

Landscape Guidelines for Non Residential Uses in Residential Areas

These Landscape Guidelines have been prepared to assist applicants in the preparation of Landscape Plans that are required as part of the planning application process for Non-Residential Uses, such as medical centres and child care centres, proposed for development in residential areas.

The aim is to integrate these developments into existing residential neighbourhoods in a manner that complements the area's local character.

The landscape should be designed as an integral part of a new development, and should be considered at the initial siting and design stage of the building.

Making it more attractive and appealing for people to use. A well landscaped development will also assist in creating a unified development that makes a positive contribution to the character of the neighbourhood.

Step 1: Planning Application and Site Analysis

Planning a development should be guided by familiarity with site location, existing physical conditions and landscape character, and the planning and regulatory requirements that affect the site.

Landscape factors that should be considered at the time of siting and designing the buildings are listed below:

- Existing trees and other significant vegetation on the subject site. Note the location, height, species and tree protection zone of all canopy trees. The provision of this information is important, as the removal of any trees may require a planning permit
- Soil type
- Site microclimate, including aspect (sunny and shady areas) or areas overshadowed by large trees or neighbouring buildings, any damp areas, direction of prevailing winds and breezes
- Desirable views to and from the site that should be retained and undesirable views that should be screened
- Treat the landscape as an integral part of the development by relating location and size of outdoor spaces to intended use. For example, if courtyards and screening are required, ensure that sufficient space is allowed for at the early planning stages. This approach will maximise productive use of the site and avoid narrow bands of unusable space

Step 2: Planning Application and Landscape Plan

Council may require that a Landscape Plan accompany the planning application or request the preparation of a detailed Landscape Plan as a condition of permit.

The aim of the Landscape Plan is to achieve a high quality landscape that:

- Retains and protects existing canopy trees, particularly trees of environmental significance
- Improves the amenity and function of the development
- Where appropriate, presents a densely landscaped appearance to main roads and adjoining land uses (eg. residential edges)
- Considers mass planting of a few well selected plant species for a bold visual effect
- Requires minimal water and is affordable to maintain in the long term
- Provides shade in the middle of the day in frequently used outdoor areas

