effective means to increase overall canopy cover in the urban areas of Bass Coast. Of note, the Bass Coast Urban Forest Strategy determined one of the biggest contributors to our urban forest is vegetation on privately owned land, primarily land in our residential areas.

The draft Bass Coast Housing Strategy provides a suite of strategies for ensuring adequate housing in the municipality. The draft Neighbourhood Character Study (NCS) identifies the existing and preferred neighbourhood character and provides Planning mechanisms for how new development should appropriately respond and contribute to the valued characteristics of the Shire's established residential areas, including vegetation outcomes. The fusion of the two is known as the Residential Design Framework (RDF) which will become the key document should these strategies progress to a planning scheme amendment.

The Housing Strategy identifies there will be an increase in medium density housing



in Bass Coast due to pressure on existing town boundaries and growing demand of permanent residences in the area. This report explores the impacts of this change including how it will lead to increased hard surfaces and less land on development sites available for landscaping and canopy tree planting and in turn, result in a decline in vegetation, primarily tree coverage throughout our settlements.

Canopy tree planting directed through the planning process is currently in deficit to the loss of canopy cover throughout the municipality because of urban consolidation, increase in permanent residents and perceived risk of canopy trees.

The Bass Coast Planning Scheme provides some protection mechanisms via vegetation focused Overlay controls and the State Native Vegetation Protections. These controls have limitations particularly as they respond to tree removal and lack the proactive nature required to meet canopy cover goals set out in the Urban Forest Strategy or enhancing the landscape character valued locally.

New unit developments are required to provide landscaping in accordance with ResCode Standard B13 however the inconsistencies that result from a generic standard are realised in examples that are examined in this paper.

Opportunities for influencing canopy tree planting in the private realm within infill development is primarily implemented through the planning process. This report will review past planning decisions to understanding canopy planting opportunities.



## Strategic Framework

The following documents have informed the preparation of this report.



**Bass Coast Urban Forest Strategy (2022-2040)** was adopted by Council in May 2023. To grow and maintain the Urban Forest the Strategy propose 4 objectives

1. **Protect:** Manage our Urban Forest to maximise our ability to mitigate and adapt to climate change
2. **Grow:** Increase the equitable distribution of vegetation cover, to enhance neighbourhood and township character, sense of place and support biodiversity connectivity
3. **Empower:** Support our community to participate in, celebrate and influence better outcomes for the Urban Forest on public and private land
4. **Embed:** Build best practice Urban Forest outcomes into our decision making and planning systems to build a sustainable Urban Forest Program that works in synergy with our other asset programs



### **Bass Coast Housing Strategy and Neighbourhood Character Study**

The draft Bass Coast housing strategy has identified infill development within established areas will need to increase to ensure there is adequate residential land available to meet the future housing needs to the Shire's residents.

The draft Neighbourhood Character Study recognises trees and mature vegetation are fundamental to the character of many locations. The draft Housing Strategy and Neighbourhood Character Study both recommend investigating ways to retain and increase canopy cover in residential areas to ensure a balance between the competing interests of medium density development and vegetation retention and establishment.



**Living Melbourne: Our Metropolitan Urban Forest (2019)** the purpose of this document is to shift Melbourne's approach to the urban forest, identifying its contribution to the creation of a resilient city, using evidence to prepare actions to connect, extend and enhance urban greening across the metropolitan area. Actions include:

- Protect and restore species habitat, and improve connectivity
- Set targets and track progress
- Scale up greening in the private realm
- Collaborate across sectors and regions
- Build a toolkit of resources to underpin implementation





## Understanding medium density development in Bass Coast

### *Medium density housing in Bass Coast*

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Medium density housing refers to housing used in established areas where the population is condensed. This housing can take a number of forms including townhouses, units and apartments.

In the Bass Coast medium density housing can only occur within the settlement boundaries on land included in a residential zone. The residential zones currently applying to our settlements include:

- **Mixed Use Zone (clause 32.04 and schedule)**

This zone is applied to areas of our settlements that have a mixed-use function, including a range of residential and commercial uses. It encourages residential development at increased densities including urban renewal and strategic redevelopment sites.

- **Township Zone (clause 32.05 and schedule)**

Historically, this zone has been applied to our small towns that have limited structure of residential, commercial and industrial land uses (for example settlements like Bass, Kilcunda and Dalyston).

- **Residential Growth Zone (clause 32.07 and schedule)**

This zone is applied to areas suitable for housing diversity and housing at increased densities in locations offering good access to services, jobs and public transport, and to provide a transition between areas of more intensive use and development such as activity centres, and other residential areas. This zone applies to land within the Cowes Activity Centre.

- **General Residential Zone (clause 32.08 and schedule)**

This zone applies to most of the land within our townships. The purpose of the zone is to encourage diversity of housing types and housing growth in locations offering good access to services and transport.

### *Existing medium density housing supply and its anticipated growth*

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Currently, the housing stock in Bass Coast is relatively homogenous and primarily comprises separate dwellings (91 percent) with medium density housing making up only 8% of the housing stock.

Infill and medium density housing has historically made up a small proportion of the development activity in Bass Coast, comprising around 3% of all residential dwelling approvals between 2015 and 2021. However, in 2022 infill and medium density dwellings comprised 13% of all approvals, increasing the proportion of approvals that are infill or medium density to 5%.

This recent development activity is likely to continue with the market for medium density housing in Bass Coast expected to increase over time - this housing type will serve a range of segments including downsizers, investors, and holiday rentals. Strong price growth of separate dwellings is expected to also increase the feasibility of medium density development over the next 15 years.

Policy, including the draft Statement of Planning Policy, Victorian Housing Statement and Bass Coast Housing Strategy will also encourage the development of medium density housing.

Maximising tree canopy in medium density development within Bass Coast without impacting housing yield is the key driver of this project. Currently, trees and landscaping are determined once the development layout has been established, resulting in vegetation being chosen to fill undeveloped space. Influencing design from the initial design stage should facilitate greater canopy trees yield per site, and subsequently canopy cover.



## Case Study Analysis -

### Balancing demand for medium density development and greening

To understand the ability of medium density development to include tree canopy an analysis of past decisions was considered, this included:

- An analysis of 30 medium density developments planning applications lodged and issued between 2019 and 2023 in Bass Coast. This was conducted to understand the relationship between site size, typology, open spaces, built form and zoning. (Table 1)
- An analysis of 32 medium density developments planning permits issued since 2019 that reached completion was conducted to review planning permits conditions and completed developments. (Table 2)

Key findings from this analysis are detailed in Table 1 and Table 2.

**Table 1:** Key findings from case study sample of medium density housing applications lodged in between 2019-2023

<b>Medium density planning permit applications</b> lodged between Jan 2019 and July 2023.	122 permits
<b>Zoning</b>	85% of the 122 applications were located in the General Residential Zone.
<b>Yield</b>	71% of permits were 2-unit developments including second dwelling on a lot and new two-unit developments.
<b>Typology</b>	99% were traditional living in design, with the recreational spaces provided as ground level secluded private open
<b>Site Coverage</b>	Average site coverage was 51%, with only 4 applications exceeding the 60% preferred in Standard B8.
<b>Permeability</b>	The majority of applications provided a layout with at least 41% permeability, which is 20% greater than the minimum amount to comply with Standard B9.
<b>Garden Area</b>	100% of sites were an area of more than 500m <sup>2</sup> in size, triggering a minimum garden area requirement.
<b>Front Setbacks</b>	Front yards were at least 5m deep in 62% of applications. The average front setback was 5.5 metres with a third of applications with a setback under 5 metres.
<b>Front Private Open Space (POS)</b>	65% had a front yard of at least 40 square meters in area, with the median front POS size being 55m <sup>2</sup> .
<b>Secluded Private Open Spaces (SPOS)</b>	All but one application had at least one of the dwellings with a SPOS with a minimum depth of 4m or more. 50% of application provided each dwelling with at least 50sqm of POS.
<b>Canopy Trees</b>	13% of applications did not have a single canopy tree on the endorsed landscape plan. 70% of permits had between 1 and 5 canopy trees on the endorsed plans.
<b>Location of canopy trees</b>	The majority of permits included canopy trees in the front setback with any supplementary planting in the side or rear corner of the POS. The location of plantings in side and rear POS were not located to sufficiently provide appropriate soil for optimum growth.
<b>Retention</b>	Only 5 of the assessed applications included retention of existing canopy trees.

**Table 2:** Key findings from permits of completed medium density housing applications issued between 2019-2023

<b>Permits</b>	32 planning permits applications decided between Jan 2019 and July 2023 reached completion via building occupancy permits.
<b>Zoning</b>	95% of the developments were located in the General Residential Zone.
<b>Yield</b>	95% of permits were 2-unit developments including second dwelling on a lot and new two unit developments.
<b>Days from permit issue to completion</b>	It took an average of 1.8 years between the issue of a planning permit and certificate of occupancy being issued.
<b>Landscaping conditions on permit</b>	90% of permits issue had conditional requirements to submission of a landscape plan or revised landscape plan.
<b>Completion condition</b>	80% of permits included conditions specifying completion of landscaping which ranged from before issue of occupation permit to completion or within 3, and 12 months of issue of occupation permit.
<b>Landscape maintenance conditions</b>	10% of permits did not include maintenance conditions, incidentally these permits also did not include any other landscaping conditions.
<b>Endorsed plans</b>	15% of permits had no endorsed landscape plans regardless of whether conditions required one to be submitted.

## Growing the urban forest in medium density development

The above analysis of medium density development indicated there is opportunity to provide additional planting. To complement this the following analysis was undertaken:

- The council's arborist prepared a preferred planting tree list including 83 trees suitable for residential environments (refer to appendix A). These trees have been grouped into four categories, A, B, C and D based on height, soil requirements and canopy area. The categories are outlined in the below table.
- Spatial analysis of the private open space in medium density development was undertaken to determine the most appropriate category tree (A,B, C or D) that can be accommodated in the existing private open space to maximise the tree and dwelling yield. The results of this analysis are set out in this section.
- A review of schedules in residential zones at several other Victoria council particularly those with urban forest strategies.

### Categorisation of trees

The successful establishment of a tree within an environment requires is largely dependent on soil volume, access to sunlight and water uptake. Where a tree is not able to access these criteria stunted growth is likely to occur, which in some situations is acceptable and even desirable.

Tree species selection is the greatest contributor to assess if a tree will perform well in a given environment. The preferred planting list included in Appendix A has been informed from the Bass Coast Urban Forest Strategy's list of species that can perform well in a shifting climate with predicted rainfall across the Bass Coast.

Soil volumes and appropriate space for root development has been used as the metric for canopy tree establishment and not projected canopy coverage as phototropic growth will largely dictate where a trees canopy will develop. The trees canopy does not accurately depict the trees TPZ (see figure 1). Tree canopies can also be pruned to suit the trees surrounds.

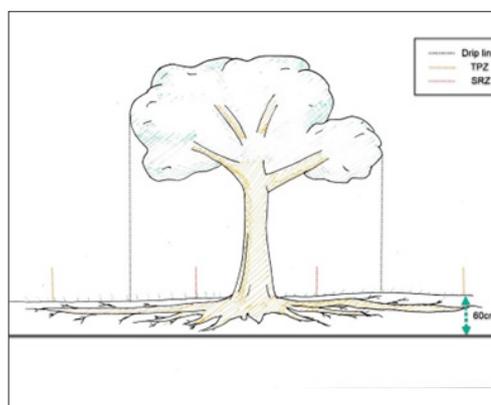


Figure 1. TPZ is not an indicator of canopy size.

Another item to consider is liveability of a site, particularly secluded private open space (SPOS) sites where sunlight may not be as predominant when compared with private open space (POS) sites where there is ample room for a tree to be grown within a front or rear setback. In these scenarios it is best to look towards deciduous trees that will provide shade in Summer and sunlight in Winter, when the trees lose their leaves.

Lifetime of the site is another element that requires consideration; if the plantings will reach maturity and provide the desired amenity to the site within the site’s lifetime. It is assumed that the lifetime of a site will be approximately 50yrs. As tree species vary in terms of longevity, soil conditions have been calculated to reflect a 16-35yr tree lifespan/planting replacement time. Although a tree will readily live longer than 50yrs, the context of the site and how the tree fits into the site constraints were important factors considered.

**Table 1** -Tree Categories for medium density development.

Tree Category	Height of tree	Minimum ground soil area (m2)	Canopy Area
A	1-5m	16	12.5m <sup>2</sup>
B	6-8m	24	24m <sup>2</sup>
C	8-10m	34	38.5m <sup>2</sup>
D	10-12m	58	57m <sup>2</sup>

When the suggested tree sizes were assessed against the 30 completed developments the following was determined:

Applications that could accommodate this tree size	Any open space location
Tree A	99%
Tree B	73%
Tree C	33.33%
Tree D	3%

**Planting opportunities in the front setback**

Tree planting within the front setback can provide shading benefit to both the private and public realm. Bass Coast encourages broad tree-canopy in private front yards to shade footpaths and roads so long as trees are maintained, and minimum clearance requirements are met. With this understanding, Council is not in opposition with private tree canopies projecting over public land as it can provide an overall community benefit. This provides an opportunity for larger trees to be planted within the front setback.

The ability for large trees to fit within front yards was analysed against the case study sample of applications. Table 2 illustrates various sized front yards of the case study sample and shows appropriate soil volumes to support larger trees within front yards, larger trees tend to have larger canopies and it is assumed that up to 40% of the canopy will project over the public realm. This is considered a conservative approach as larger trees could overhang part of the built form such as porch structures to provide beneficial cooling of the roof structure through shading.

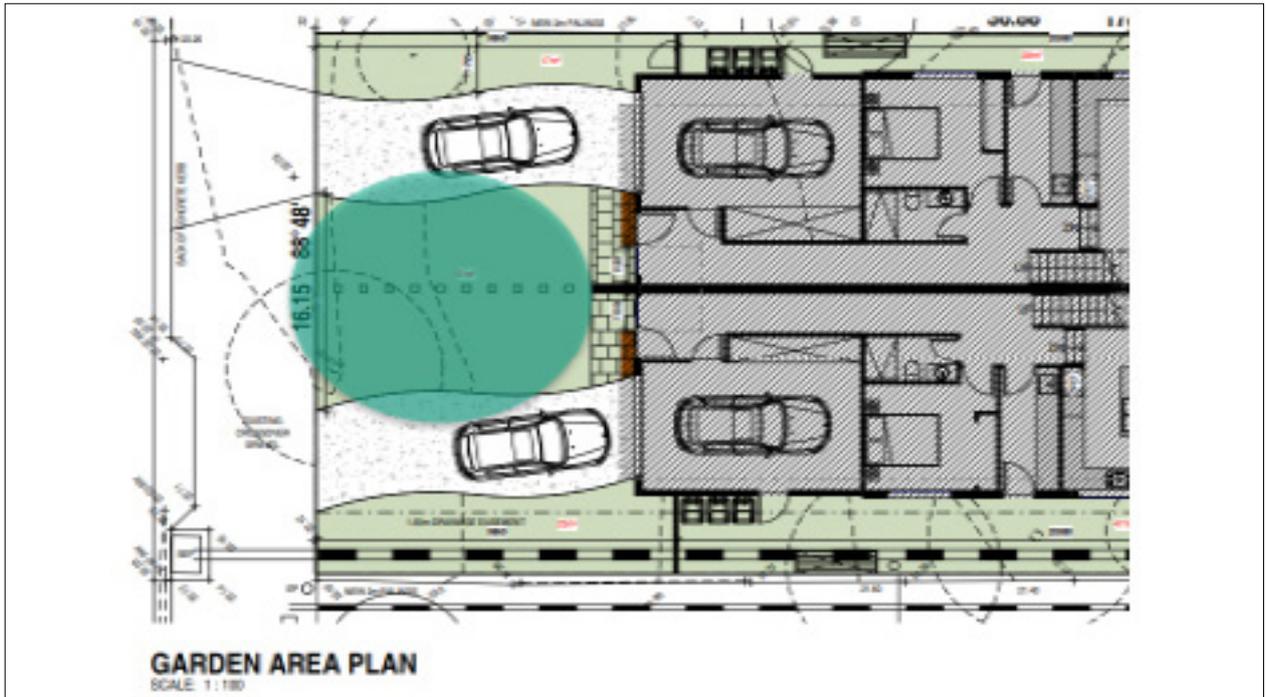
This examination demonstrated that on smaller lots with front setbacks of less than 4.5m, it was difficult to accommodate the larger category D trees (refer to sample 6 in Table 2). On larger lots with deeper front setbacks, the majority of category C & D trees could be accommodated in the front yard, as there was an acceptable amount of soil volume to support establishment of these larger trees. This is demonstrated in Table 2 with required area up to 60m<sup>2</sup> to support larger trees with an estimated canopy size of 55m<sup>2</sup> or 8.5m diameter, this also demonstrates where these larger trees cannot reasonably be supported, the smaller category C tree have been used with an estimated canopy size of 40m<sup>2</sup>.

