

Great Homes, Greater Neighbourhoods

RESIDENTIAL DESIGN GUIDELINES



INTRODUCTION

Greater Dandenong is expected to change significantly over the next twenty years. The growing population will need new homes such as apartments, townhouses, units and detached houses. Council wants to make sure that they are well designed, comfortable and contribute to the neighbourhood.

Housing quality is one of the most important factors in contributing to the liveability of any city.

New development must satisfy the requirements of the Greater Dandenong Planning Scheme and Victorian Building Regulations as outlined in the diagram on the next page (page 3).

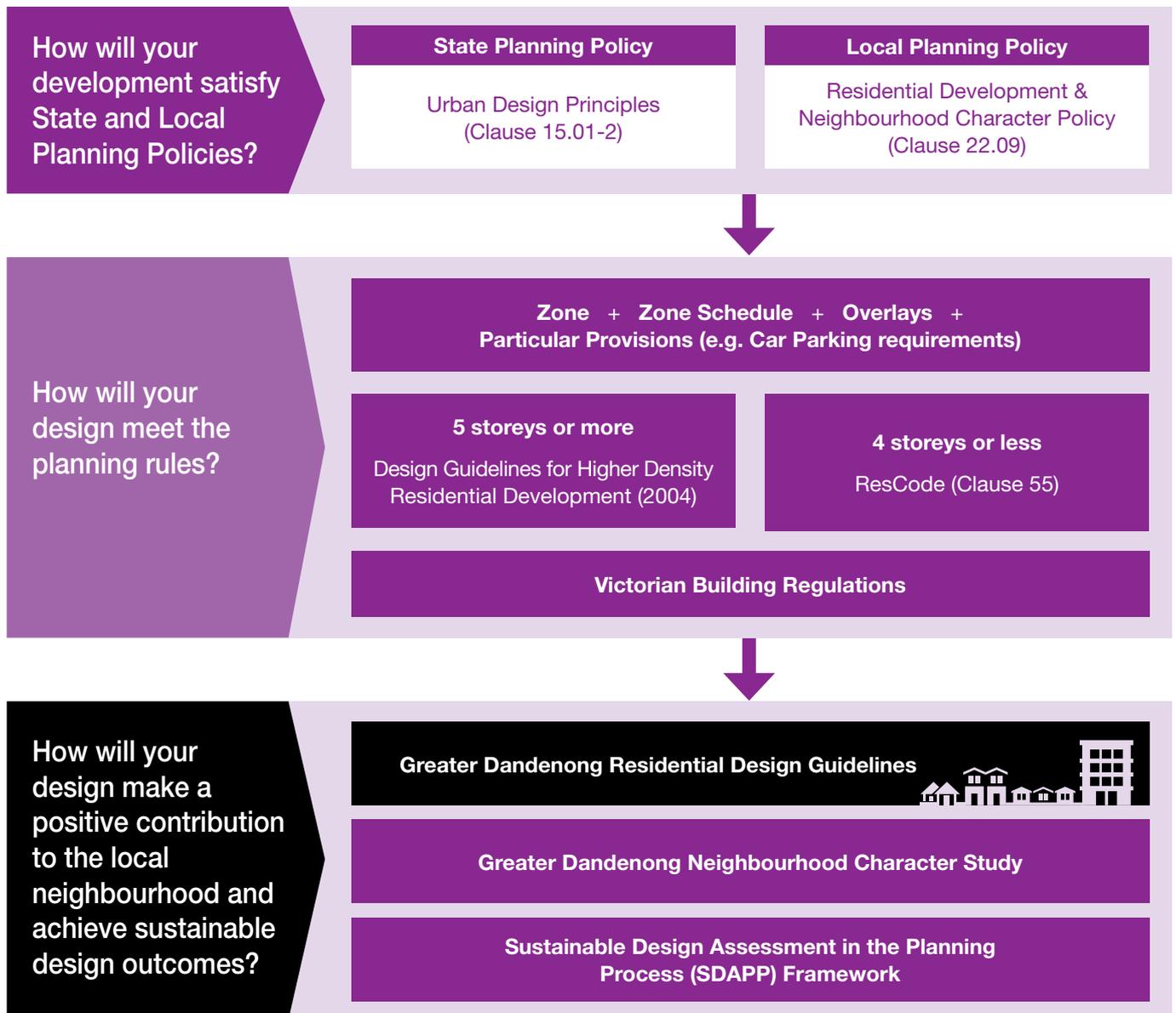
These Guidelines are structured around 9 design topics. Each topic includes prompt questions, important guiding principles and illustrations to consider when designing new homes and to explain how to achieve well designed housing.