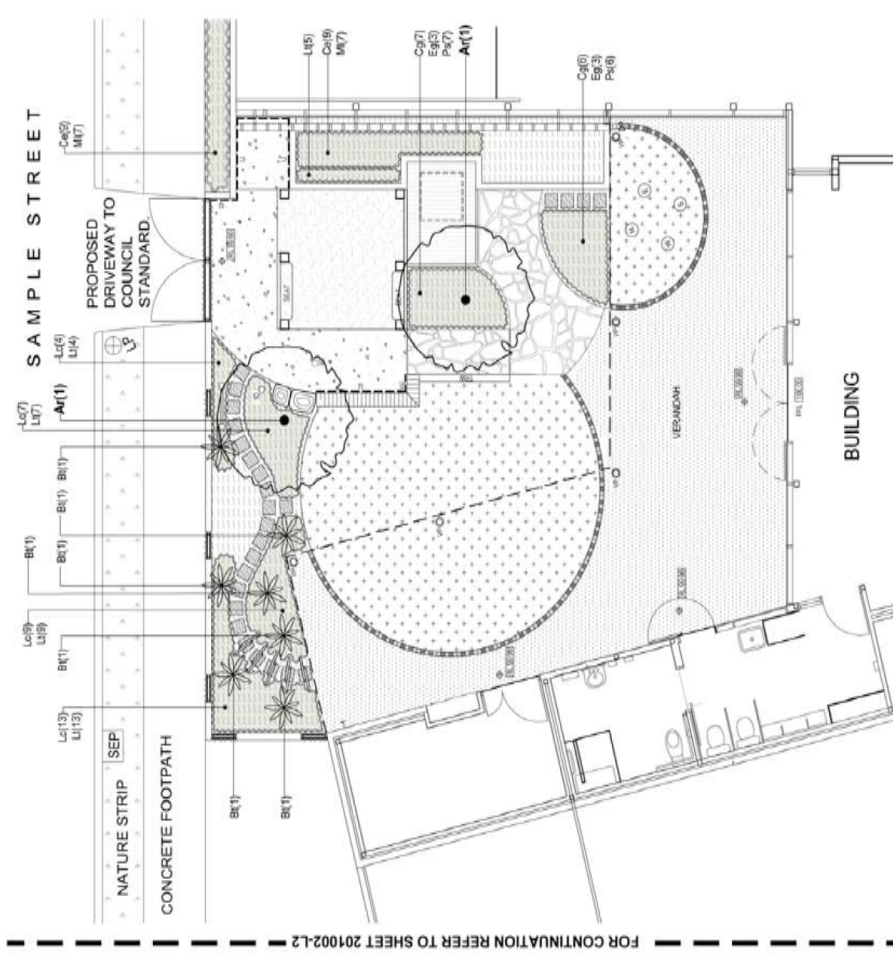
Checklist – Landscape Plan

The following checklist will help ensure that the submitted Landscape Plan provides all the information required to assess the landscape treatment aspects of the planning application. The Landscape Plan should address each of the Landscape Design Principles contained in this brochure.

- Existing vegetation to be removed and retained
- Plant schedule listing proposed plants by their botanical names and common names. Also include: plant quantities, pot sizes, and size of plants at maturity (height x width)
- Clear graphics and call outs indicating locations of proposed plants that relate to the Plant Schedule. Identify plants with call outs comprising the initials of their botanical name and quantity (i.ex4 Acacia implexa = Ai [4])
- Proposed grassed areas/mounds/mulched garden beds and garden edges
- Proposed paved areas and paving material (this will include driveways, parking bays and pedestrian paths)
- Height, style and location of proposed fences and gates
- Street name and title boundaries
- North point, scale and scale bar
- Legend
- Direction of flood flow and site levels. Site levels to include finished floor levels, top and bottom of embankments, retaining walls and outdoor structures
- Car park and road layout
- Location of rubbish bins
- Proposed buildings/garages, roof areas and awnings
- Location and style of letter boxes
- Services (underground and overhead)
- Proposed watering system (taps/sprinkler/automated drip irrigation)
- Extent of any cut/fill, embankments and retaining walls
- Site levels
- Sign location
- Proposed shade provision (by appropriate selection and siting of broad canopy trees)

- Landscape construction details for tree and shrubs planting, paving, edging treatments, lawns etc
- Site preparation specifications (i.e weed control, soil ameliorations (i.e weed control, soil amelioration etc)
- Maintenance schedule for 24 months establishment maintenance
- Surrounding area (ie. Treatment of nature strip and planting for visual privacy to and from development)

Submit: 3 copies of Landscape Plan drawn at a scale of 1:100



SPECIFICATION NOTES

PRIOR TO COMMENCING WORKS REMOVE ALL EXISTING PLANTING, GRASS, MUCK AND OTHER EXISTING MATERIAL FROM PROPOSED LANDSCAPE AREAS.

SPRAY ALL BEDS WITH AN APPROVED MULCH. MULCH SHALL BE LEFT UNDISTURBED FOR A PERIOD OF 12 MONTHS.

ALL VEGETATION NEED MATTER.

DESTROY ALL EXISTING PLANTING AND VEGETATION WITHIN THE BOUNDARIES OF THE PROPOSED LANDSCAPE AREAS.

PROVIDE AUTOMATIC DRAINAGE SYSTEMS FOR ALL GARDEN BEDS.