**Table 2:** Sample of case study applications on lots of varying size and shape demonstrating canopy sizes appropriate for available soil.

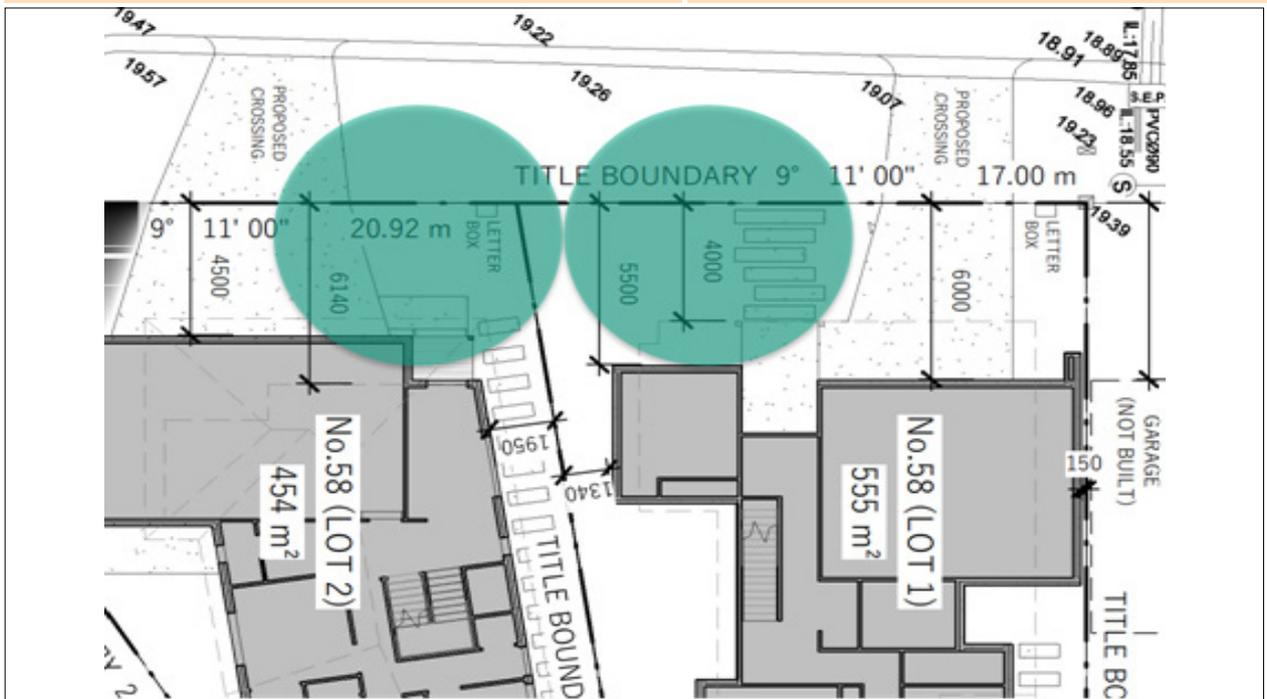
Sample	FRONT SETBACKS	
1	Lot Size	707m <sup>2</sup>
	Front yard area	80m <sup>2</sup>
	Front set back	4.7m
Species		D



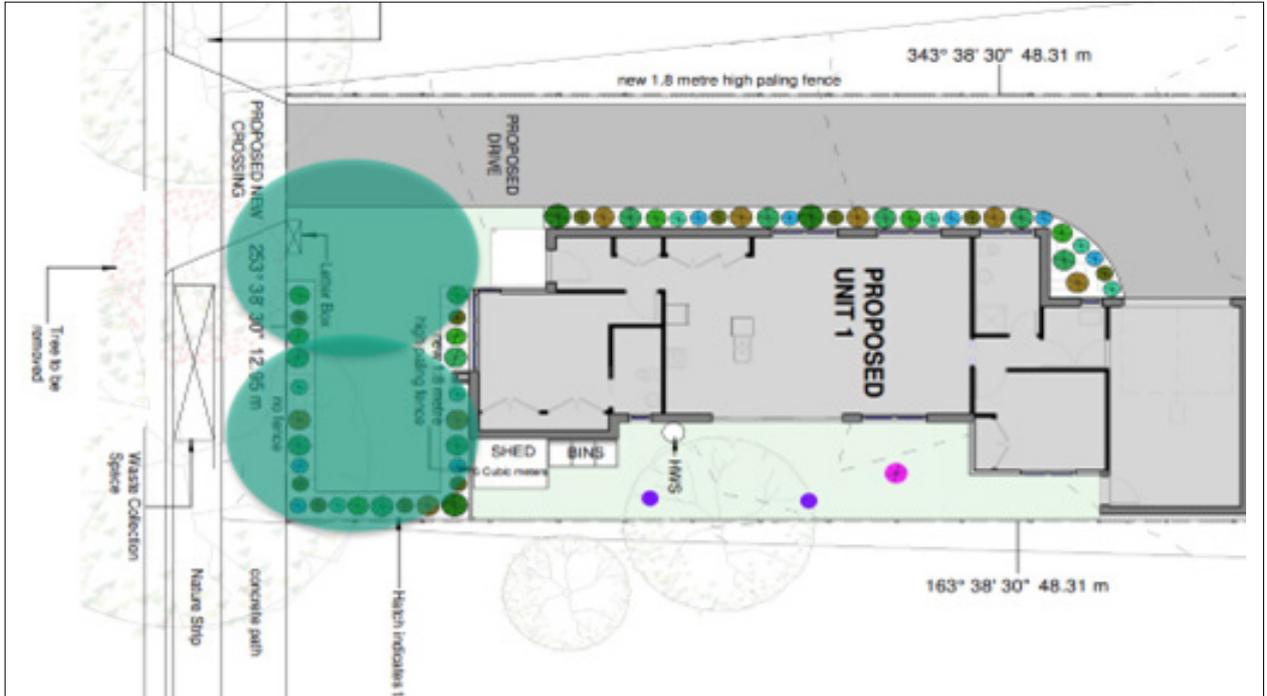
Sample	FRONT SETBACKS	
2	Lot Size	506m <sup>2</sup>
	Front yard area	51m <sup>2</sup>
	Front set back	8.7
Species		D



Sample	FRONT SETBACKS	
3	Lot Size	1009m <sup>2</sup>
	Front yard area	60m <sup>2</sup>
	Front set back	4m
Species		C



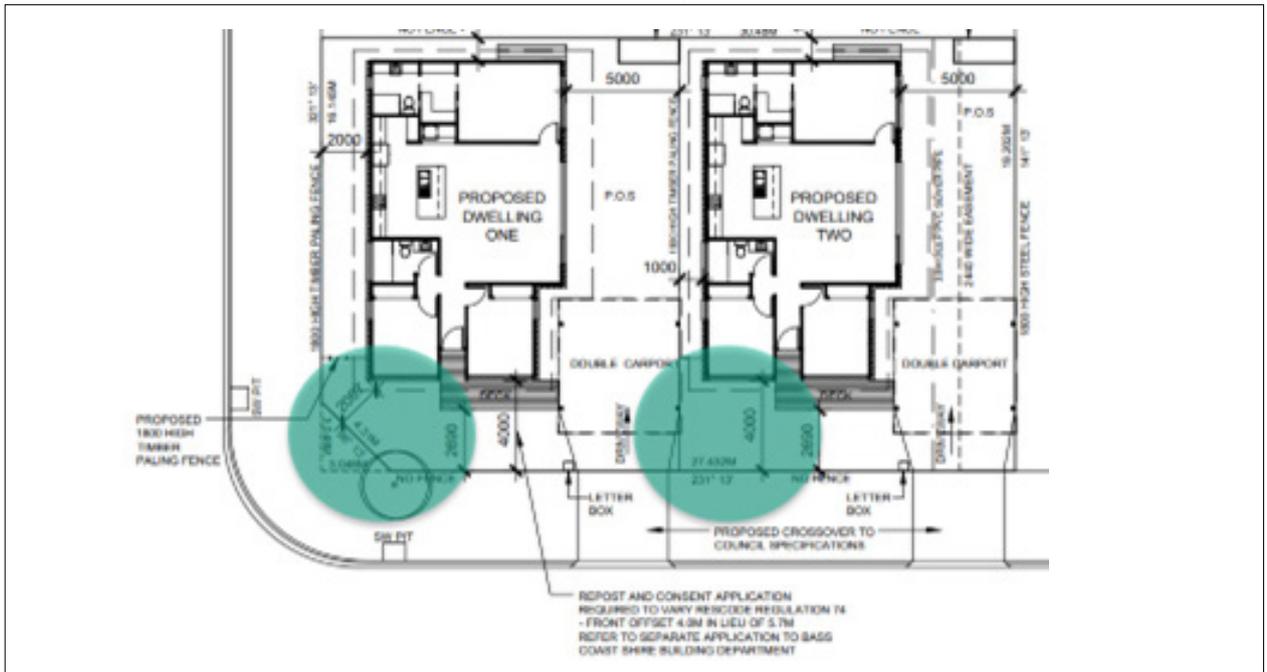
Sample	FRONT SETBACKS	
4	Lot Size	625m <sup>2</sup>
	Front yard area	40m <sup>2</sup>
	Front set back	5.1m
Species		C



Sample	FRONT SETBACKS	
5	Lot Size	581sqm
	Front yard area	181m <sup>2</sup>
	Front set back	6m
Species		D



Sample	FRONT SETBACKS	
6	Lot Size	580 m <sup>2</sup>
	Front yard area	36m <sup>2</sup> per unit
	Front set back	4m
Species		D





## Planting opportunities in other open spaces

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A similar analysis was undertaken for trees with the remaining private open spaces of the case study applications. The largest part of the remaining private open spaces was the secluded private open spaces (SPOS) of the proposed dwellings. These open spaces were generally smaller and more constrained than the front yard due to buildings on adjacent sites, the built form layout on the subject site and the presence of drainage and sewage easements.

Considering that the minimum projected canopy by soil volume for a canopy tree is 22m<sup>2</sup> and that each SPOS should provide adequate soil volume and ground area for this size tree, a 22m<sup>2</sup> sized canopy tree (5.5m wide canopy) was chosen as a measurable canopy for this analysis. It was found that some areas of SPOS have available space to host much larger canopy trees (see sample 2 Table 3) or a mix of both (see sample 4 Table 3).

## Side by side development

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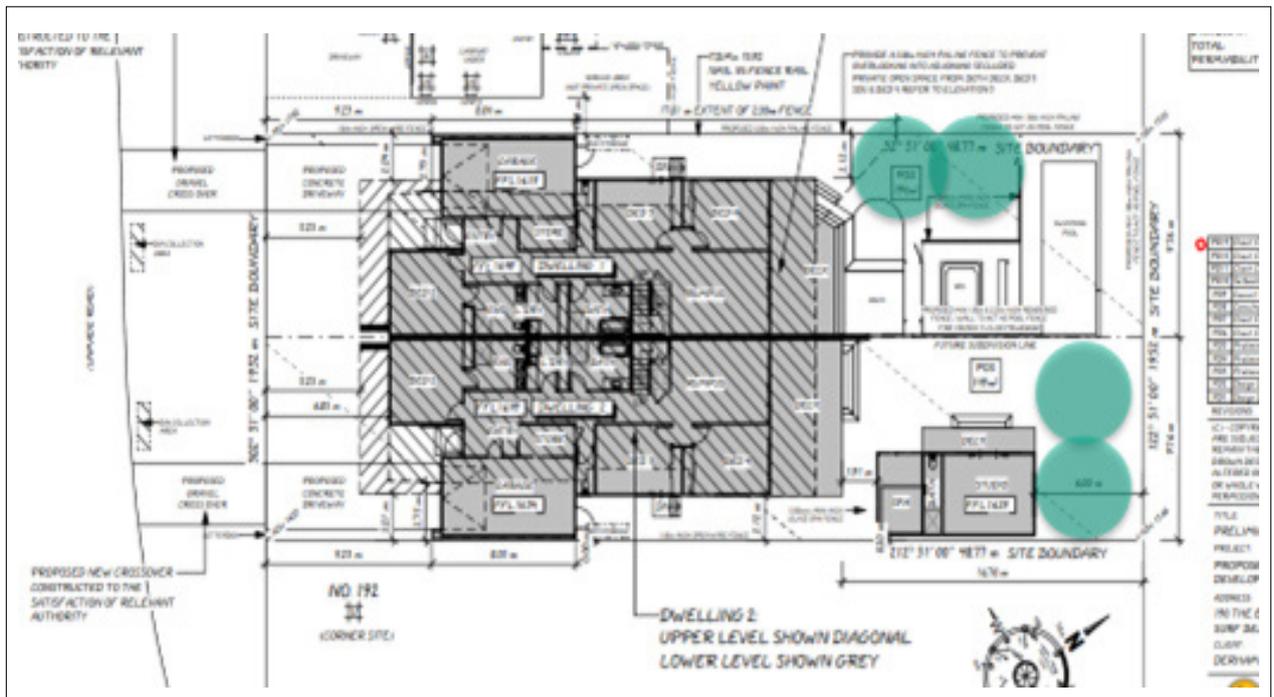
Table 3 illustrates side by side type developments that can accommodate category B trees (demonstrated as a green circle) in both dwellings SPOS.

**Table 3:** Sample of case study applications on lots of varying size and shape demonstrating category B trees with a 22m2 (5m wide) canopy in the secluded private open spaces.