The Glossary at the back of this document explains the planning terms used in these Guidelines and in *Clause 22.09 Residential Development and Neighbourhood Character Policy of the Greater Dandenong Planning Scheme*.

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Before you start designing your development consider...



Make sure the right type of housing is built in the right place

The Residential Development and Neighbourhood Character Policy (Clause 22.09) provides guidance on the location and design of different types of residential development within Greater Dandenong by dividing residential areas into three 'Future Change Areas' called Substantial, Incremental and Limited Change Areas. This makes sure the right type of housing is built in the

right place, that new development respects the scale of surrounding development and that the height of residential buildings gets lower as they get further away from shopping areas.

Clause 22.09 also includes Design Principles which all residential developments are assessed against.

WHAT IS GOOD DESIGN?



2 STOREY TOWN HOUSES SCENARIO

1 Site responsive design

The size of the building and number of dwellings is in proportion to the site & respectful of adjoining properties

2 Attractive streetscape

Integrated design, active frontages, human scale

3 Easy vehicle & bicycle access

Practical and safe access for cars and bikes that does not dominate the look of the building or street

4 Safe pedestrian access

Convenient and safe access for pedestrians



3 STOREY TOWN HOUSES SCENARIO

Disclaimer: These designs are for illustration purposes only. If you apply for a Planning Permit, copying or recreating any design from this brochure does not guarantee approval of the planning permit.



5 Comfortable internal layout & space

Well proportioned, functional room layouts

6 Passive design

Maximise solar access, natural light and cross-ventilation through good orientation and passive design

7 Durable building material

Low maintenance and attractive building materials and finishes

8 Hidden building services

Hide lift wells and other building services from view or integrate them into the overall design

9 Generous landscaping

Soften the appearance of development with quality planting and canopy trees



DESIGN GUIDANCE

1 Site Planning and Built Form

Prompt questions

- Is the type of residential development appropriate for the area?
- Is the site large enough to comfortably accommodate the proposed development and does it have the right shape and dimensions to achieve everything that you want to achieve?
- Is the design respectful of existing neighbours and the identified future character of the neighbourhood?

Top principles

1. Refer to Clause 22.09 of the Greater Dandenong Planning Scheme to identify which Future Change Area the site is located in and apply the relevant design principles to determine what type of housing is suitable for the site.
2. Over development – or building proposals that are simply too big or too dense for their sites should be avoided.
3. Dwelling at the rear of a lot should be single storey to respect the amenity of adjoining properties.
4. Buildings should be designed to provide a transition in development intensity and height between different zones or residential areas to ensure new development is respectful of surrounding built form.
5. The number of dwellings should be determined by the number of parking spaces that can fit on the site. Lack of car parking spaces can be a sign of overdevelopment of the site.
6. Buildings should be orientated to maximise natural sunlight to habitable rooms (e.g. living rooms) and private open space to improve the liveability of the dwelling for future residents.
7. Buildings and car parks should be designed with a substantial landscaping buffer and perimeter planting along site boundaries. The use of mature (taller) planting along the boundaries of the site is strongly encouraged to reduce the need for external screens on side and rear windows.
8. Buildings should be sited and designed to respect and use the natural topography of the site
9. Side and rear building setbacks, orientation of balconies and placement of habitable room windows should be designed to not adversely impact the development potential and amenity of adjoining buildings or neighbouring properties.
10. Buildings should look architecturally appealing and not just simply maximise the allowable (ResCode) building envelope.
11. Large consolidated sites should design internal road networks and paths to make it easy for residents to walk through the site.



Design buildings that are architecturally appealing from the street and respectful of surrounding built form.



2 Streetscapes

Prompt questions

- Will the new building make a positive contribution to the neighbourhood?
- Will the building be visually attractive when viewed from neighbouring properties to the side and rear?
- Will the building have an active frontage?