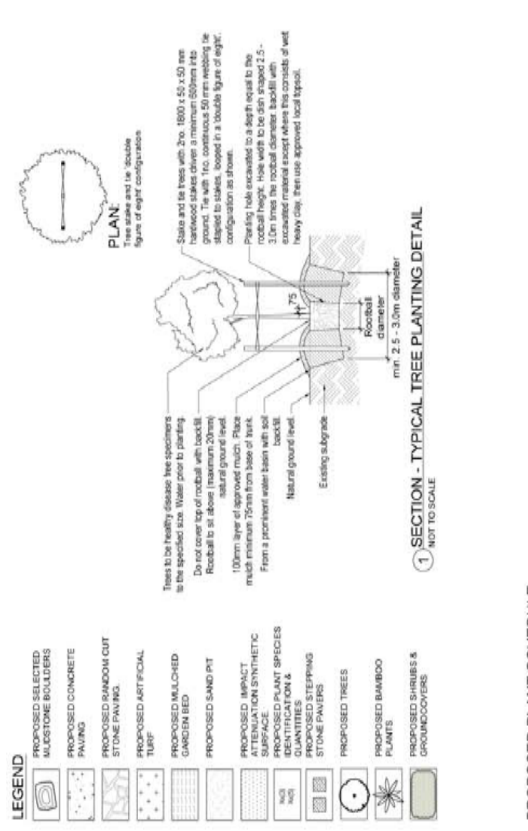
THE FOOTBALL ALL TREES ARE TO BE SPRAYED AS ESTIMATED.

FOR CONTINUATION REFER TO SHEET 201002-L1

FOR CONTINUATION REFER TO SHEET 201002-L3

TERMINARY PROTECTION FENCING SHALL BE INSTALLED AT A MINIMUM DISTANCE OF 1.5 METRES FROM THE TRUNK OF ALL TREES. FENCING SHALL BE 1.8 METRES HIGH AND SHALL BE MADE OF 19 GAUGE GALVANIZED STEEL WITH 1000MM VERTICAL SLATS AND 1000MM HORIZONTAL SLATS. FENCING SHALL BE INSTALLED AT A MINIMUM DISTANCE OF 1.5 METRES FROM THE TRUNK OF ALL TREES. FENCING SHALL BE 1.8 METRES HIGH AND SHALL BE MADE OF 19 GAUGE GALVANIZED STEEL WITH 1000MM VERTICAL SLATS AND 1000MM HORIZONTAL SLATS.

NO WORKS SHALL BE UNDERTAKEN ON ANY OF THE PROPOSED LANDSCAPE AREAS WITHOUT THE PRIOR APPROVAL OF THE RESPONIBLE AUTHORITY.



LEGEND

- PROPOSED SELECTED WASTONE BOLLARDS
- PROPOSED CONCRETE PAVING
- PROPOSED RANDOM CUT STONE PAVING
- PROPOSED ARTIFICIAL TURF
- PROPOSED MALCHED GARDEN BED
- PROPOSED SAND PIT
- PROPOSED IRONACT ATTENUATION SYNTHETIC SURFACE
- PROPOSED PLANT SPECIES QUANTITIES
- PROPOSED STEPPING STONE PAVING
- PROPOSED TREES
- PROPOSED BAMBOO PLANTS
- PROPOSED SHRUBS & GROUNDCOVERS

PLAN
Tree size and its location figure of eight configurations

Plants are to have with 200 x 1600 - 65 x 60 mm rootball and sub-rootball. Plants are to be planted in a double figure of eight configuration as shown.

Planting hole excavated to a depth equal to the rootball height. Hole width to be 30mm greater than rootball diameter. Excavated material except where the coincide of wet heavy clay, then use approved local topsoil.