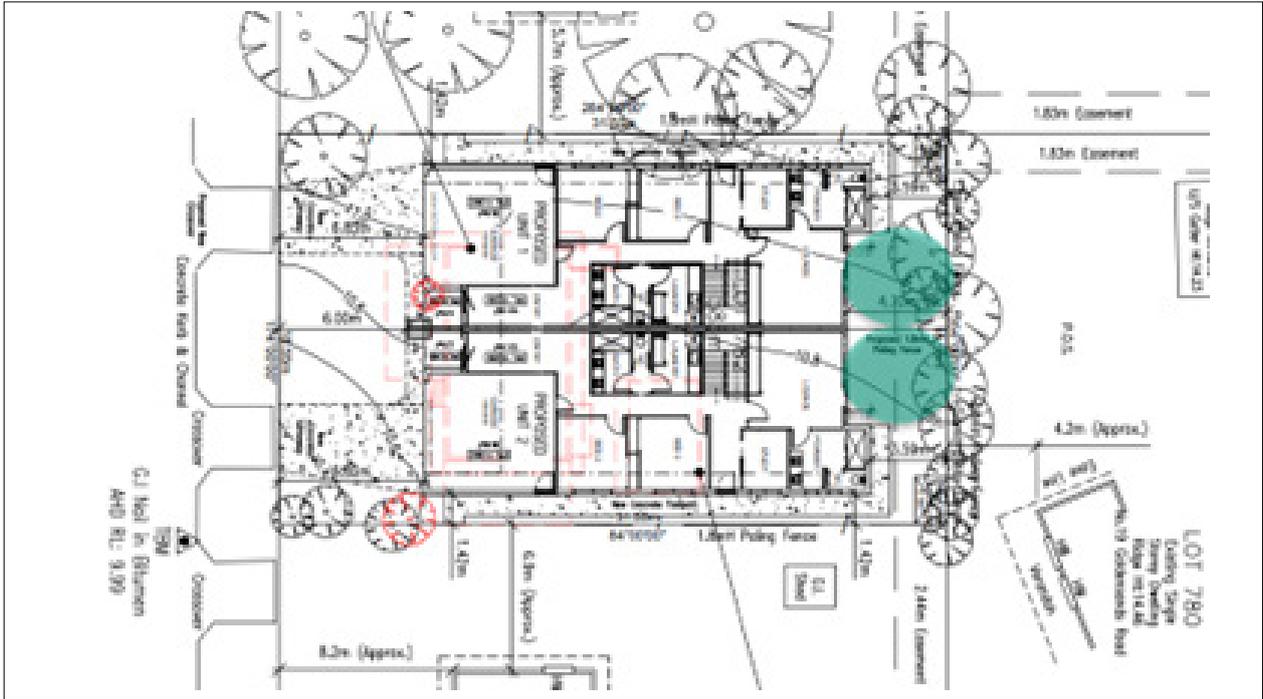
Sample	FRONT SETBACKS	
1	Lot Size	585m <sup>2</sup>
	SPOS Area	65m <sup>2</sup> & 65m <sup>2</sup>
Species		C



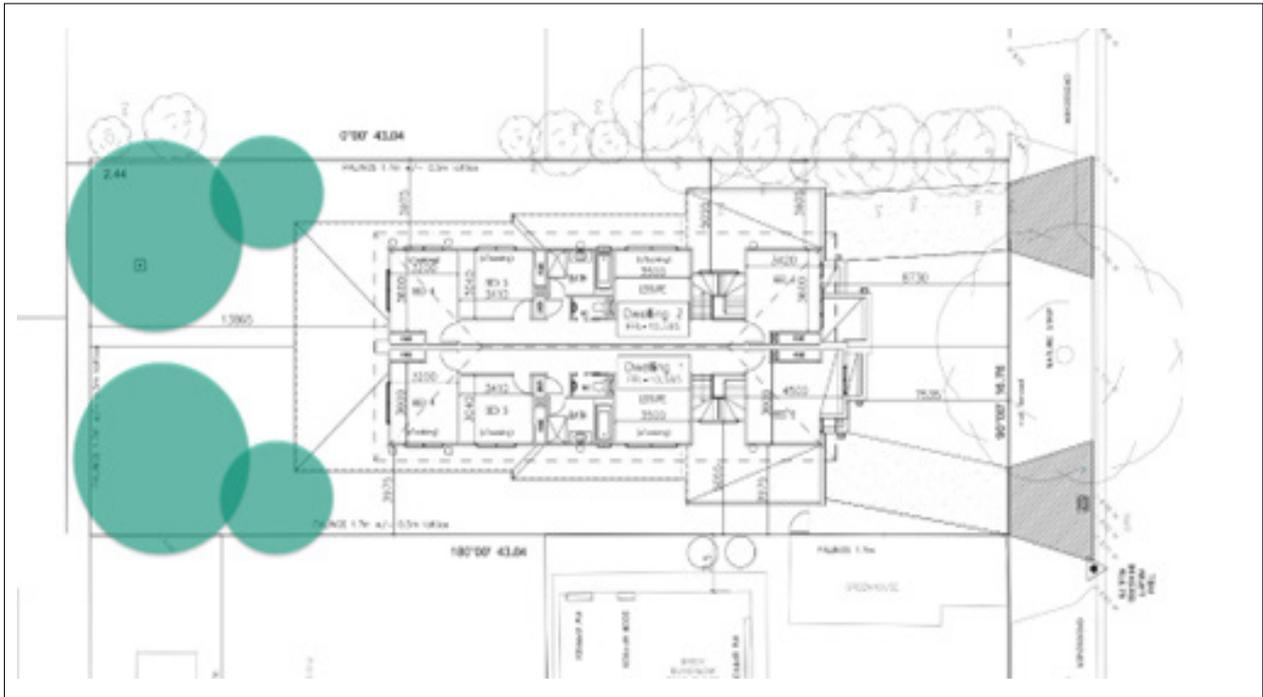
Sample	REAR SETBACKS	
2	Lot Size	952m <sup>2</sup>
	SPOS Area	149m <sup>2</sup> & 194m <sup>2</sup>
Species		B



Sample	REAR SETBACKS	
3	Lot Size	570m <sup>2</sup>
	SPOS Area	45m <sup>2</sup> & 45m <sup>2</sup>
Species		B



Sample	REAR SETBACKS	
4	Lot Size	721m <sup>2</sup>
	SPOS Area	138m <sup>2</sup> per dwelling.
Species		B & D



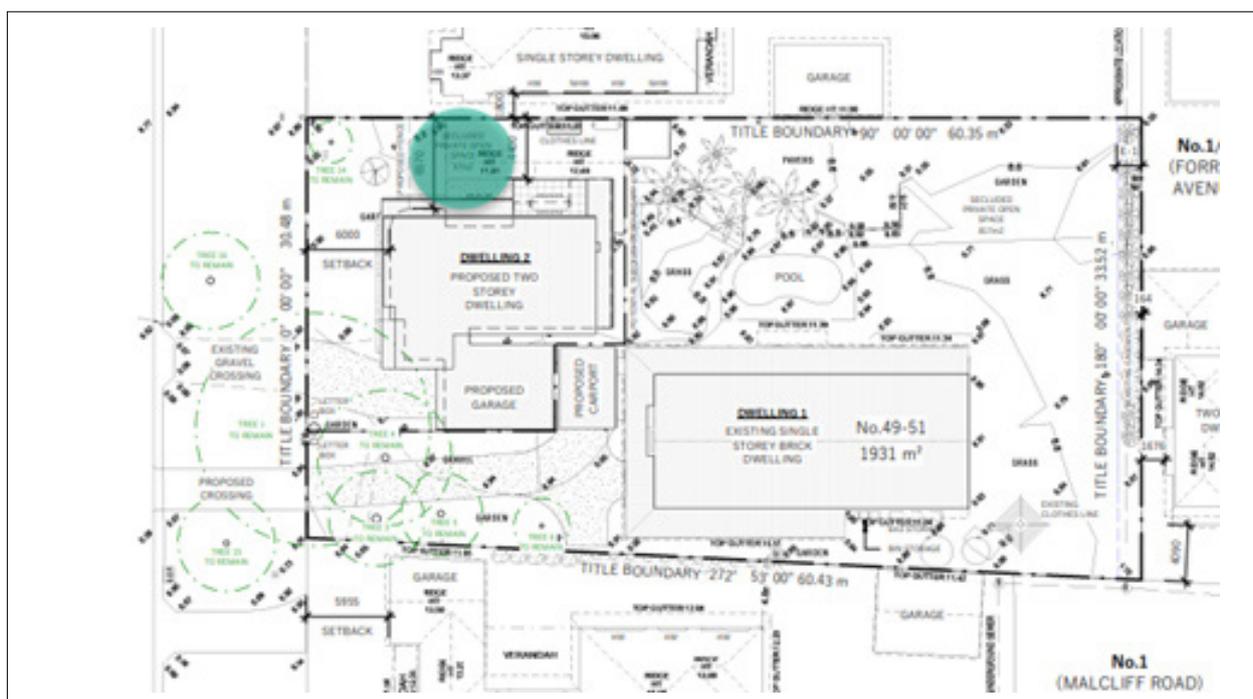
## Second dwelling at the rear of an existing dwelling

There were a number of applications within the case study sample that seek to construct a second dwelling to the rear of an existing dwelling. Within this typology, retaining the existing dwelling and the existence of a rear easement constrains the site layout to provide space for only one 24m<sup>2</sup> canopy tree, as illustrated in Table 3.

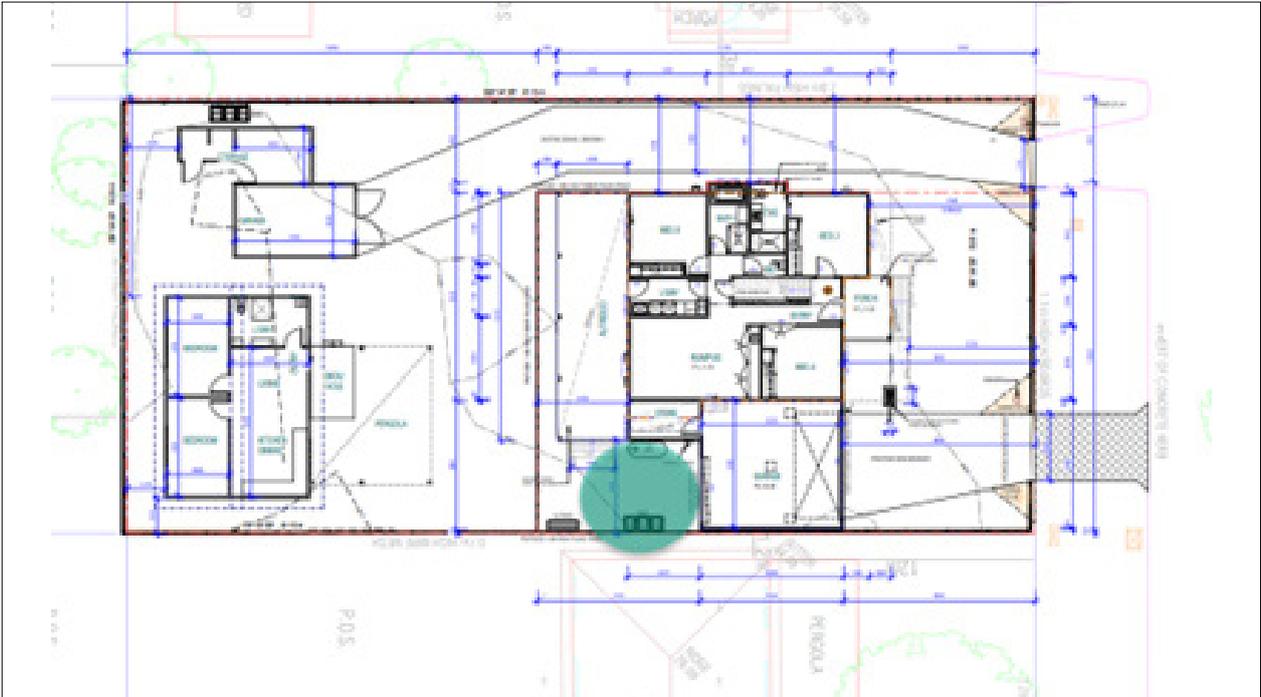
However, in the majority of the applications with this typology, modification to the new dwelling's layout could have increased the open space to provide an open area for a second tree with a 24m<sup>2</sup> canopy tree without impacting dwelling yield. For example, Sample 3 in Table 4 demonstrates a layout with a double single storey dwelling in the rear. Modifying this dwellings location, would create a pocket of open space outside the easement to accommodate a second tree.

**Table 4:** Sample of case study applications on lots of varying size and shape demonstrating trees with a 24m<sup>2</sup> (5.5m wide) canopy in the secluded private open spaces.

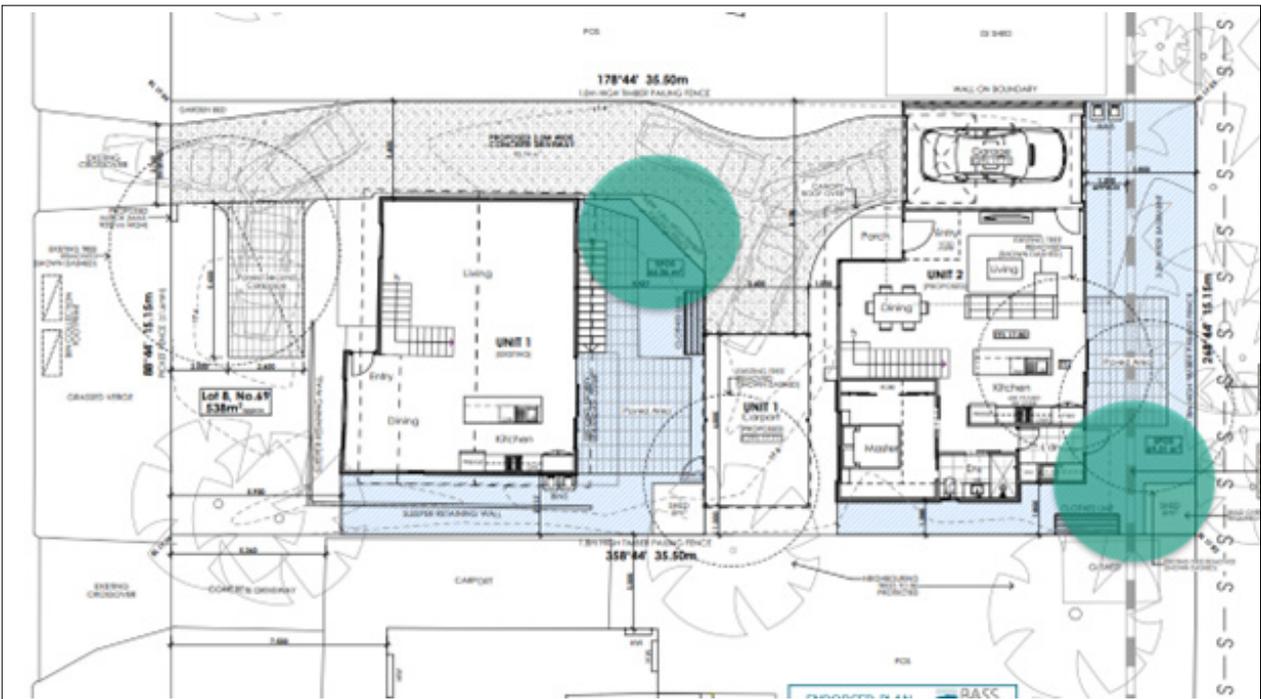
<b>Sample</b>	TWO DWELLINGS (existing dwelling retained) – 38.5m <sup>2</sup> (7m wide) canopy shown in green.	
<b>1</b>	Lot Size	1931m <sup>2</sup>
	SPOS Area	68m <sup>2</sup>
Species		C



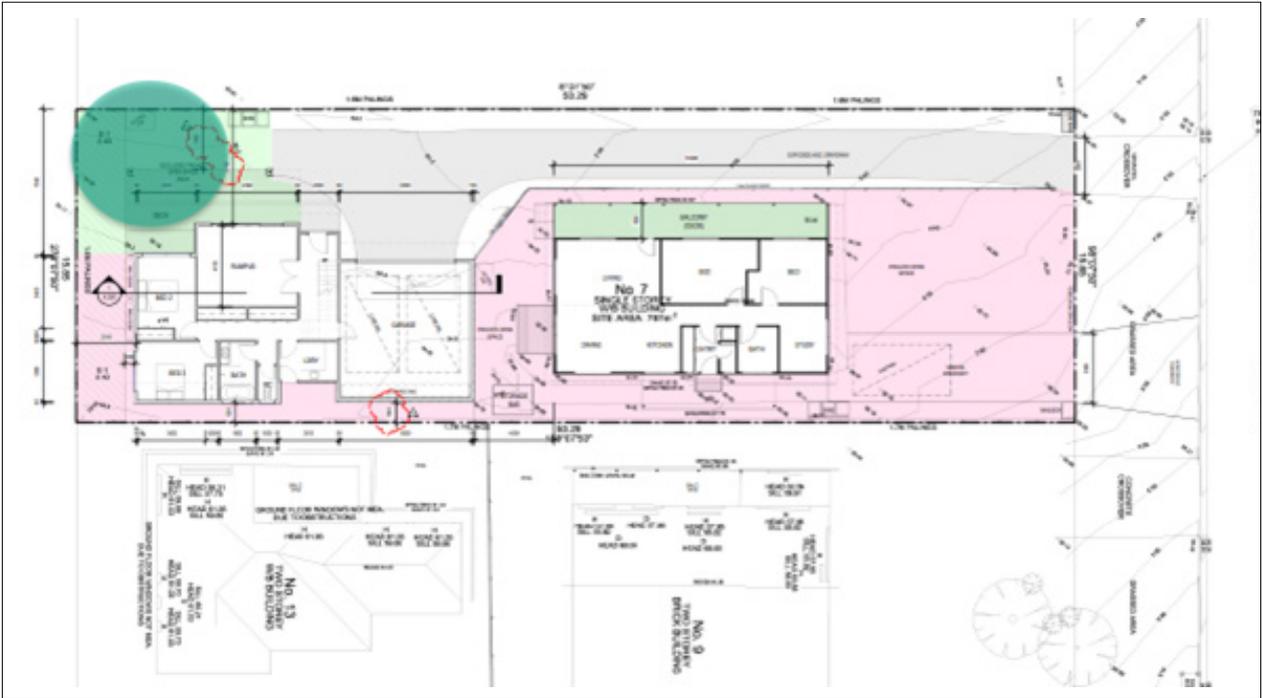
<b>Sample</b>	TWO DWELLINGS (existing dwelling retained) – 38.5m <sup>2</sup> (7m wide) canopy shown in green.	
<b>2</b>	Lot Size	815m <sup>2</sup>
	SPOS Area	64m <sup>2</sup>
Species		B