Top principles

1. Provide active frontages by locating habitable rooms at ground floor level and upper levels facing the street to support passive surveillance and improved perception of safety.
2. Avoid locating secluded private open spaces within front setback areas.
3. Carefully consider fence heights, materials and transparency to maximise passive surveillance of the street.
4. Break up the appearance of large buildings by incorporating design elements that reflect the existing streetscape rhythm and scale.
5. The side of buildings should be articulated to complement the character of the street by using similarly proportioned roof forms, doors, windows or verandahs and similarly proportioned solid walls against the window and door opening areas.
6. Fences and structures built along the front boundary or within the front setback areas should be integrated with the overall building and landscape design.



Locate habitable rooms at the ground floor and upper level facing the street to create active frontages.



Consider fence heights, details and transparency to maintain passive surveillance to the street.



Use building elements and articulation to break up the appearance of large buildings

DESIGN GUIDANCE

3 Vehicle & Bicycle Access

Prompt questions

- Have people been considered before cars?
- Are bicycle and car parking areas safe, secure and convenient for residents and visitors to use?
- Are garages, driveways, crossovers and carports designed to not dominate the street frontage?

Top principles

1. Make it easy and safe for pedestrians, cyclists and drivers to walk, ride or drive in and out of the car parking areas.
2. Avoid large car parks being visible from the street, because it can often be unattractive and have a negative impact on the streetscape and existing character of an area. At grade and semi-basement car parks should be sleeved (hidden) behind ground floor units.
3. Minimise the loss of on-street parking by carefully considering the location of the driveway.
4. Locate driveways at the side or rear of the development and integrate them into the landscape design.
5. Carefully consider the location of the driveway to retain existing large and healthy street trees and front yard trees whenever possible.
6. When designing car parking basement areas, provide adequate ground level side boundary setbacks to allow substantial landscaping such as canopy trees with deep roots.
7. Basement car parks are preferred over undercroft or at-grade car parks for apartment buildings, and should be well-ventilated.
8. Bicycle storage and visitor car parks need to be practical, safe and easily accessible from the main public thoroughfare.



Driveway located to the side of the lot.



Entrance to car park set back from the street ensures easier access.



Easy to use visitor's bicycle racks.



4 Pedestrian Access & Common Areas

Prompt questions

- Are the entrances and pedestrian paths to each dwelling easy to access, clearly identifiable, safe and separated from vehicles?
- Is it easy for pedestrians to get to each dwelling and to do everyday activities like taking out rubbish and collecting the mail?
- Are communal areas strategically located and integrated into the overall pedestrian network so they are convenient for residents to use?

Top principles

1. Entrances and mailboxes for all dwellings should be visible from the street or public thoroughfare to provide a sense of identity and a positive front door impression for daily use and welcoming guests.
2. The design should provide weather protection so residents can comfortably walk to the mailbox or wait outside their front entrance.
3. Allow for casual surveillance of main pedestrian entrances and communal open spaces without compromising the privacy of dwellings. Consider the placement of windows, landscape buffers and avoid excessive blank walls or fences.
4. Consider separating pedestrian access from vehicle access ways, as an option to improve pedestrian safety.
5. Create safe communal areas that are well lit and designed to encourage casual surveillance of streets and common driveways.
6. Consider providing lift access in 3 storey or higher apartment developments to provide for residents with a range of mobility needs such as the aged and people with a disability.
7. Ensure the main entrance, foyer and common corridors are easily accessible for all residents and visitors and capable of accommodating maintenance and furniture delivery activities.
8. Locate and design communal open spaces so that they receive reasonable solar access and are conveniently accessible for all future residents to enjoy.



Entrance and mailboxes for all dwellings are visible from the street.



Pedestrian safety is achieved by separating pedestrian access from vehicular access.



Create functional and welcoming communal open spaces.

DESIGN GUIDANCE

5 Dwelling Space, Layout, & Internal Amenity for Future Residents

Prompt questions

- Does the size of the rooms in each dwelling provide a sufficient amount of space for the number of future residents?
- Is the layout functional, flexible, adaptable and accessible for residents with different needs?
- Is the amount of storage space adequate and easy for future residents to use?
- Are the bedrooms located away from noisy areas such as public thoroughfares or car parks?

