

OCEAN GROVE SIGNIFICANT TREE PROJECT

OCEAN GROVE TREE PLANTING GUIDELINES



Introduction

These guidelines have been prepared to provide guidance to planning permit applicants about the types of trees to be included in landscape plans to meet the landscape requirements set out in the schedules of Significant Landscape Overlay 7 & 15 in the township of Ocean Grove.

Where practical the removal and destruction of vegetation should be avoided. Ideally, existing vegetation will be incorporated into the overall development.

Council requires the planting of two canopy trees per site (trees being retained can count toward this) as part of development applications. The reasons for this include; replacing trees being removed as part of development, maintaining the streetscape and preserving the established or preferred neighbourhood character.

Designers need to allocate adequate space to allow canopy trees to grow. Large trees can cause damage if insufficient space is provided for mature root systems. Allowing trees sufficient space for healthy growth can also reduce the risk of tree and limb failure. If front setbacks/open space areas can not accommodate any canopy trees a redesign may be required.

We strongly recommend engaging an arborist or landscape designer at the earliest possible stage. This will ensure any proposed buildings and works consider the impact on existing and future trees and adequate space is provided. Landscaping should be considered prior to and as part of the site and building layout. Trying to retrofit trees into development plans will not provide optimum results and may result in a request to redesign the proposal.

Tree Selection

Indigenous trees are preferred for landscaping because they help maintain the unique character of the area, are suited to local conditions and contribute to local biodiversity.

Native species may also appropriate. Council is not encouraging the use of exotic species as they do not contribute as strongly to the bush and coastal landscapes of Ocean Grove. Council have prepared indigenous plant lists for regions across the municipality which are available at www.geelongaustralia.com.au.

The plant lists applicable to Ocean Grove include:

- Zone 3: Central Bellarine Hills
- Zone 4: Lower Rear Dune Communities
- Zone 19: Coastal Zones

Bellarine Yellow Gums

The Bellarine Yellow Gum (*Eucalyptus leucoxylon* ss *bellarinensis*) is listed as threatened under the Flora & Fauna Guarantee Act (DEPI 2014). The protection and management of Bellarine Yellow-gum within residential Ocean Grove is crucial to the long-term conservation of the species.

We encourage the use of this species in landscape plans. Note: planting *Eucalyptus leucoxylon*

(not subspecies *bellarinensis*) on roadsides and in private and public gardens has lead to hybridisation/genetic pollution and is a major threat to the species (DSE 2003). Only Bellarine Yellow Gums should be planted.

Tea-Tree

Tea-tree (*Leptospermum laevigatum*) is indigenous within the coastal dune area but is generally considered an environmental weed beyond this area e.g. the hillside area & Significant Tree Area (SLO15). The inclusion of Tea-tree in landscape plans is not supported outside the coastal dune area.

Environmental Weeds

Trees considered to be environmental weeds must not be planted. A list of environmental weeds can also be found at www.geelongaustralia.com.au.

Tree Suppliers

There are a number of indigenous plant nurseries in the area. It is best to contact them as most have selective opening times or open by appointment. You will also need to check the availability of stock as some suppliers grow to order and may require long lead times depending on the time of year.

Allocating Space for Canopy Trees

Ideally canopy trees planted in Ocean Grove would be indigenous as this maximises character and environmental benefits. The space requirements for common indigenous trees within Ocean Grove have been calculated based on height and width at maturity. The formula used has been taken from the 'Banyule Tree Planting Guidelines, 2011':

$$\text{Soil volume (m3)} = \frac{\text{Height (m)} \times \text{DBH (mm)}}{100}$$

Once the soil volume of calculated it is assumed roots will utilise soil within a 1m depth of ground level and thus the area required can be calculated.

Trees are resourceful and as such will grow to suit the growing space available. However a large a tree in too small of a space will require pruning and management and this will impact the trees health and longevity. Large trees in small spaces should be avoided. Smaller species in smaller spaces allows for longevity.

Allowances should also be made for multiple 'woodland' type plantings where multiple specimens of a species can be planted. As is common in nature, in this situation the mature size of an individual specimen is somewhat reduced due to competition.

Canopy trees can be co-planted with suitable understory species to form a key feature in a landscape.