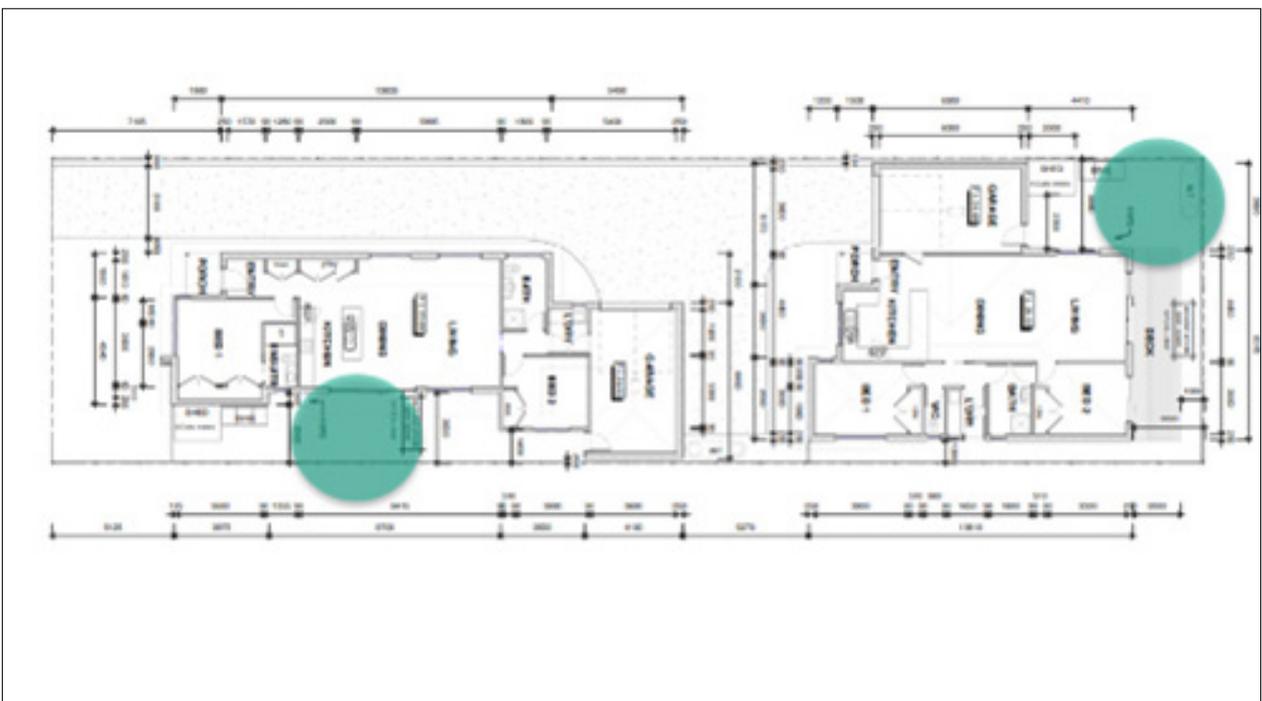
<b>Sample</b>	TWO DWELLINGS (existing dwelling retained) – 38.5m <sup>2</sup> (7m wide) canopy shown in green.	
<b>3</b>	Lot Size	538m <sup>2</sup>
	SPOS Area	66 & 68m <sup>2</sup>
Species		B



<b>Sample</b>	TWO DWELLINGS (existing dwelling retained) – 38.5m <sup>2</sup> (7m wide) canopy shown in green.	
<b>4</b>	Lot Size	797m <sup>2</sup>
	SPOS Area	65m <sup>2</sup>
Species		C



<b>Sample</b>	TWO DWELLINGS (existing dwelling retained) – 38.5m <sup>2</sup> (7m wide) canopy shown in green.	
<b>5</b>	Lot Size	625m <sup>2</sup>
	SPOS Area	44m <sup>2</sup> & 56m <sup>2</sup>
Species		B





## Three or more dwellings

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The case study applications for three or more dwellings identified that whilst the garden area had increased the depth of the SPOS, the depth would need to further increase to accommodate a canopy of 24m<sup>2</sup> entirely within the SPOS of the dwellings.

The approach to allow some overhang of the canopy across the property boundary was also considered acceptable within these spaces, however at a much lesser degree. Considering that Australian Standard 4970-2009, Protection of trees on development sites, states that an incursion of more than 10% of the Tree Protection Zone (TPZ) is a major encroachment and may require a detailed root investigation. Soil volumes within these areas will be able to sustain appropriate root mass to ensure tree stability and longevity even with encroachments up to 30% into the TPZ of the tree, root investigation may find no roots in the area.

Using this tolerance, a 24m<sup>2</sup> canopy tree would require the depth of a SPOS to be at least 3.85m. The analysis of the case study sample identified in the majority of the applications at least one of the secluded private open spaces had this depth.

Applying this tolerance to the analysis to development layouts for three or more dwellings found that there were private open spaces outside of the front setback that could accommodate at least two trees with a 24m<sup>2</sup> canopy. The analysis also determined that in many instances the layout could be modified to accommodate additional trees at a tree planting rate of one per dwelling without impacting yield or bedroom numbers. Table 5 illustrates examples of this outcome from the case study samples, with trees being shown:

- Within the SPOS,
- Appropriate soil volume for structural root development,
- Allowable tolerances for canopies to be pruned/modified to suit the planting space,
- Where a modified building footprint could provide space for an additional tree without greatly impacting the development outcome.

**Table 5:** Sample of case study applications on lots of varying size and shape demonstrating trees with a 24m<sup>2</sup> canopy in the secluded private open spaces.

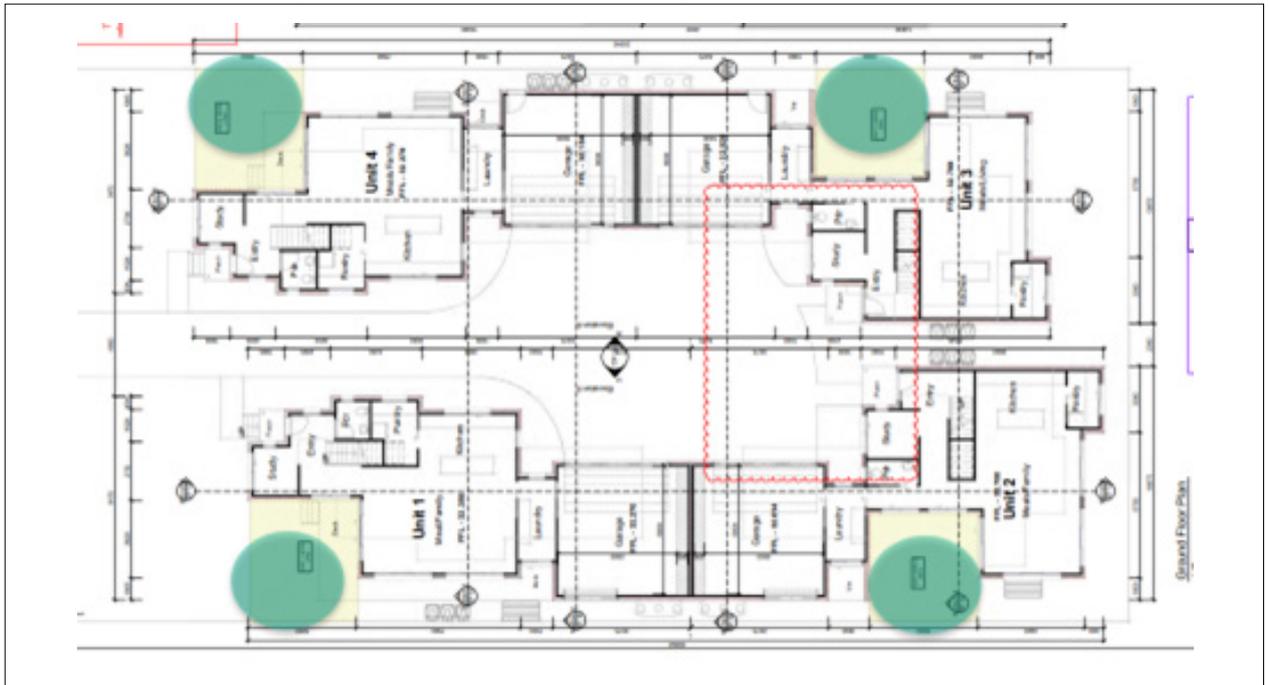
<b>Sample</b>	THREE or MORE DWELLINGS - 24m <sup>2</sup> (5.5m wide) canopy shown in green.	
<b>1</b>	Lot Size	873m <sup>2</sup>
	SPOS Area	79 SQM + 41.9 SQM + 40.6 SQM
Species		B



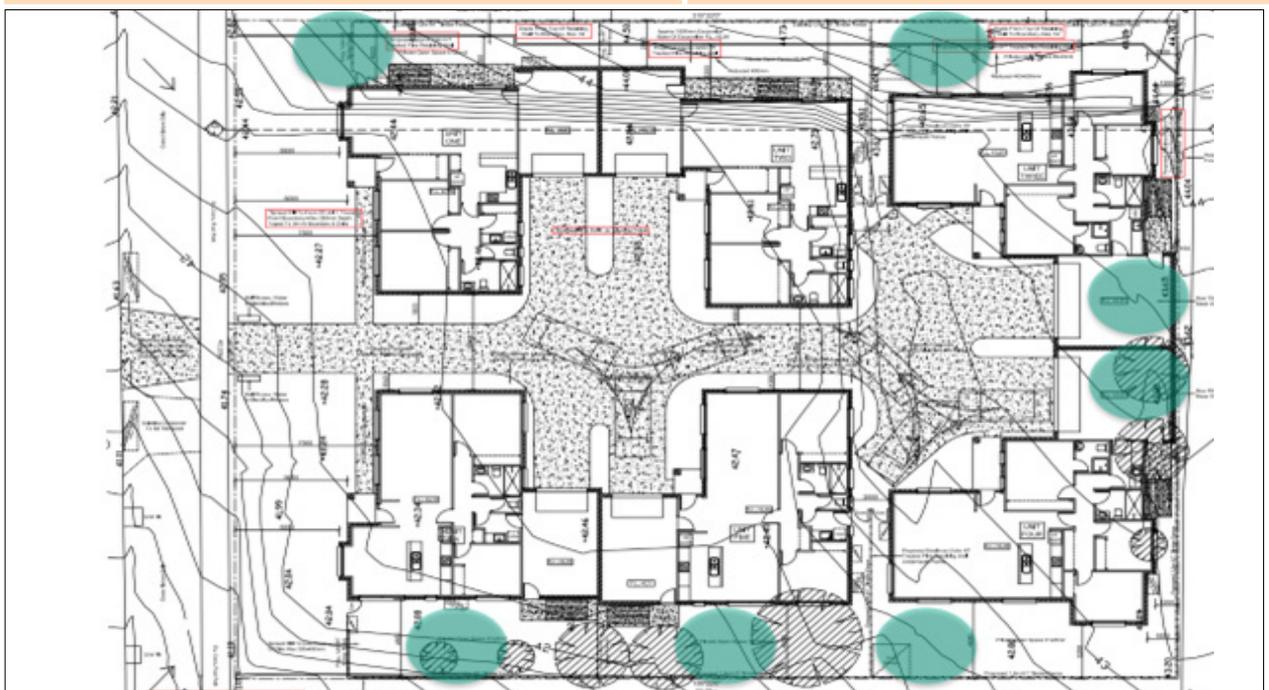
<b>Sample</b>	THREE or MORE DWELLINGS - 24m <sup>2</sup> (5.5m wide) canopy shown in green.	
<b>2</b>	Lot Size	1012m <sup>2</sup>
	SPOS Area	33m <sup>2</sup> & 53m <sup>2</sup> & 53m <sup>2</sup>
Species		B



<b>Sample</b>	THREE or MORE DWELLINGS - 24m <sup>2</sup> (5.5m wide) canopy shown in green.	
<b>3</b>	Lot Size	1295m <sup>2</sup>
	SPOS Area	27m <sup>2</sup> & 27m <sup>2</sup> & 25m <sup>2</sup> & 25m <sup>2</sup>
Species		B



<b>Sample</b>	THREE or MORE DWELLINGS - 24m <sup>2</sup> (5.5m wide) canopy shown in green.	
<b>4</b>	Lot Size	625m <sup>2</sup>
	SPOS Area	44m <sup>2</sup> & 56m <sup>2</sup> & 44m <sup>2</sup> & 56m <sup>2</sup> & 44m <sup>2</sup> &
Species		B





## **Planting Opportunities in Residential Growth Zone, Commercial and Mixed Use Zone areas**

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Medium Density Development within Bass Coast is overwhelmingly located in the General Residential Zone (GRZ). While the Residential Growth (RGZ) and Mixed Use Zones (MUZ) seeks to encourage apartment type development, it is not uncommon for townhouse developments with a reverse living architectural style to be developed in these zones.

A consequence of a reverse living typology is site coverage is maximised, ground level open spaces are smaller than other residential zones, and the built form often cantilevers over open spaces, limiting the opportunity for canopy tree planting.

For these types of townhouses in the MUZ around Cowes, San Remo, Grantville, Inverloch, Newhaven, Rhyll and Wonthaggi there is normally land available within the front setback as well as in POS to accommodate a category C tree. Reliance on public realm street trees and greening of the built form will become critical for these developments too.

Apartment developments within the RGZ and MUZ are required to be assessed against Clause 58 of the planning scheme.

Apartment Developments within the RGZ and MUZ are required to be assessed against Clause 58. Clause 58.03-5 seeks to preserve existing canopy cover and support the provision of new canopy cover, and ensure landscaping is climate responsive, supports biodiversity, wellbeing and amenity and reduces urban heat. To meet these objectives apartment developments must meet Standard D10 which includes canopy cover and deep soil requirements based on site area.

A review of the applications has shown that historically without the guidance of Clause 58 it was difficult to providing enough space within open areas to allow for the growth of canopy trees, however, minor modifications to the developments would have facilitated canopy tree establishment, refer to Table 6.

Clause 58 requires deep soil method considered and it has been decided that this method is not appropriate for the majority of sites across the urban landscape within Bass Coast due to most sites hosting enough soil volume to not require deeper soils and some areas being subject to higher water tables where allowance for deeper soils may not be effective in assessing appropriate soil volumes for tree establishment.

**Table 6:** Sample of case study applications demonstrating there is little provision for the establishment of trees with a mix of 12.5,24, 38.5m2 canopy

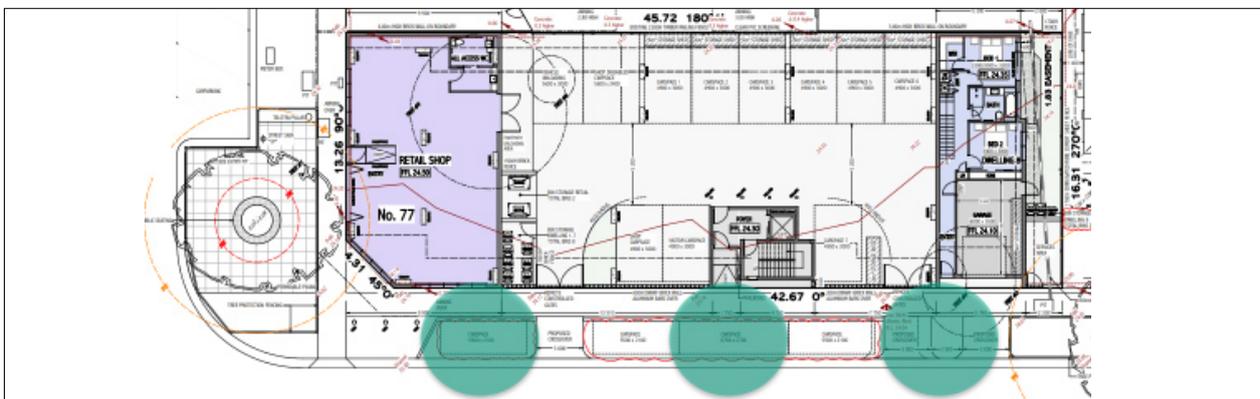
<b>Sample</b>	Mixed Use Zone – (A,B,C) canopy shown in green, design require little if any design modification for tree planting.	
<b>1</b>	Lot Size	7018m <sup>2</sup>
	POS Area	2332m <sup>2</sup>
Species		A,B,C



Site provides numerous opputurnities for canopy tree planting within the breadth of the site, this is with the current layout, alteration of design not necessary to facilitate some form of meaningful planting. Minor design changes could potentially be incorporated to facilitate larger canopy tree.