Top principles

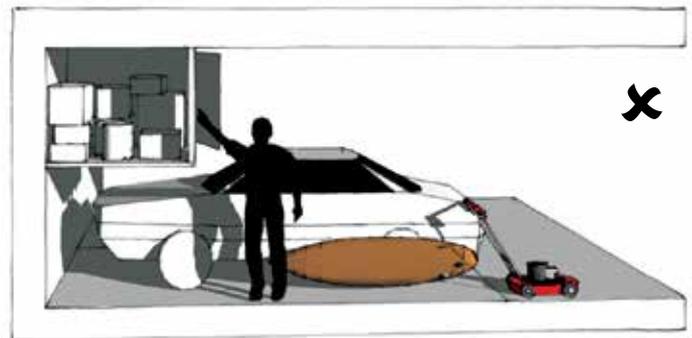
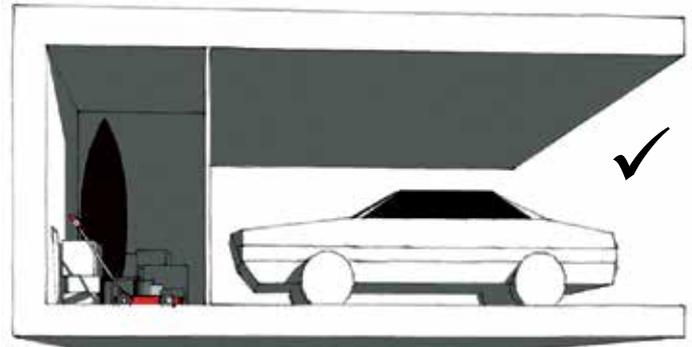
1. The size of the bedrooms, living areas, balconies and courtyards need to be large enough and of the right proportions to allow for the movement of people with various physical abilities and for a functional and flexible furniture layout. For example, an apartment with 3 bedrooms requires a larger living area than a 1 bedroom apartment to ensure the comfort of future residents.
2. Design dwellings with seamless and functional connections between indoor and outdoor living by providing direct access from principal living areas and kitchen areas to external living spaces such as balconies and courtyards.
3. Create private and quiet bedrooms by considering their location in the dwelling and minimising potential amenity impact from public thoroughfares through careful placement of windows or use of landscape buffers.



Provide direct access from living areas to balconies and courtyards.



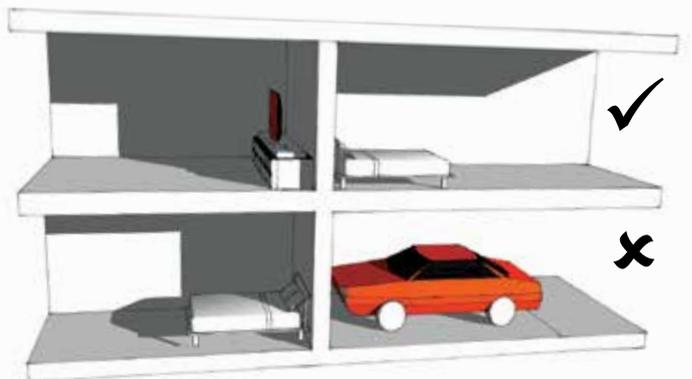
4. Orientate the building, walls and windows to avoid direct overlooking. Ensure all habitable rooms have an outlook to the street, common areas or light courtyard.
5. Excessive screening of habitable room windows with no outlook should be avoided.
6. Provide adequately sized storage (including a pantry cupboard and built in wardrobe) that will make the dwelling more comfortable for the number of future residents.
7. Avoid relying on above bonnet type of storage in carpark areas as the only storage for the entire dwelling.
8. Avoid an inefficient layout or awkward shape of indoor and or outdoor living spaces that are difficult to furnish.
9. Acoustic walls and treatments should be provided for developments adjacent to major noise sources such as main roads, railway lines and industrial areas, and in between dwelling walls, floors and ceilings.



Avoid relying on above bonnet type of storage as the only storage for the entire dwelling



Provide direct access from living areas to courtyards.



Create private and quiet bedrooms by considering their location in the dwelling

DESIGN GUIDANCE

6 Passive Design

Prompt questions

- Will the design of the development allow future residents to use less energy to heat, cool and light their homes?
- Does the development maximise the number of north facing dwellings for access to sunlight?
- Do all the habitable rooms have access to natural light and cross-ventilation?

Top principles

1. Orientate all habitable room windows, private secluded open space and balconies and courtyards to the north whenever possible.
2. Create bright, inviting rooms by not relying on borrowed light to habitable rooms. Avoid narrow and deep habitable rooms as they will tend to have poor natural light. Where unavoidable, consider providing a higher ceiling to improve the level of natural light access.
3. All habitable rooms should have an openable window to allow natural ventilation.
4. Habitable rooms with dual orientation are encouraged to facilitate good cross-ventilation.
5. Use building materials with high insulating qualities or high thermal resistance.
6. Consider the size and placement of windows, eaves, shades, blades, screens to allow future residents to control the northern, western and eastern sunlight/heat.
7. Design common corridors and lift lobbies with natural light.