PROPOSED PLANT SCHEDULE

Key Botanical Name	Common Name	Mature Size (H x W)	Install Size	QTY
TREES				
Ar <i>Acer rubrum</i> 'Somerset'	Somerset Maple	8 x 4M	45L Cont. / 30-40 Cal / 2.5m Height	2
BAMBOO				
Br <i>Bambusa textilis</i> 'Gracilis'	Gracilis Bamboo	6 x 2M	3-5 culms / 1.5m Height min.	7
SHRUBS				
Cg <i>Corea glabra</i> 'Green Compact'	Key Lantern	0.5 x 0.5M	150mm Pot	13
Eg <i>Crocea exaltata</i>	Candy Stars	0.4 x 0.5M	150mm Pot	9
Cg <i>Erenopsis glabra</i> compact	Silver Ball	0.7 x 1M	150mm Pot	6
Ml <i>Meibomia linearifolia</i> Dwarf	Miri Mel	1.3 x 1	150mm Pot	7
GRASSES & TUFTED				
Lc <i>Lomandra confertifolia</i>	Little Con	0.3 x 0.3M	150mm Pot	33
Lt <i>Lomandra longifolia</i> 'Tanika'	Dwarf Spiny-headed Rush	0.5-0.6 x 0.65M	150mm Pot	38
Ps <i>Pennisetum setaceum</i> 'Rubrum'	Red Fountain Grass	0.9 x 0.45M	150mm Pot	13
TOTAL				128

Landscape Design Principals

These design principles will guide you towards developing a landscape for the facility that is:

- Visually appealing and functional for users
- In keeping with the design of the proposed buildings
- Complementary to the streetscape and neighbourhood character
- Respectful of environmental values. This includes conservation of indigenous landscape character and retention of trees as habitat for wildlife.
- Self-sustaining and low maintenance

Retain existing trees

Retention of existing trees is one of the most significant landscape issues to be considered when planning a new development. Existing trees will contribute instant visual impact to a new development.

Existing trees to be retained should be incorporated into the design of the development at the early planning and design stages, including trees on neighbouring land and within nature strips. This requires siting the buildings and other built components such as car parks and fences around existing trees to minimise disturbance to tree roots.

Retention of River Red Gums in a private context is often problematic. Council has a River Red Gum Protection Policy to protect and integrate existing River Red Gums into proposed developments. This policy must be consulted if River Red Gums are present either on or in close vicinity to the property. For trees not covered by Council's River Red Gum Policy, AS 4970-2009 *Protection of Trees on Development Sites* should be referenced and used.

Techniques

- Mature River Red Gums require retention in public open space or extended road reserves. In exceptional circumstances Council may permit their retention in a private/ body corporate context where Council can be satisfied of its security over the longer term and
- exclusion of activity within the tree protection zone
- During construction, protect trunk, branches, and tree protection zone of existing trees by erecting temporary fencing around the edge of the tree protection zone, and avoid storing materials and equipment over the tree protection zone. Street trees affected by the design should be similarly protected
- Incorporate existing trees in grassed areas or mulched garden beds. Retain existing soil level within the tree protection zone and avoid filling or excavating the soil levels. Also avoid trenching in the vicinity of tree roots
- Where paving is placed within a tree protection zone, place paving above natural surface level (i.e. not dig construction) so as not to disturb roots. Use a free draining porous paving material to allow oxygen and water to permeate through to tree roots
- Consider canopy growth/ spread requirements for younger trees to be retained

Select Plant Species and Garden Styles appropriate to the Landscape Character of the Area

Good development proposals incorporate landscape design as an integral component of the overall development. This means that Landscape Design should be included at the early planning stage of the building, particularly where existing trees are to be integrated into the design. The result will be a visual cohesion between the building and landscape that makes the development attractive and functional.

Plants that are appropriately selected for and located on the site will help integrate the development with the surrounding area. Building setbacks should be generous enough to allow a complementary response to either the existing or Council's proposed landscape character for the area.