**Table 6:** Sample of case study applications demonstrating there is little provision for the establishment of trees with a 38.5m2 canopy

<b>Sample</b>	Mixed Use Zone – 38.5m2 canopy shown in green, design would require significant modification for canopy tree planting.	
<b>2</b>	Lot Size	740.9m <sup>2</sup>
	SPOS Area	42m <sup>2</sup> - at ground floor
Species		C



The proposal does not allow for canopy tree planting, to incorporate canopy trees car spaces would need to be sacrificed and appropriate tree pits installed and/or leave areas unpaved. Area character may benefit from canopy tree planting, parking opportunities exist along the Street.

**Table 6:** Sample of case study applications demonstrating there is little provision for the establishment of trees with a 24m<sup>2</sup> canopy.

<b>Sample</b>	Mixed Use Zone – 24m <sup>2</sup> (5.5m wide) canopy shown in green, design would require minor modification for canopy tree planting.	
<b>3</b>	Lot Size	1333m <sup>2</sup>
	POS Area	0
Species		C



**Table 6:** Sample of case study applications demonstrating trees with a 38.5m<sup>2</sup> canopy in the private open spaces.

<b>Sample</b>	Mixed Use Zone – 38.5m <sup>2</sup> (7m wide) canopy shown in green, there is potential to plant within the SPOS of Dwelling 8-11.	
<b>4</b>	Lot Size	2924m <sup>2</sup>
	SPOS Area	35m <sup>2</sup> -65m <sup>2</sup>
Species		C



## Technical Assessment - Ensuring the success of planting in Medium Density Development

### Choosing the right Planning Provision Tool

The previous section of the report identified opportunities exist to grow canopy cover within medium density developments. This section reviews the Victorian Planning Provisions (VPP) that can be utilised to direct landscaping outcomes, and in particular specific canopy tree planting outcomes. Table 1 assesses the effectiveness of utilising of each of these tools to provide the new canopy tree planting direction to improve the urban landscape.

**Table 1:** Analysis of available planning provisions

Provision	Purpose
Planning Policy Framework (PPF)	The PPF contains statewide, regional and local policy that articulate the land use and development outcomes sought by the planning provisions. These policies are implemented through the zones, overlays and particular provisions
Municipal Planning Strategy (MPS)	The MPS operates in conjunction with the PPF and outlines the overarching strategic policy directions for Bass Coast.

provisions for planning schemes.

## Effectiveness

**Clause 11.01** provides Environmental Strategies for some townships that are varied in detailed. Opportunity to review each township to provide clear strategies on canopy cover goals.

**Clause 12.01-1S & 12.01-1L** (Biodiversity) aim to protect biodiversity. The local policy includes broad strategies to achieve this including encouraging developments to protect existing vegetation and incorporate revegetation.

**Clause 13.02-1S** (Bushfire Planning) the priority of human life and consideration of vegetation as a fire risk limits landscaping opportunities. A guidance document may be able to ensure some landscaping in new developments that do not increase BAL levels.

**Clause 15.01-1L-02** (Built Environment – landscape design) includes broad policy and is an opportunity to provide specific content about landscaping in medium density development.

**Clause 15.01-2S** (building design) seeks to encourage development that retains existing vegetation, there is an opportunity to include local based policy to ensure this happens within areas earmarked for medium density development.

**Clause 15.01-5S & 15.01-5L** (neighborhood character) Useful in providing a direction on the future green character and landscape outcome sought within development. There is an opportunity to include preferred character descriptions for urban areas within the shire that will reinforce the importance of urban greening.

**Clause 02.03-2** (Environmental and landscape values) recognizes the decline and fragmentation of indigenous vegetation and loss of biodiversity is a major environmental issue and as such council seeks to:

- Protect and conserve the Shire's biologically diverse natural environment.
- Prioritise habitat protection and enhancement.
- Minimise the decline and fragmentation of indigenous vegetation.
- Minimise the degradation of the coastline and other areas of high habitat value.

**Clause 02.03-5** (Built environment and heritage) recognizes towns within the municipality have settlement patterns and housing types that contribute to their identity and livability. It is important that valued aspects of their character are not lost through redevelopment. As such, Council seeks to:

- Support a built environment that enhances surrounding natural environment and landscape values.
- Support the role of landscape design as integral to any development.

The MPS policy are broad and there is opportunity for the policy to be updated to include discussion about growing and protecting the urban forest.



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over the page.*

Schedules to Residential Zones

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Schedules can be varied to guide better landscaping outcomes

Currently not utilized.

Schedules to residential zones can include neighborhood character objectives, allow variations to Clause 54 and Clause 55 (many of which can influence the success of tree planting), include application requirements, and decision guidelines.

- **Mixed Use Zone (clause 32.04 and schedule)**

This zone is applied to areas of our settlements that have a mixed-use function, including a range of residential and commercial uses. It encourages residential development at increased densities including urban renewal and strategic redevelopment sites. A schedule to the zone can specify application requirements, decision guidelines and local requirements for specified clause 54 and clause 55 standards. Specifying requirements into the schedule can influence the ability of medium density development to include adequate area for the establishment of vegetation including canopy trees.

- **Township Zone (clause 32.05 and schedule)**

Historically, this zone has been applied to our small towns that have limited structure of residential, commercial and industrial land uses (for example Bass, Kilcunda and Dalyston) A schedule to the zone can be used to change the permit requirement for a dwelling, based on lot size. The schedule can also specify a neighbourhood character objective, application requirements and local requirements for specified clause 54 and clause 55 standards. Specifying requirements into the schedule can influence the ability of medium density development to include adequate area for the establishment of vegetation including canopy trees..

- **Residential Growth Zone (clause 32.07 and schedule)**

This zone is applied to areas suitable for housing diversity and housing at increased densities in locations offering good access to services, jobs and public transport, and to provide a transition between areas of more intensive use and development such as activity centres, and other residential areas. This zone applies to land within the Cowes Activity Centre.

The schedule to the zone can be modified to include design objectives, application requirements and local requirements for clause 54 and clause 55 standards that can influence the ability of medium density development to include adequate area for the establishment of vegetation including canopy trees.

- **General Residential Zone (clause 32.08 and schedule)**

This zone applies to most of the land within our townships. The purpose of the zone is to encourage diversity of housing types and housing growth in locations offering good access to services and transport. A schedule to the zone can be used to change the permit requirement for a dwelling (based on lot size), apply a neighborhood character objective, application requirements and set local requirements for clause 54 and clause 55 standards. Modifying the schedule is a tool to influence establishment of vegetation (including canopy trees) within Medium density development.

- **Neighbourhood Residential Zone (Clause 32.09 and schedules)**

There is currently no Neighbourhood Residential Zone (NRZ) zoned land in Bass Coast. The guidance on the Housing Strategy and Neighbourhood Character Study from the PPN90 & PPN91 is that minimal change areas are encouraged to be rezoned to NRZ. The NRZ traditionally accommodates minimal change therefore is likely to have developments with lower site coverage and more capacity to take on canopy trees which could be specified in schedules.

Of note, medium density housing can occur in the Commercial Zones, including apartment developments and shop top dwellings. The schedule to the commercial zone cannot be varied to include local requirements that can influence vegetation outcomes. However, the general provision that must be considered includes Clause 58.03 – 5 landscape objective, specifies canopy cover and deep soil requirements that are required to be met by apartment developments.

## Overlay's in the Bass Coast Planning Scheme

Provision	Purpose
Environmental Significance Overlay	Protection of identified landscape features
Vegetation Protection Overlay	Protect significant vegetation in urban areas.
Significant Landscape Overlays)	Protections of significant landscapes
Heritage Overlay	Protection and management of significant heritage features including trees
Design and Development Overlay	Direction to a specific design and built form outcome

## Effectiveness

Primarily used in valuing and protecting an existing significant landscape feature or character (eg a creek corridor, woodlands, reserves, indigenous trees/grasses), which subsequently contributes to canopy coverage through the protection of existing vegetation.

This tool has limited ability to direct planting of trees within medium density development.

The vegetation protection overlays are best suited to protecting the urban forest as it can be applied to individual trees, stands of trees or areas of significant vegetation. In the Bass Coast there are three different schedules to the Vegetation Protection Overlay applying across the shire.

- **Vegetation Protection Overlay, Schedule 1**

This overlay applies to Tenby Point, part of Wonthaggi, and part of Cape Paterson, it seeks to protect significant remnant vegetation in these townships, especially that which is contiguous with sites identified as being of regional zoological significance.

- **Vegetation Protection Overlay, Schedule 2**

This overlay applies to settlements on Phillip Island. It intends to protect indigenous and large native trees in urban areas. A planning permit is required for any tree or shrub with a girth greater than 30 centimeters or that has a height of 2.0 meters. Introduced species of ornamental shrubs, fruit trees and Weeds (as identified in the Common Weeds of Gippsland Brochure) are exempt from planning permit requirements.

- **Vegetation Protection Overlay, Schedule 3**

This overlay applies to part of Inverloch and only requires a planning permit to remove the listed native species that it seeks to protect. The control is extremely narrow in focus and does not seek protection for all vegetation including canopy trees in the residential areas of Inverloch. It is also noted that applicants avoid planting trees listed in the VPO3 in landscape plans due to the protections.

Generally, not applicable to residential areas capable of accommodating medium density development.

Used for identifying and retaining specific established trees with heritage significance, which subsequently contribute to maintaining canopy coverage of Bass Coast. This control is important for a heritage tree protected within a development.

The Design and development overlay (clause 43.02 and schedule) is principally intended to implement requirements based on a demonstrated need to control built form and the built environment, including landscaping. In Bass Coast there are 13 schedules to the Design and Development Overlay. Of these schedules only two include requirements relating to vegetation protection, these are:

- **Design and Development Overlay, Schedule 9**

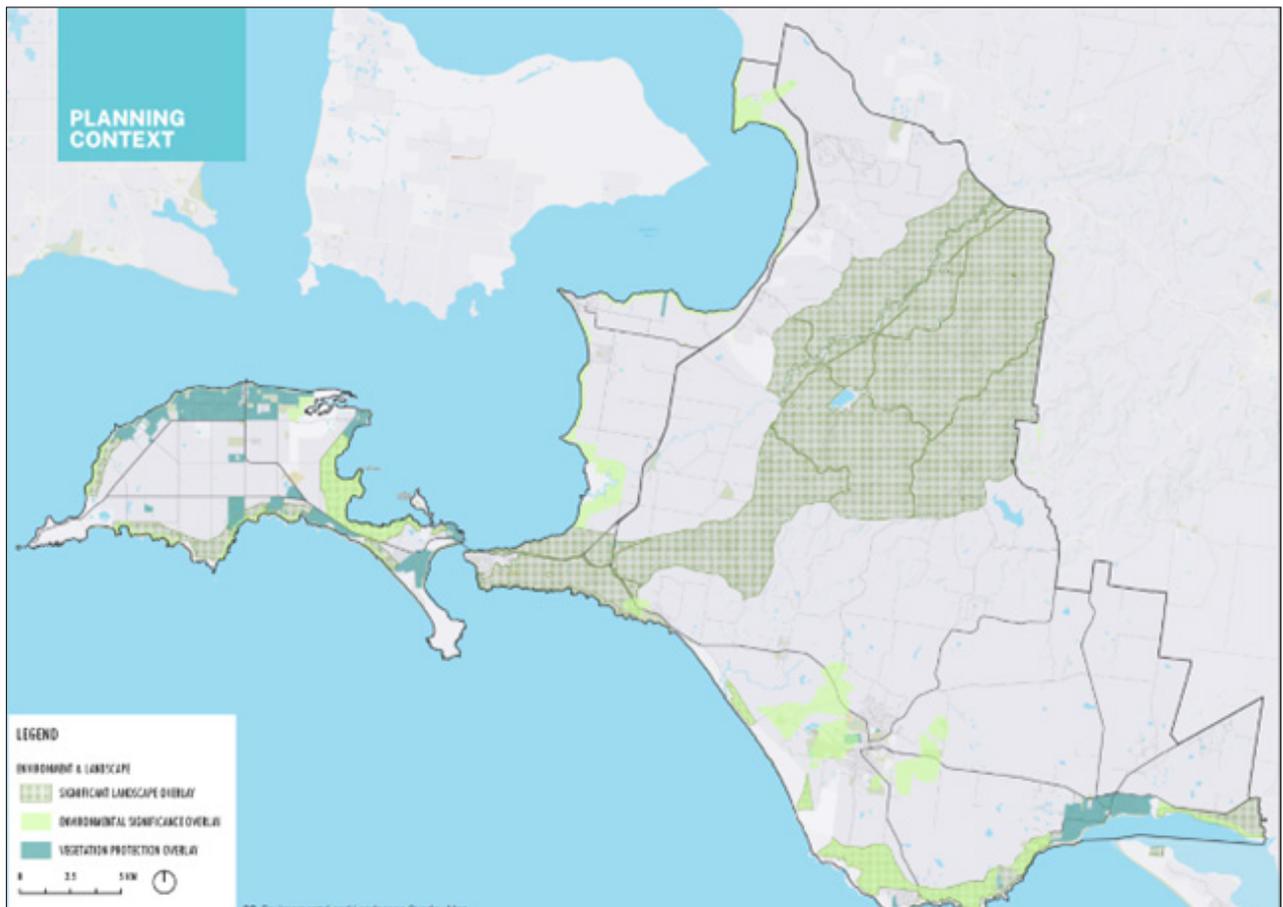
This schedule applies to part of residential areas with environmental value within Inverloch. It intends to ensure developments will protect and minimise impact on existing vegetation.

- **Design and Development Overlay, Schedule 12**

This schedule applies to the former Isle wight site. One of the matters it addresses is the protection of the Moreton Bay Fig by listing specific tree protection zones that any development must respect.

The review of the available provisions demonstrates there is an opportunity to update the MPS and PPF to clarify the need to protect and grow the urban forest. Importantly, the PPF can include provision to ensure the medium density development applications are encouraged to protect and grow the urban forest.

Whilst a Design and Development Overlay could also be utilised to implement the tree canopy metrics, this is considered a secondary tool that would add an additional layer of complexity, compared to using the residential zone schedules that already needs to be considered with all medium density planning applications.



**Environmental and Landscape Overlay map**

*(Source: Draft Neighbourhood Character Study)*

The above discussion has also shown that implementing the changes to policy would be best resolved via the use of schedules to the residential zones, in particular including application requirements and variations to Clause 55, primarily standard B13. The analysis showed that overlays were of limited effectiveness to achieve Council's strategic aims and there is a clear need to pivot from reaction controls such as vegetation permit to proactive strategies such as planting requirements.

## Review of metropolitan council's zone schedules

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To confirm this conclusion, an analysis was undertaken of other metropolitan planning schemes (those reviewed are set out in Appendix B). Local Governments have the ability to amend standards in schedules in the residential zones including B13 – Landscaping.

The following metropolitan Council's schedules were reviewed: Banyule, Brimbank, Darebin, Greater Dandenong, Knox, Monash, Merri-Bek, Stonnington, Whitehorse & Whittlesea. A wide-ranging review of planning schemes across metropolitan Melbourne was conducted, schedules listed in the table were considered noteworthy based on landscape values specified in the schedules or if the Council's were known to have schedules based on improving urban canopy cover for instance Merri-Bek.

Variations to B13 landscaping within their residential zone schedules to direct minimum tree numbers, characteristics of the trees, and dimensions to accommodate the trees was found to be a consistent approach to proactively increasing landscaping.

The proposed variations to B13 have been listed in the 'Next Steps' section of the Neighbourhood Character Study which provides customised standards based on character area and change areas.

## Easements

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Drainage and sewage easements are a common feature on residential lots within Bass Coast Shire, often running along the rear boundary at widths of approximately 1.8m-3m. Infrastructure within these easements are associated with Council, Westernport Water and South Gippsland water and vary in depth (0.8m-3m) and in material (UPVC, vitrified clay, concrete or terracotta).