Table 1: Indigenous Canopy Tree Requirements (guide only)

Trees		Width (m)	Established Average Diameter at Breast Height* (DBH -1.4m above ground level) (cm)	Ground Area Required (m2)
Bellarine Yellow-gum <i>Eucalyptus leucoxylon</i> subsp. <i>bellarinensis</i>	10	10-12	50	50
Narrowleaf Peppermint <i>Eucalyptus radiata</i>	15	10-12	50	75
Swamp Gum <i>Eucalyptus ovata</i>	10	6-10	45	50
Manna Gum <i>Eucalyptus viminalis</i>	10	8-15	50	50
Drooping Sheoak <i>Allocasuarina verticillata</i>	10	3-6	30	30
Sweet Bursaria <i>Bursaria spinosa</i>	6	3-6	20	18
Coastal tea tree** <i>Leptospermum laevigatum</i>	6	6	25	18
Coast beard heath <i>Leucopogon parviflorus</i>	4	4-6	25	12
Coast wirilda <i>Acacia uncifolia</i>	8	3-5	30	24
Moonah <i>Melaleuca lanceolata</i> subsp. <i>lanceolata</i>	5	6-8	30	15

*based on average data collected as part of the Ocean Grove Tree Project

**only indigenous to the coastal fringe/dune area

Tree Management

The management of indigenous and planted native trees as arboricultural assets is a necessary management technique in retaining trees in healthy sound condition. All trees should be managed to meet the requirements of AS 4373—2007 Pruning of Amenity Trees (Standards Australia 2007).

It is recommended that all tree works should be undertaken by a qualified level 3 arborist, as per the guidelines of Australian Standard AS 4373—2007 Pruning of Amenity Trees (Standards Australia 2009).

Considerations for development near trees

When designing and planning for development in the vicinity of trees on public and private land, the guidance of AS4970-2009 Protection of Trees on Development Sites should be implemented in all site planning (Standards Australia 2009).

We require a level 5 (or equivalent experience) arborist assessment for development proposals on how individual significant trees can be protected through Tree Protection Zones (TPZs) on each tree within and around a development site, and management measures on public and private land.

Encroachment into the TPZ from development is sometimes unavoidable; however, mitigation measures can assist in avoiding impacts resulting in unnecessary damage or loss.

Nature Strip Trees

Council is responsible for planting, maintaining and removing street trees. Trees are selected to suit the street appeal, local character, height restrictions (if any), water requirements and soil conditions of an area.

At the outset of designing a new development, the location of any existing street or park trees near the site need to be considered. They also need to be shown on the plans lodged as part of the planning permit application. It is important to remember that the removal of Council's tree assets will not automatically be approved.

Many factors inform Council's decision on whether a street or park tree can be removed. The removal of each tree is assessed on its own merits by Council's Tree Management Unit. Council also needs to be satisfied works adjacent to street trees will not impact their overall health. All requests relating to street trees can be made via www.geelongaustralia.com.au or by phoning 5272 5272.

Tree Protection Zone

SRZ – Structural Root Zone

Crown – Extent of tree canopy

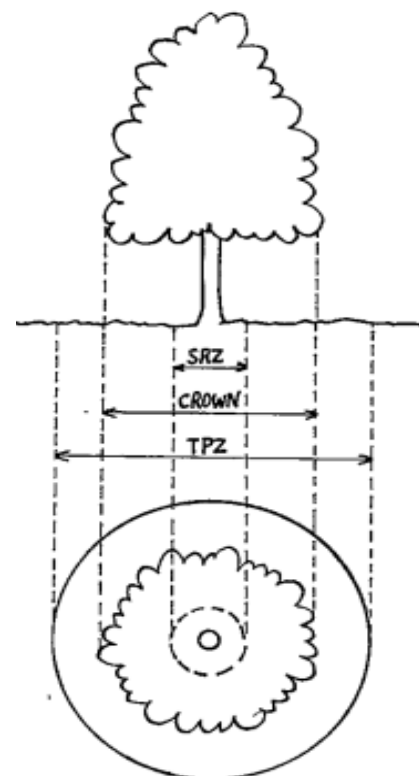
TPZ – Tree Protection Zone

The tree protection zone is used to protect trees on development sites and ensures both the canopy and roots are protected.

The tree protection zone is calculated by multiplying the Diameter (in cms) at Breast Height (DBH) which is approx. 1.4m from ground level by 12.

Example: a Bellarine Yellow Gum is estimated to have a mature stem diameter of 50cm. So $50 \times 12 = 600\text{cm}$ or 6m. This is expressed as a radius and as such tree protection zone would be 12m x 12m.

As part of an application you need to identify any trees that are in close proximity to the construction area and specify if works will extend into the tree protection zone. Where trees could be impacted a management plan is required.



Indicative Tree Protection Zone