Techniques

- Accommodate canopy trees with spreading crowns that contribute to the streetscape and soften the appearance of the development. Space should be made for at least one substantial tree in both the front and rear garden areas. Consideration should be given to locating trees such that their potential to damage nearby buildings and other structures is minimised
- Select semi-advanced canopy trees with a minimum 300mm pot diameter. The selection of quality tree stock may be guided by Australian Standard AS 2303:2015 *Tree stock for landscape use*
- Select plant species suited to the soil conditions and microclimate of the site
- Use plants that typify and perform well in the area to reinforce the character of the local landscape and built form. For example, if Australian native plants are predominant in the area, select native and/or local indigenous plants to enhance the existing theme
- In areas of environmental significance, the planting scheme should include species indigenous to the area. (refer to the back page "Information and Contacts" for assistance)
- Provide sufficient setback from the front boundary to allow for planting that blends the development with neighbouring dwellings
- Locate trees to maximise summer shade between 11 am and 3pm
- Provide a logical pedestrian connection between the streetscape and building entrance

Minimise the visual impact of fencing

Fencing is often an integral part of development in delineating areas and boundaries, and for security purposes. Fencing location, style and height should be integrated with the building form, be unobtrusive, and should relate to the character of the streetscape.

Techniques

- High fencing should be located at or behind the line of the building, and the building should be designed to become part of the security solution
- Fencing along front boundaries is generally discouraged, however any solid fencing should be a maximum 1.2m in height
- Where front boundary security fencing is unavoidable, the fencing style should utilise high quality materials, be transparent and unobtrusive

Design open spaces as a series of attractive and functional outdoor 'rooms' to meet facility user needs

The site's open space should be designed to accommodate a range of user needs. Design outdoor 'rooms' as an extension of the building. This will enhance the development's use and therefore add to its value.

Uses to design for include: informal staff gathering areas, children's play areas, and approaches to the building that will influence the 'first impression' of the facility.

Techniques

- Design open space as a series of courtyards that address a range of needs from play and social interaction to quiet contemplation. Provide seating and shelter. Select and locate plant species to provide comfortable micro-environments. For example:
 - *Provide shade in summer and allow light in winter by locating deciduous trees and shrubs on the north side of a courtyard*
 - *Buffer the effects of prevailing winds by locating trees and shrubs on the north and west sides of the courtyard Plant for seasonal colour and interest*
- Locate informal outdoor areas for staff close to indoor dining areas. This will encourage greater use of the outdoors during lunch breaks. Consider an outdoor BBQ area with overhead weather protection within landscaped surrounds
- Use paving materials suited to the scale of the space. For example: granitic sand, lilydale toppings, or unit pavers laid on a sand and crushed rock base
- Outdoor play spaces should cater to the range of age groups using the facility, providing a stimulating safe and diverse range of play opportunities. Locate and design play spaces to allow for adequate adult supervision.
- Use of safe plants that are non-toxic, have no thorns or prickles, non-allergenic etc.
- Provision of shade should be considered in the design of an outdoor play area

Landscape Car Parking Areas

All car parking areas should be landscaped with suitable species selected to provide both shade to parked vehicles and subtle screening of vehicles from adjacent roads.

Techniques

- Select canopy trees, low shrubs and ground covers for 'garden bays' within car parks. Garden bays should be placed at regular intervals of every 8 continuous car parking spaces. Each 'garden bay' should be the size of 1 car parking bay
- All 'garden bays' within car parks should have an edge treatment to protect plants from vehicle overhang. Suitable edge treatments include concrete kerb that is 150 mm x 150mm above finished pavement level, or 600mm high vehicle barriers, or 900mm high bollards
- Screening with evergreen shrubs up to 3m high may be necessary along the perimeter of the car park where the car park is visible from the front boundary

Minimise External Paved Area

Minimising paved areas will visually soften the appearance of the site and increase on-site infiltration of stormwater.

Techniques

- Maximise garden beds and lawn surfaces. For low access areas use stepping stones through garden beds or grass as an alternative to a path
- Use porous materials for paving pedestrian areas. For example:
 - Gravel or granitic sand on crushed rock base
 - Unit pavers laid on a sand and crushed rock base
- Use impervious paving such as *in situ* concrete only for vehicular access areas
- Use grass pavers as an alternative to concrete in low use vehicle areas

Achieve Effective Planting that is Low Maintenance

The following techniques will encourage effective plant establishment and minimise maintenance demands in the long term.