Within medium density development, an easement is often included within at least one dwellings' secluded private open space. Tree planting within these spaces is not a common practice and not encouraged by beneficiaries of easements due to the potential damage roots can cause to infrastructure.

Melbourne Water's Planting Near Sewers, Drains and Water Mains Guide recommends that any trees or shrubs planted near an asset should be planted with a root barrier, described as a tough material that is wrapped around the base of the plant when it is planted to restrict the root system as the plant grows. Whilst the use of a root barrier can protect infrastructure, it may also restrict the growing potential of a tree. Tree planting within an easement is therefore not considered within the scope of this project.

The existence of an easements within a developable lot can not only subsequently constrain a site layout but also may impact the available space for tree planting therefore guidance must be provided to encourage canopy tree planting across the site and not be an excuse to prevent planting in a development. The proposed planting list will provide guidance for planting in different sized POS areas so easements can be avoided and canopy tree yield can be met.



**Summary of assessment:**

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**Landscape plans:**

The spatial analysis recognises that there is opportunity for larger trees to be planted within medium density housing. Review of historic planning permits were shown to under optimise the planting opportunities presented in the development. In particular, it is possible for most medium density development within all Residential Zones to provide the space for a broad canopy tree in the front setback and canopy tree planting in each secluded open space areas.

**Completed Developments:**

Consistency between planning permits issues was varied with inconsistency in permit conditions relating to timing of planting, maintenance requirements and even the reference to the landscape plan.

**Metropolitan Schedules:**

Schedules review provide a strong incentive for Bass Coast to pursue schedules in residential zones to proactively seek to meet the targets set in the Urban Forest Strategy.

## **Formulating the Recommendations - What tree planting can be achieved**

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### **Size of trees**

A list of recommended trees for planting, the size of trees within the recommended metrics was considered against the features of trees (height, canopy area and width) to provide consistency and ease in end user use. The list includes trees with 16m<sup>2</sup> canopy, and 50m<sup>2</sup> canopy.

### **Internal Guidance Document that provides advice on:**

#### **Positioning**

To achieve an optimal outcome, trees should be positioned to shade the large areas of hard surfacing exposed to the northern and western sun within the urban environment, such as the walls of buildings, roofing, driveways, roads and footpaths. However, due to the heights allowed within the residential zones and that the predominate layout separates the open spaces from much of the driveway, the optimal outcome could not be achieved without impacting housing yield.

Larger trees in the front setback have the potential to provide shading to part of the driveway, walls and ground floor roofing of dwellings in addition to footpaths and roads (Figure 3 & 4). Shading from trees within the secluded private open spaces could extend to walls and ground floor roofing and has the potential to provide shading to hard surfaces on abutting lots.

#### **Retention of existing canopy trees**

Retention of existing canopy trees should be the upmost priority in development considerations, by producing guidance documents statutory planner will be armed with solutions for allowing for increased density while protecting valuable vegetation.



Figure 3: Front trees casting shade on the dwelling, driveway and footpath.



Figure 4: Canopy trees casting shade over the shared accessway and dwellings.

## Assessing landscape plans

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The internal document would also provide guidance for assessing landscape plans to ensure that there is practicable opportunity of success. The document would include details about minimal expectations for plans that would ensure consistent and avoid delays in assessment times due to lack of information. An example of this is how applicants list size of vegetation is it listed as maximum size or size of planting. The review of the landscape plans showed varied descriptions of Coastal Banksia could range from 7m-10m in height. The document would also guide appropriate locations for planting to ensure that all landscaping was not hard up against fence lines and be restricted.

## Variations to B13

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Amended schedules which include variations to B13 which related to character are the crown jewel in the improvement of canopy trees in residential areas of Bass Coast. As stated, numerous times the Bass Coast Planning Scheme fails to proactively encourage planting of canopy trees, setting requirements for replanting in unit development is a valuable way for urban development to contribute to growing the urban canopy and contribute to the localised landscape character. The proposed B13's are in the 'Next Steps' section of the Bass Coast Neighbourhood Character Study.

## Appendix A: Draft preferred planting list

Species name	Common Name	Native/ Indigenous/ Exotic	Deciduous	Design size at 15- 20yrs* (Height m)
Hakea nodosa	Yellow Hakea	VIC NATIVE	No	1-3m
Melaleuca nesophila	Showy Honey Myrtle	AUS NATIVE	No	2-4m
Prunus ssp.	- Stone Fruit	EXOTIC	Yes	2-4m
Banksia ericifolia	Heath-leaved Banksia	VIC NATIVE	No	2-4m
Leptospermum petersonii	Lemon-scented Tea-tree	AUS NATIVE	No	3-5m
Hakea multilineata	Grass Leaf Hakea	VIC NATIVE	No	3-5m
Hakea salicifloia	Willow Leaf Hakea	VIC NATIVE	No	3-5m
Melaleuca squarrosa	Scented Paperbark	INDIGENOUS	No	4-5m
Allocasuarina torulosa	Forest Sheoak	VIC NATIVE	No	4-5m
Acacia pycnantha	Golden Wattle	AUS NATIVE	No	4-6m
Banksia serrata	Saw Banksia	AUS NATIVE	No	4-6m
Callistemon viminalis	Weeping Bottlebrush	AUS NATIVE	No	4-6m
Callistemon salignus	Willow Bottlebrush	AUS NATIVE	No	4-6m
Eucalyptus forrestiana	Fuchsia Gum	AUS NATIVE	No	4-6m

Sites; SPOS, POS	Sunlight Requirements	Weed Potential	M <sup>2</sup> of soil**	Category***
SPOS	FS	Non-invasive	16	A
SPOS	PS	Moderately invasive	16	A
POS-SPOS	FS	Moderately invasive	16	A
SPOS	FS-PS	Non-invasive	16	A
SPOS	PS	Non-invasive	16	A
SPOS	FS	Non-invasive	16	A
SPOS	FS	Highly invasive	16	A
SPOS	PS	Non-invasive	16	A
SPOS	FS-PS	Non-invasive	24	B
SPOS	PS	Somewhat invasive	24	B
SPOS	FS	Non-invasive	24	B
SPOS	FS-PS	Non-invasive	24	B
SPOS	FS-PS	Somewhat invasive	24	B
SPOS	FS-PS	Non-invasive	24	B

Continued.....Appendix A: Draft preferred planting list

Species name	Common Name	Native/ Indigenous/ Exotic	Deciduous	Design size at 15- 20yrs* (Height m)
Eucalyptus leucoxyton 'Eukie Dwarf'	Dwarf Yellow Gum	AUS NATIVE	No	4-6m
Nerium oleander	Oleander	EXOTIC	No	4-6m
Acacia longifolia	- Coast/Sallow Wattle	INDIGENOUS	No	4-6m
Eucalyptus pauciflora 'Little Snowman'	Snow Gum	INDIGENOUS	No	4-6m
Leptospermum laevigatum	Coast Tea-tree	INDIGENOUS	No	4-6m
Leptospermum lanigerum	Woolly Tea-tree	INDIGENOUS	No	4-6m
Myoporum insulare	Common Boobialla	INDIGENOUS	No	4-6m
Pittosporum undulatum	Sweet Pittosporum	INDIGENOUS	No	4-6m
Banksia marginata	Silver Banksia	VIC NATIVE	No	4-6m
Hakea laurina	Pincushion Hakea	VIC NATIVE	No	4-6m
Acacia baileyana	Cootamundra Wattle	AUS NATIVE	No	5-7m
Melaleuca ericifolia	Swamp Paperbark	INDIGENOUS	No	5-7m
Melaleuca lanceolata	Moonah	INDIGENOUS	No	5-7m
Acacia howittii	Sticky Wattle	VIC NATIVE	No	5-7m

Sites; SPOS, POS	Sunlight Requirements	Weed Potential	M <sup>2</sup> of soil**	Category***
SPOS	FS-PS	Moderately invasive	24	B
SPOS	FS-PS	Non-invasive	24	B
SPOS	FS-PS	Highly invasive	24	B
SPOS	FS-PS	Non-invasive	24	B
SPOS	PS	Highly invasive	24	B
SPOS	PS	Non-invasive	24	B
SPOS	FS	Non-invasive	24	B
POS-SPOS	PS	Highly invasive	24	B
SPOS	FS-PS	Non-invasive	24	B
SPOS	FS	Moderately invasive	24	B
SPOS	FS-PS	Highly invasive	24	B
SPOS	PS	Non-invasive	24	B
SPOS	FS-PS	Non-invasive	24	B
SPOS	FS-PS	Moderately invasive	24	B

Continued.....Appendix A: Draft preferred planting list

Species name	Common Name	Native/ Indigenous/ Exotic	Deciduous	Design size at 15- 20yrs* (Height m)
Corymbia ficifolia	Red Flowering Gum	AUS NATIVE	No	6-8m
Elaeocarpus reticulatus	Blueberry Ash	AUS NATIVE	No	6-8m
Lophostemon confertus	- Brush Box	AUS NATIVE	No	6-8m
Melaleuca armillaris	Bracelet Honey-myrtle	AUS NATIVE	No	6-8m
Melaleuca styphelioides	Prickly Paperbark	AUS NATIVE	No	6-8m
Melia azedarach	White Cedar	AUS NATIVE	Yes	6-8m
Tristaniopsis laurina	Kanooka	AUS NATIVE	No	6-8m
Pyrus calleryana	Callery Pear	EXOTIC	Yes	6-8m
Salix babylonica	Weeping Willow	EXOTIC	Yes	6-8m
Shinus areira	Peppercorn Tree	EXOTIC	Yes	6-8m
Ulmus parvifolia	Chinese Elm	EXOTIC	Yes	6-8m
Eucalyptus kitsoniana	Bog Gum	VIC NATIVE	No	6-8m
Agonis flexuosa	Willow Myrtle	AUS NATIVE	No	8-10m
Eucalyptus leucoxylon Megalocarpa	Yellow Gum	AUS NATIVE	No	8-10m

Sites; SPOS, POS	Sunlight Requirements	Weed Potential	M <sup>2</sup> of soil**	Category***
POS	FS	Non-invasive	24	B
SPOS	FS-PS	Moderately invasive	24	B
POS-SPOS	FS-PS	Non-invasive	24	B
SPOS	PS	Moderately invasive	24	B
POS	FS-PS	Non-invasive	24	B
SPOS	FS-PS	Somewhat invasive	24	B
SPOS	FS	Non-invasive	24	B
SPOS	FS-PS	Highly invasive	24	B
POS	FS	Highly invasive	24	B
POS-SPOS	FS	Highly invasive	24	B
SPOS	FS-PS	Non-invasive	24	B
SPOS	FS-PS	Non-invasive	24	B
POS-SPOS	FS	Somewhat invasive	34	C
POS	FS	Moderately invasive	34	C

Continued.....Appendix A: Draft preferred planting list

Species name	Common Name	Native/ Indigenous/ Exotic	Deciduous	Design size at 15- 20yrs* (Height m)
Eucalyptus Leucoxydon 'Rosea'	Pink Flowering Yellow Gum	AUS NATIVE	No	8-10m
Eucalyptus spatulata	Swamp Mallee	AUS NATIVE	No	8-10m
Acer negundo	- Box-elder	EXOTIC	Yes	8-10m
Betula pendula	Silver Birch	EXOTIC	Yes	8-10m
Fraxinus angustifolia	Desert Ash	EXOTIC	Yes	8-10m
Fraxinus excelsior	Common Ash	EXOTIC	Yes	8-10m
Acacia mearnsii	Black Wattle	INDIGENOUS	No	8-10m
Allocasuarina verticillata	Drooping Sheoak	INDIGENOUS	No	8-10m
Eucalyptus lehmanii	Bushy Yate	INDIGENOUS	No	8-10m
Eucalyptus obliqua	Messmate Stringybark	INDIGENOUS	No	8-10m
Eucalyptus viminalis pryoriana	Coast Manna- gum	INDIGENOUS	No	8-10m
Allocasuarina littoralis	Black Sheoak	VIC NATIVE	No	8-10m
Populus ssp.	Poplar	EXOTIC	Yes	>10m
Eucalyptus nicholli	Narrow-leaved Black Peppermint	AUS NATIVE	No	10-12m

Sites; SPOS, POS	Sunlight Requirements	Weed Potential	M <sup>2</sup> of soil**	Category***
POS	FS	Moderately invasive	34	C
POS	FS-PS	Non-invasive	34	C
POS-SPOS	PS	Somewhat invasive	34	C
SPOS	FS	Somewhat invasive	34	C
POS-SPOS	FS-PS	Highly invasive	34	C
POS-SPOS	FS-PS	Somewhat invasive	34	C
POS-SPOS	FS-PS	Non-invasive	34	C
POS-SPOS	FS	Non-invasive	34	C
POS	FS-PS	Non-invasive	34	C
POS	FS	Non-invasive	34	C
SPOS	FS	Non-invasive	34	C
POS-SPOS	FS	Non-invasive	34	C
POS	FS-PS	Somewhat invasive	58	D
POS	FS	Non-invasive	58	D

Continued.....Appendix A: Draft preferred planting list

Species name	Common Name	Native/ Indigenous/ Exotic	Deciduous	Design size at 15- 20yrs* (Height m)
Eucalyptus scoparia	Wallangarra White Gum	AUS NATIVE	No	10-12m
Lagunaria patersonia	Norfolk Island Hibiscus	AUS NATIVE	No	10-12m
Pinus radiata	- Radiata Pine	EXOTIC	No	10-12m
Banksia integrifolia	Coast Banksia	INDIGENOUS	No	10-12m
Eucalyptus radiata	Narrow-leaf Peppermint	INDIGENOUS	No	10-12m
Grevillea robusta	Silky Oak	VIC NATIVE	No	10-12m
Acacia melanoxylon	Blackwood	INDIGENOUS	No	10-15m
Acacia dealbata	Silver Wattle	VIC NATIVE	No	10-15m
Acmena smithii	Lilly Pilly	VIC NATIVE	No	10-15m
Quercus robur	English Oak	EXOTIC	Yes	12-14m
Angophora Costata	Sydney Red Gum	AUS NATIVE	No	>15
Araucaria heterophylla	Norfolk Island Pine	AUS NATIVE	No	>15
Eucalyptus gomphocephala	Tuart	AUS NATIVE	No	>15
Cupressus macrocarpa 'Aurea'	Golden Cypress	EXOTIC	No	>15

Sites; SPOS, POS	Sunlight Requirements	Weed Potential	M <sup>2</sup> of soil**	Category***
POS	FS-PS	Non-invasive	58	D
POS	FS	Moderately invasive	58	D
POS	FS-PS	Highly invasive	58	D
POS	FS-PS	Non-invasive	58	D
POS	FS-PS	Non-invasive	58	D
POS	FS	Moderately invasive	58	D
POS-SPOS	FS-PS	Non-invasive	58	D
POS	FS-PS	Somewhat invasive	58	D
POS	FS-PS	Somewhat invasive	58	D
POS	FS	Somewhat invasive	58	D
POS	FS	Moderately invasive	58	D
POS	FS	Non-invasive	58	D
POS	FS	Somewhat invasive	58	D
POS	FS	Highly invasive	58	D

Continued.....Appendix A: Draft preferred planting list

Species name	Common Name	Native/ Indigenous/ Exotic	Deciduous	Design size at 15- 20yrs* (Height m)
Liquidambar styraciflua	Sweet Gum	EXOTIC	Yes	>15
Eucalyptus Ovata	Swamp Gum	INDIGENOUS	No	>15
Eucalyptus globulus	- Southern Blue-gum	VIC NATIVE	No	>15
Corymbia citriodora	Lemon-scented Gum	AUS NATIVE	No	>15m
Corymbia maculata	Spotted Gum	AUS NATIVE	No	>15m
Acer rubrum	Autumn Blaze Maple	EXOTIC	Yes	>15m
Cupressus macrocarpa	Monterey Cypress	EXOTIC	No	>15m
Eucalyptus botryoides	Southern Mahogany	VIC NATIVE	No	>15m
Eucalyptus camaldulensis	River Red-gum	VIC NATIVE	No	>15m
Eucalyptus cladocalyx	Sugar Gum	VIC NATIVE	No	>15m
Eucalyptus sideroxylon	Mugga Ironbark	VIC NATIVE	No	>15m
Eucalyptus tereticornis	Gippsland Red-gum	VIC NATIVE	No	>15m
Eucalyptus viminalis	Manna Gum	VIC NATIVE	No	>15m

Sites; SPOS, POS	Sunlight Requirements	Weed Potential	M <sup>2</sup> of soil**	Category***
POS	FS-PS	Non-invasive	58	D
POS	FS-PS	Non-invasive	58	D
POS	FS	Somewhat invasive	58	D
POS	FS	Moderately invasive	58	D
POS	FS	Moderately invasive	58	D
POS	FS-PS	Non-invasive	58	D
POS	FS	Highly invasive	58	D
POS	FS	Somewhat invasive	58	D
POS	FS	Non-invasive	58	D
POS	FS	Highly invasive	58	D
POS	FS	Non-invasive	58	D
POS	FS	Non-invasive	58	D
POS	FS	Non-invasive	58	D

## Appendix B: Examples from other Councils

Landscaping Standard B13		
<b>Banyule</b>	GRZ1	Landscape plans will provide at least 1 large tree in the front setback
	GRZ2	Landscape plans will provide 1 tree for every 400 square metres of site area, including 1 large tree in the front setback
<b>Brimbank</b>	NRZ1	<p>A minimum of 2 medium sized trees of 6-12m (at maturity) should be provided in the front setback. A minimum of 1 small to medium sized tree up to 6m (at maturity) should be provided in private or secluded private open space.</p> <p>Planting to be provided along the length of any driveway. Where new building bulk visually impacts on adjoining dwellings, a landscaped vertical screen should be provided.</p>
	NRZ2	<p>A minimum of 2 medium sized trees of 6-12m (at maturity) should be provided in the front setback. A minimum of 1 small to medium sized tree up to 6m (at maturity) should be provided in private or secluded private open space.</p> <p>Planting to be provided along the length of any driveway. Where new building bulk visually impacts on adjoining dwellings, a landscaped vertical screen should be provided.</p>
	GRZ1	<p>A minimum of 1 medium-sized tree of 6-12 m (at maturity) should be provided in the front setback. A minimum of 1 small to medium sized tree up to 6 m (at maturity) should be provided in private or secluded private open space greater than 25 sqm in area.</p> <p>Planting to be provided along the length of any driveway.</p> <p>Where new building bulk visually impacts on adjoining dwellings, a landscaped vertical screen should be provided.</p>

**cont...Landscaping Standard B13**

<b>Darebin</b>	GRZ1	
<b>Greater Dandenong</b>	GRZ1/ GRZ2/ GRZ3	70% of ground level front setback, and side and rear setbacks, planted with substantial landscaping and canopy trees.
<b>Knox</b>	GRZ3	Provision of a minimum of one canopy tree per 200 square metres of the site area including a minimum of one canopy tree within the front setback per 5 metres of width of the site (excluding the width of one driveway). Each tree should be surrounded by 20 square metres of permeable surface with a minimum radius of 3 metres. Up to 50 per cent of the permeable surface may be shared with another tree.
	GRZ4	Provision of a minimum of one canopy tree per 250 square metres of the site area including a minimum of one canopy tree within the front setback per 5 metres of width of the site (excluding the width of one driveway).  Each tree should be surrounded by 20 square metres of permeable surface with a minimum radius of 3 metres. Up to 50 per cent of the permeable surface may be shared with another tree.
<b>Monash</b>	GRZ7/ GRZ8/ GRZ9	Retention or provision of at least two canopy trees with a minimum mature height of 10 metres. Retention or provision of at least three canopy trees (two located within the front setback) with a minimum mature height of 10 metres

## cont...Landscaping Standard B13

<b>continued - Monash</b>	GRZ3 – B13	<p>New development should provide or retain:</p> <ul style="list-style-type: none"> <li>- At least one canopy tree, plus at least one canopy tree per 5 metres of site width;</li> <li>- A mixture of vegetation including indigenous species;</li> <li>- Vegetation in the front, side and rear setbacks; and</li> <li>- Vegetation on both sides of accessways.</li> </ul> <p>A canopy tree should reach a mature height at least equal to the maximum building height of the new development.</p>
	GRZ5	<p>New development should provide:</p> <ul style="list-style-type: none"> <li>- A mixture of vegetation including indigenous species;</li> <li>- Vegetation in the front, side and rear setbacks; and</li> <li>- Vegetation on both sides of accessways.</li> </ul>
	GRZ6	<p>New development should provide or retain:</p> <ul style="list-style-type: none"> <li>- At least one canopy tree, plus one canopy tree per 5 metres of site width;</li> <li>- A mixture of vegetation including indigenous species;</li> <li>- Vegetation in the front, side and rear setbacks; and</li> <li>- Vegetation on both sides of accessways.</li> </ul> <p>A canopy tree should reach a mature height at least equal to the maximum building height of the new development.</p>
	NRZ1	<p>Retain or provide at least one canopy tree plus one canopy tree per 5 metres of site width with a minimum mature height equal to the height of the roof.</p>
	NRZ2/NRZ3	<p>Retain or provide at least one canopy tree plus one canopy tree per 5 metres of site width with a minimum mature height equal to the height of the roof.</p> <p>The species of canopy trees should be native, preferably indigenous</p>

**cont...Landscaping Standard B13**

<p><b>Merri-Bek</b></p>	<p>GRZ1</p>	<p>The development should provide:</p> <ul style="list-style-type: none"> <li>- At least one canopy tree located within the front setback that meets the following requirements:             <ul style="list-style-type: none"> <li>- For front setbacks of less than 4.5 metres:                 <ul style="list-style-type: none"> <li>- Located within permeable area within the site of at least 10 square metres and 4.5 metres wide</li> <li>- Reach a height of 6 metres - 8 metres at maturity</li> <li>- Achieve a canopy width of at least 5 metres at maturity.</li> </ul> </li> <li>- For front setbacks of 4.5 metres or more:                 <ul style="list-style-type: none"> <li>- Located within a permeable area within the site of at least 4.5 metres x 4.5 metres.</li> <li>- Reach a height of 8 metres -15 metres at maturity.</li> <li>- Achieve a canopy width of at least 7 metres at maturity.</li> </ul> </li> </ul> </li> <li>- At least one canopy tree located within the secluded private open space of each dwelling that meets the following requirements:             <ul style="list-style-type: none"> <li>- Located within a permeable area within the site of at least 4.5 metres x 4.5 metres.</li> <li>- Reach a height of 6 metres - 8 metres at maturity.</li> <li>- Achieve a canopy width of at least 5 metres at maturity.</li> </ul> </li> <li>- Where a vehicle accessway is provided, canopy trees should be located to provide shading to the vehicle accessway, if practicable.</li> <li>- Additional planting along any vehicle accessway.</li> </ul> <p>This requirement does not apply to an application to construct or extend an apartment development, or to construct or extend a dwelling in or forming part of an apartment development.</p>
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### cont...Landscaping Standard B13

<b>Whitehorse</b>	GRZ1	Provision of at least two canopy trees per dwelling that have the potential of reaching a minimum mature height of 8 metres. At least one of those trees should be in the secluded private open space of the dwelling.
<b>Whittlesea</b>	GRZ4/ 5W	Provide one canopy tree in both the front and rear setbacks. Each canopy tree must achieve a minimum six metres mature height and be accommodated in a pervious area of at least 5 metres by 5 metres, that does not contain driveways or car parking. This area is to be provided in addition to secluded private open space.  Incorporate additional canopy trees at a ratio of one canopy tree for every two dwellings on development sites of 1,000 square metres or more.

### Permeability A6 & B9

<b>Brimbank</b>	NRZ1 / NRZ2	30%
<b>Dandenong</b>	GRZ1	Minimum 30%
<b>Monash</b>	GRZ3	The site area covered by pervious surfaces should be at least 30 per cent.
	NRZ1/NRZ3	30%
	NRZ2	40%
<b>Whitehorse</b>	GRZ1	50%

### Site coverage A5 & B6

<b>Banyule</b>	GRZ2	40%
<b>Brimbank</b>	NRZ1 / NRZ2	The site area covered by buildings should not exceed 50%
<b>Bayside</b>	NRZ3	50 per cent
<b>Darebin</b>	GRZ1	50 %
<b>Monash</b>	GRZ3	The site area covered by buildings should not exceed 50 per cent
	NRZ1/NRZ3	50%
	NRZ2	40%
<b>Whitehorse</b>	GRZ1	30%

## Side and Rear Setback A10 & B17

<b>Bayside</b>		A new building not on or within 200mm of a boundary should be set back 2 metres from the side boundary, and 3 metres from the rear boundary, plus 0.6 metres for every metre of height over 3.6 metres up to 6.9 metres, plus 2 metres for every metre of height over 6.9 metres.
<b>Monash</b>	GRZ3	A new wall not on or within 200mm of a rear boundary should be set back at least 5 metres. Side setback requirements in accordance with standards A10 and B17 continue to apply.
	GRZ5	A new wall not on or within 200mm of a rear boundary should be set back at least 4 metres. Side setback requirements in accordance with standards A10 and B17 continue to apply.
	NRZ2	Side setbacks – 1 metre, plus 0.3 metres for every metre of height over 3.6 metres up to 6.9 metres, plus 1 metre for every metre of height over 6.9 metres. Rear setbacks – 7 metres
	NRZ3	Rear setback – 5 metres Side setbacks – 1 metre, plus 0.3 metres for every metre of height over 3.6 metres up to 6.9 metres, plus 1 metre for every metre of height over 6.9 metres.

**cont...Side and Rear Setback A10 & B17**

<p><b>Stonnington</b></p>	<p>GRZ8</p>	<p>For a distance of at least 5 metres behind the front facade of the building fronting the street, setback new buildings (including basements) a minimum of 2 metres from at least one side boundary and at least 1 metre from the other side boundary up to 3.6 metres in height. *also wall on boundary no wall on boundary for 5 metres and 2 metres.</p>
<p><b>Whitehorse</b></p>	<p>B18</p>	<p>Walls should only be constructed on one side boundary.</p>
<p><b>Whittlesea</b></p>	<p>A10-B17</p>	<p>Rear setback minimum 5 metres. Side setback requirements as specified in Standards A10 and B17 continue to apply.</p>
	<p>A11&amp; B18</p>	<p>No walls on or within 200 mm of rear boundaries. Walls on or within 200 mm of a side boundary as specified in Standard A11 and B18 continue to apply.</p>

**POS A17 B32**

<b>Brimbank</b>	NRZ1 – A17	<p>An area of 60 sqm, with one part of the private open space to consist of secluded private open space with a minimum area of 40 sqm and a minimum dimension of 5m.</p> <p>Secluded private open space should not be located in the front setback of a dwelling or residential building and should have convenient access from a living room.</p>
	NRZ1 – B28	<p>An area of 60 sqm, with one part of the private open space to consist of secluded private open space with a minimum area of 40 sqm and a minimum dimension of 5m.</p> <p>Secluded private open space should not be located in the front setback of a dwelling or residential building and should have convenient access from a living room.</p>
	NRZ2 – A17 GRZ1 – A17	<p>An area of 40 sqm, with one part of the private open space to consist of secluded private open space with a minimum area of 25 sqm and a minimum dimension of 4m.</p> <p>Secluded private open space should not be located in the front setback of a dwelling or residential building and should have convenient access from a living room.</p>
	NRZ1 – B28 GRZ1 – B28	<p>An area of 40 sqm, with one part of the private open space to consist of secluded private open space with a minimum area of 25 sqm and a minimum dimension of 4m.</p> <p>Secluded private open space should not be located in the front setback of a dwelling or residential building and should have convenient access from a living room.</p>

cont...POS A17 B32

<p><b>Darebin</b></p>	<p>GRZ1 – B28</p>	<p>An area of 55 sqm, with one part of the private open space to consist of secluded private open space at the side or rear of the dwelling or residential building with a minimum area of 40 sqm, a minimum dimension of 3.5m and convenient access from a living room.</p>
<p><b>Greater Dandenong</b></p>	<p>GRZ1 – A17</p>	<p>Private open space consisting of an area of 80 square metres or 20 per cent of the area of the lot, whichever is the lesser, but not less than 40 square metres. At least one part of the private open space should consist of secluded private open space at ground level with a minimum area of 25 square metres at and a minimum dimension of 5 metres at the side or rear of the dwelling with convenient access from a living room.</p>
	<p>GRZ1– B28</p>	<p>An area of 50 square metres of ground level, private open space, with one part of the private open space to consist of secluded private open space at the side or rear of the dwelling with a minimum area of 30 square metres, a minimum dimension of 5 metres and convenient access from a living room; or  A balcony with a minimum area of 10 square metres with a minimum width of 2 metres and convenient access from a living room; or  A roof-top area of 10 square metres with a minimum width of 2 metres and convenient access from a living room.</p>
	<p>GRZ2</p>	<p>An area of 40 square metres, with one part of the private open space to consist of secluded private open space at the side or rear of the dwelling with a minimum area of 25 square metres, a minimum dimension of 5 metres and convenient access from a living room; or  A balcony with a minimum area of 10 square metres with a minimum width of 2 metres and convenient access from a living room; or  A roof-top area of 10 square metres with a minimum width of 2 metres and convenient access from a living room.</p>

cont...POS A17 B32

<b>Knox</b>	GRZ4 – B28	<p>an area of 40 square metres, with one part of the private open space to consist of secluded private open space at the side or rear of the dwelling or residential building with a minimum area of 25 square metres, a minimum dimension of 3 metres and convenient access from a living room, or</p> <p>a balcony of 15 square metres with a minimum width of 1.8 metres and convenient access from a living room, or</p> <p>a roof-top area of 15 square metres with a minimum width of 2 metres and convenient access from a living room.</p>
<b>Monash</b>	GRZ7 – A17	<p>An area of 60 square metres, with one part of the private open space at the side or the rear of the dwelling or residential building with a minimum area of 40 square metres, a minimum width of 5 metres and convenient access from a living room.</p>
	GRZ8/ GRZ9 – A17	<p>A dwelling or residential building should have private open space consisting of:</p> <ul style="list-style-type: none"> <li>- An area of 40 square metres, with one part of the private open space at the side or the rear of the dwelling or residential building with a minimum area of 35 square metres, a minimum width of 3 metres and convenient access from a living room; or</li> <li>- A balcony of 10 square metres with a minimum width of 2 metres and convenient access from a living room; or</li> <li>- A roof top area of 10 square metres with a minimum width of 2 metres and convenient access from a living room.</li> </ul>
	GRZ8-B28	<p>A dwelling or residential building should have private open space consisting of:</p> <ul style="list-style-type: none"> <li>- An area of 40 square metres, with one part of the private open space at the side or the rear of the dwelling or residential building with a minimum area of 35 square metres, a minimum width of 3 metres and convenient access from a living room; or</li> <li>- A balcony of 10 square metres with a minimum width of 2 metres and convenient access from a living room; or</li> </ul> <p>A roof top area of 10 square metres with a minimum width of 2 metres and convenient access from a living room.</p>

cont...POS A17 B32

cont/ Monash	GRZ3 – A17	A dwelling should have private open space consisting of an area of 75 square metres, with one part of the private open space to consist of secluded private open space at the side or the rear of the dwelling with a minimum area of 35 square metres, a minimum dimension of 5 metres and convenient access from a living room.
	GRZ3-B28 / NRZ1/ NRZ3	<p>A dwelling or residential building should have private open space consisting of:</p> <ul style="list-style-type: none"> <li>- An area of 75 square metres, with one part of the private open space to consist of secluded private open space at the side or the rear of the dwelling or residential building with a minimum area of 35 square metres, a minimum dimension of 5 metres and convenient access from a living room; or</li> <li>- A balcony or roof-top area of 10 square metres with a minimum width of 2 metres and convenient access from a living room.</li> </ul>
	GRZ5 – A17	A dwelling should have private open space consisting of an area of 75 square metres, with one part of the private open space to consist of secluded private open space at the side or the rear of the dwelling with a minimum area of 35 square metres, a minimum dimension of 5 metres and convenient access from a living room.
	B28	<p>A dwelling or residential building should have private open space consisting of:</p> <ul style="list-style-type: none"> <li>- An area of 75 square metres, with one part of the private open space to consist of secluded private open space at the side or the rear of the dwelling or residential building with a minimum area of 35 square metres, a minimum dimension of 5 metres and convenient access from a living room; or</li> <li>- A balcony or roof-top area of 10 square metres with a minimum width of 2 metres and convenient access from a living room</li> </ul>

cont...POS A17 B32

<b>cont/ Monash</b>	GRZ5-A17	A dwelling should have private open space consisting of an area of 50 square metres, with one part of the private open space to consist of secluded private open space at the side or the rear of the dwelling with a minimum area of 35 square metres, a minimum dimension of 5 metres and convenient access from a living room.
	B28	A dwelling or residential building should have private open space consisting of: An area of 50 square metres, with one part of the private open space to consist of secluded private open space at the side or the rear of the dwelling or residential building with a minimum area of 35 square metres, a minimum dimension of 5 metres and convenient access from a living room; or A balcony or roof-top area of 10 square metres with a minimum width of 2 metres and convenient access from a living room.
	NRZ1 – B28	An area of 75 square metres, with one part of the private open space to consist of secluded private open space at the side or the rear of the dwelling or residential building with a minimum area of 35 square metres, a minimum dimension of 5 metres, convenient access from a living room and clear of all structures and services.
<b>Whitehorse</b>	GRZ1 – A17	A dwelling should have private open space consisting of an area of 80 square metres or 20 per cent of the area of the lot, whichever is the lesser, but not less than 40 square metres. At least one part of the private open space should consist of secluded private open space with a minimum area of 35 square metres and a minimum dimension of 5 metres and convenient access from a living room. It cannot include a balcony or roof top terrace.
	GRZ1- B28	A dwelling or residential building should have private open space consisting of an area of 40 square metres, with one part of the private open space at the rear or side of the dwelling or residential building within a minimum area of 35 square metres, a minimum dimension of 5 metres and convenient access from a living room. It cannot include a balcony or roof top terrace.