Techniques

- Prepare the soil in areas to be planted by:
 - *Removing all weeds in proposed garden beds and lawn areas*
 - *Deep ripping and treating clay soils with gypsum to enhance drainage and root penetration. Deep ripping should be undertaken with caution in proximity to underground services*
- Plant long lived, drought tolerant plants that are low maintenance. High maintenance planting such as annual borders should be placed in high exposure and communal gathering areas for maximum appreciation
- Place all shrub and groundcover plants in garden beds with a containing edge treatment such as a timber, brick or concrete edge
- Apply mulch to all garden beds to reduce weed growth and conserve soil moisture. Examples of mulch include wood chips, pine bark and jute mat. To effectively control weed growth, a loose mulch such as wood chips should be spread to 75mm depth
- Install an automated drip irrigation system to canopy trees and mulched garden beds
- Control weed growth during the plant establishment period
- Provide a maintenance period of 2 years to establish the landscape
- Plant shrubs and groundcover at the appropriate density to ensure complete coverage of the area when planting is mature. Use the guide below:

Spacing Guide for Shrubs and Groundcovers

- Tall shrubs – 2-5m height, space 1 plant every 2 metres
- Medium shrubs – 1-2m height, space 1 plant every 1 metre
- Small shrubs and groundcover – under 1m height, space 1 plant every ½ metres

Landscape bond, inspection and approval

Council will levy a bond, as a condition of the planning permit, prior to works commencing to ensure that the landscape works are undertaken and maintained as per the approved Landscape Plan.

The developer should book a final inspection by arranging a time with a council officer from the Planning Department. The final landscape shall be assessed for its conformity to the Landscape Plan.

Any areas or items found to be unsatisfactory or inconsistent with the Landscape Plan must be rectified. Where work is not satisfactorily completed, a notice will be issued to the permit holder.

On completion of the landscaping works to the satisfaction of the Responsible Authority, a refund of 50% of the security deposit will be made to the payee. Upon the maintenance of the landscaping works for a period of two years after completion of such works to the satisfaction of the Responsible Authority, the balance of the security deposit will be refunded to the payee.

Compliance with Approved Landscape Plans

Landscape Plans endorsed under a planning permit must continue to be maintained in accordance with the plan and dead and diseased plants are to be replaced and weeds controlled. Council officers may undertake inspections to ensure that landscaping is maintained. Amendments to Landscape Plans require the approval of Council if proposed or if there are future changes to the land or permitted uses/development.

Information & Contacts

Design Assistance

Where the scale and complexity of a project requires professional design assistance, it is suggested that a suitably qualified landscape design professional be employed. Their involvement should start at the early stages of site analysis and development planning.

A list of landscape design professionals is available from the following organisations:

- **The Australian Institute of Landscape Architects** - (Victorian Chapter) PO BOX 110 Montmorency Vic 3094 Phone: 03 9016 0111 Email: vic@aila.org.au www.aila.org.au
- **Landscape Industries Association of Victoria** - Suite 12, 497 Burke Road, Hawthorn East VIC 3123 Phone: 1300 365 428 www.landscapingvictoria.com.au

Useful References

The following publications will provide assistance in the areas of planning requirements for medium density housing, landscape design and plant selection.

Plants of the Merri Merri: A guide to the indigenous vegetation at the Merri Creek Valley and Melbourne's Northern Suburbs (Merri Creek Coordinating Committee)

Flora of Melbourne, A Guide to the Indigenous Plants of the Greater Melbourne Area (Marilyn Bull)

Botanica: The illustrated A-Z of over 10,000 Garden Plants and how to cultivate them (Random House)

Developing Shade in Public Places, Anti -Cancer Council of Victoria

Urban Nature Strip Guidelines, City of Whittlesea

Contacts

Council's Planning Department

Phone: 9217 2236