cont...POS A17 B32

<b>Whittlesea</b>	GRZ4	<p>An area of 40 square metres, with one part of the private open space to consist of secluded private open space at the side or rear of the dwelling or residential building with a minimum area of 25 square metres, a minimum dimension of 4 metres and convenient access from a living room, or</p> <p>A balcony of 12 square metres with a minimum width of 2.4 metres and convenient access from a living room, or</p> <p>A roof-top area of 10 square metres with a minimum width of 2 metres and convenient access from a living room.</p>
	GRZ5	<p>A minimum area of 40 square metres of secluded private open space at the side or rear of the dwelling or residential building with a minimum dimension of 5 metres and convenient access from a living room.</p>

## Application Requirements

<b>Banyule</b>	GRZ1	A Landscape Concept Plan must be submitted which considers the Banyule Tree Planting Zone Guidelines. It should distinguish landscaped garden areas from useable private open space, show tree planting locations and the extent of the mature canopies.
	GRZ2	A Landscape Concept Plan must be submitted which considers the Banyule Tree Planting Zone Guidelines. It should distinguish landscaped garden areas from useable private open space, show tree planting locations and the extent of the mature canopies.
<b>Monash</b>	GRZ7 / NRZ1	<p>A landscape plan prepared by a landscape architect or a suitably qualified landscape designer, drawn to scale and dimensioned which:</p> <ul style="list-style-type: none"> <li>- Responds and enhances 'garden city' character.</li> <li>- Identifies, retains and protects significant vegetation on the site and significant vegetation on adjoining properties in proximity to the development which contributes to the character of the area, including the identification of tree protection zones.</li> <li>- Proposes new canopy trees and other vegetation that will enhance the landscape character of the Glen Waverley Major Activity Centre particularly within the front, side and rear setbacks, along driveways and walkways, and within private open space areas.</li> <li>- Provides a schedule of all proposed trees, shrubs and ground covers including the size of all plants (at planting and at maturity), their location, botanical names and the location of all areas to be covered by grass, lawn, mulch or other surface material.</li> <li>- Provides the location and details of all fencing and external lighting.</li> <li>- Identifies the extent of any cut and fill, embankments or retaining walls associated with the landscape treatment of the site.</li> <li>- Details of all proposed surface materials including pathways, patios or decked areas and measures to reduce stormwater runoff such as porous paving, swales and infiltration, ponding areas and grey water reuse.</li> <li>- Identify measures to maintain landscaping, including weed control, pruning, mulching and irrigation systems</li> </ul>

## cont...Application Requirements

<b>cont/ Monash</b>	GRZ8/ GRZ9	<p>A landscape plan prepared by a landscape architect or a suitably qualified landscape designer, drawn to scale and dimensioned which:</p> <ul style="list-style-type: none"> <li>- Identifies, retains and protects significant vegetation on the site and significant vegetation on adjoining properties in proximity to the development which contributes to the character of the area, including the identification of tree protection zones.</li> <li>- Proposes new canopy trees and other vegetation that will enhance the landscape character of the activity centre, particularly within front, side and rear setbacks, along driveways and walkways, and within private open spaces areas.</li> <li>- Provides a schedule of all proposed trees, shrubs and ground covers including the size of all plants (at planting and at maturity), their location, botanical names and the location of all areas to be covered by grass, lawn, mulch or other surface material.</li> <li>- Provides the location and details of all fencing and external lighting.</li> <li>- Identifies the extent of any cut and fill, embankments or retaining walls associated with the landscape treatment of the site.</li> <li>- Details of all proposed surface materials including pathways, patios or decked areas and measures to reduce stormwater runoff such as porous paving, swales and infiltration, ponding areas and grey water reuse.</li> <li>- Identify measures to maintain landscaping, including weed control, pruning, mulching and irrigation systems.</li> </ul>
	GRZ3/ GRZ5/GRZ6	<ul style="list-style-type: none"> <li>- Plans showing existing vegetation and any trees proposed to be removed.</li> <li>- Plans showing proposed landscaping works and planting including tree species and mature height</li> </ul>

## cont...Application Requirements

<p><b>cont/ Monash</b></p>	<p>NRZ2</p>	<p>A landscape plan prepared by a landscape architect or a suitably qualified landscape designer, drawn to scale and dimensioned which:</p> <ul style="list-style-type: none"> <li>- Responds and enhances the ‘creek interface’.</li> <li>- Identifies, retains and protects significant vegetation on the site and significant vegetation on adjoining properties in proximity to the development which contributes to the character of the area, including the identification of tree protection zones.</li> <li>- Proposes new canopy trees and other vegetation that will enhance the landscape character of the creek environs particularly within the front, side and rear setbacks, along driveways and walkways, and within private open space areas.</li> <li>- Provides a schedule of all proposed trees, shrubs and ground covers including the size of all plants (at planting and at maturity), their location, botanical names and the location of all areas to be covered by grass, lawn, mulch or other surface material.</li> <li>- Provides the location and details of all fencing and external lighting.</li> <li>- Identifies the extent of any cut and fill, embankments or retaining walls associated with the landscape treatment of the site.</li> <li>- Contains details of all proposed surface materials including pathways, patios or decked areas and measures to reduce stormwater runoff such as porous paving, swales and infiltration, ponding areas and grey water reuse.</li> <li>- Identifies measures to maintain landscaping, including weed control, pruning, mulching and irrigation systems.</li> </ul>
<p><b>Merri-Bek</b></p>	<p>GRZ1/2/3</p>	<p>A landscape plan showing existing vegetation retained (on the site and adjacent to the site, as appropriate) and any proposed for removal, tree and vegetation selection and planting plan in accordance with this schedule and the Moreland Tree Planting Manual for Residential Zones, 2019.</p>

## Decision Guidelines

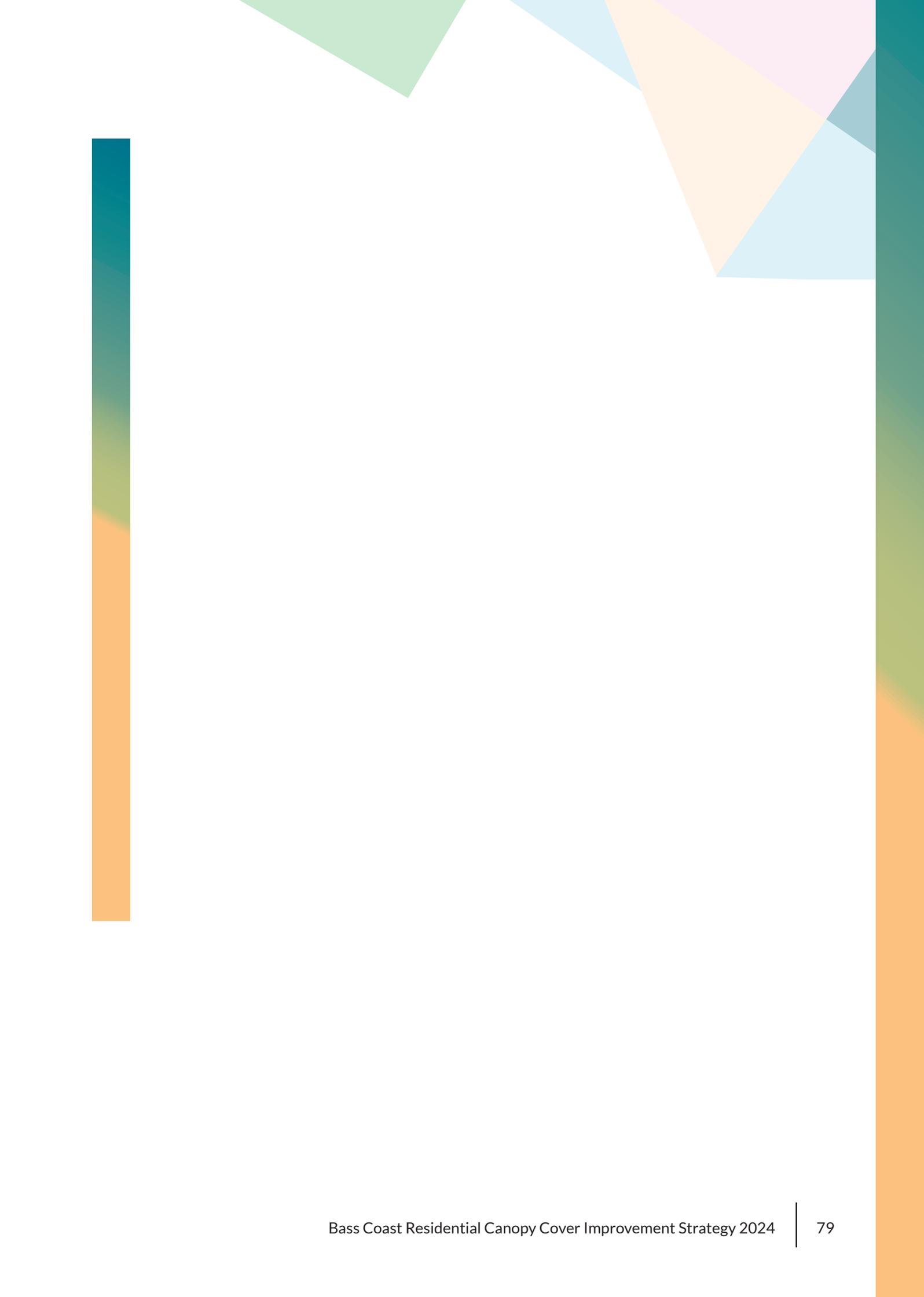
	GRZ1	Whether the landscaping requirement can be met by including existing trees that are considered worthy of retention.
<b>Banyule</b>	GRZ2	<p>Whether the landscaping requirement is met by providing mostly large trees.</p> <ul style="list-style-type: none"> <li>- Whether the landscaping requirement can be met by including existing large trees that are considered worthy of retention.</li> <li>- Whether the proposed site coverage protects and enhances the character of the area by enabling existing vegetation to be retained and new trees to be planted</li> </ul>
<b>Monash</b>	GRZ7 / NRZ1	<ul style="list-style-type: none"> <li>- Whether development contributes to ‘garden city’ character. Specifically, whether the proposal:               <ul style="list-style-type: none"> <li>- Provides sufficient and well located open space, primarily unencumbered by easements, to provide for large trees to be retained or planted within front, side and rear setbacks, and secluded open space areas. Environmental weeds and artificial grass should be avoided.</li> <li>- Provides vegetation in the front setback that softens the appearance of built form and contributes to the public realm.</li> <li>- Sites buildings to minimise the need to remove significant trees, and protect significant trees on the site and adjoining properties.</li> <li>- Minimises hard paving throughout the site by limiting driveway widths and lengths, providing landscaping on both sides of driveways, and restricting the extent of paving within open space areas.</li> <li>- Maximises planting opportunities adjacent to the street by excluding hard paving such as car parking, turning circles and driveways, and minimising basement car parking, within the front setback.</li> </ul> </li> <li>- Whether the development minimises the impact to neighbouring properties, through suitable setbacks from adjacent secluded private open space to enable the provision of screening trees, and scaling down of building form to the adjoining properties.</li> <li>- Whether the building retains human scale and, by the inclusion of significant breaks and recesses in building massing, is designed to avoid large block like structures dominating the streetscape.</li> </ul>

**cont...Decision Guidelines**

<p><b>cont/ Monash</b></p>	<p>GRZ8/ GRZ9</p>	<ul style="list-style-type: none"> <li>- Whether development contributes to the landscape character of the activity centre. Specifically, whether the proposal:             <ul style="list-style-type: none"> <li>- Provides large tree planting and a mixture of indigenous and exotic vegetation in front, side and rear setbacks, and open space areas. Environmental weeds and artificial grass should be avoided.</li> <li>- Sites buildings to minimise the need for the removal of significant trees, and protects significant trees on the site and adjoining properties.</li> <li>- Maximises planting opportunities adjacent to the street by excluding hard paving such as car parking, turning circles and driveways, and minimising basement car parking, within the front setback.</li> <li>- Minimises hard paving throughout the site including limiting driveway lengths and widths, providing landscaping on both sides of driveways, and restricting the extent of paving within open space areas.</li> </ul> </li> </ul>
	<p>GRZ3/ GRZ5/ GRZ6</p>	<ul style="list-style-type: none"> <li>- The impact of the development on nature strips and street trees.</li> <li>- The location, quantity and species of vegetation provided.</li> </ul>

## cont...Decision Guidelines

	NRZ2	<ul style="list-style-type: none"> <li>- Whether development contributes to ‘buildings in bushland setting’ which is the preferred character for the creek interface areas. Specifically, whether the proposal:</li> <li>- Provides sufficient and well located open space, primarily unencumbered by easements, to provide for large trees to be retained or planted within front, side and rear setbacks, and secluded open space areas.</li> <li>- Provides vegetation in the front setback that softens the appearance of built form and contributes to the public realm.</li> <li>- Sites buildings to minimise the need to remove significant trees, and protect significant trees on the site and adjoining properties.</li> <li>- Provides sufficient setbacks of built form and provision of vegetation along any boundary abutting a creekland reserve (including a side boundary).</li> <li>- Minimises hard paving throughout the site by limiting driveway widths and lengths, providing landscaping on both sides of driveways, and restricting the extent of paving within open space areas.</li> <li>- Maximises planting opportunities adjacent to the street by excluding hard paving such as car parking, turning circles and driveways, and minimising basement car parking, within the front setback.</li> <li>- Breaks up the appearance of building mass through the provision of space for trees and vegetation between dwellings on the same site.</li> </ul>
<b>Merri-Bek</b>	GRZ1/ 2/3	<ul style="list-style-type: none"> <li>- Whether there is opportunity to retain existing vegetation.</li> <li>- Whether the landscaping will provide suitable shading and cooling of the urban environment to reduce heat absorption and re-radiation of hard surfaces.</li> <li>- The suitability of the proposed location and soil volume for canopy tree health.</li> <li>- Whether an alternative combination of canopy trees or climbers will achieve an equivalent or increased canopy cover to the requirements listed in Clause 4.0.</li> <li>- Whether the development is consistent with the <i>Moreland Tree Planting Manual for Residential Zones, 2019</i>.</li> </ul>





# **Bass Coast Residential Canopy Cover Improvement Strategy 2024**

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1300 BCOAST (226 278) or (03) 5671 2211 or  
via the National Relay Service (if you are deaf  
and/or find it hard hearing or speaking with  
people who use a phone) on their website:

[infrastructure.gov.au/national-relay-service](https://infrastructure.gov.au/national-relay-service)

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[basscoast.vic.gov.au](https://basscoast.vic.gov.au)