Orientate habitable room windows to the north whenever possible.



Use shading devices for north facing windows.



Design facades to allow future residents to control the sunlight/ heat to the habitable rooms and/ or balcony.



7 Building Materials & External Finishes

Prompt questions

- Will the building still look good in 20 years time?
- Can the finishes and surfaces of the building be easily cleaned and maintained?
- Are the building materials sustainably-sourced and manufactured?

Top principles

1. Use high quality, fit for purpose and durable building materials such as brick, concrete or pre-fabricated cladding that age well and require minimal or low-cost maintenance.
2. The use of lower quality materials such as painted or rendered walls that rapidly deteriorate, require frequent maintenance and result in ongoing cost to owners and occupants are strongly discouraged.
3. Avoid the use of lightweight construction and materials along ground floor public thoroughfares that could be easily damaged or vandalised.
4. Develop a colour and materials palette to ensure the look and feel of elements such as fences, balustrades, screens and pergolas integrate with the overall appearance of the building.
5. The choice of building facades, materials and finishes should look just as appealing from the side and rear as at the front of the development.
6. Do not rely on the use of varied materials and colours alone to solve a poorly articulated building form and facade.
7. Use equally high quality and durable building materials for all front, side and rear building elevations especially in parts of the building which are not readily accessible or easy to maintain.
8. The use of timber or bright coloured surfaces on a building's exterior must be properly treated so as to age as intended and to maintain their good appearance.
9. Avoid large unarticulated blank walls and monotonous building materials that can result in a building appearing unattractive.
10. Avoid large areas of blank walls that could be easily targeted for vandalism or graffiti.



Use varied high quality and durable building materials that age well and require minimal low-cost maintenance.



Integrate the balustrade and screen materials with the overall building design.



Appealing building facades, materials and finishes.

DESIGN GUIDANCE

8 Building Services

Prompt questions

- Have fire hydrants, meter boxes and clothes lines been integrated into the overall building design or hidden from view?
- Is the bin storage area located in a logical, well-ventilated place for easy collection that is easily accessed by residents?

Top principles

1. Ensure building services such as exposed fire hydrants, meter boxes, downpipes, hot water services, rainwater tanks, and solar panels, cannot be seen from the street.
2. Materials used to screen building services should integrate well with the overall building design and material palette of the development.
3. Avoid facing bathroom, kitchen, laundry, and basement windows to the street or common areas.
4. Avoid placing air-conditioning units and clothes lines on balconies. If not possible, these services should be hidden from view by using non-transparent balcony balustrades.
5. Locate rainwater tanks, hot water services, clothes lines, air-conditioning units and outdoor storage sheds so as not to compromise the size, functionality and usability of private secluded open spaces. Consider providing rainwater tanks underground.
6. Consider providing alternative access ways for waste bins and bicycles that is separate from the main pedestrian entrance for the comfort of future residents.
7. Provide separate water meters for each dwelling (including apartments) so residents can monitor their level of water usage.



Hide water meters, fire hydrants and booster panels from view.



Avoid placing air-conditioning units, bikes and clothes lines on balconies by providing these facilities at other appropriate concealed areas on site or in the building



9 Landscaping

Prompt questions

- Does the landscaping soften the appearance of the development when viewed from the street and adjoining properties?
- Are the plants and canopy trees drought tolerant and easy to maintain?
- Has generous landscaping been incorporated into the design of common driveways, footpaths and building entrances?

Top principles

1. Allow for the establishment of deep rooted trees and mature perimeter planting by providing adequate space between site boundaries and buildings, car parks, basement structures and along common driveways.
2. Incorporate landscaping, particularly canopy trees, into the design of developments to provide an outlook, privacy, shade, and contribution to a landscape character and positive amenity outcomes.
3. Retain existing healthy canopy trees within front setback areas and nature strips where possible.
4. Consider appropriate tree and plant species for the local environment.
5. Ensure adequate soil depth to maintain healthy growth of all trees and plants.
6. Consider permeable ground surfaces that allow rainwater to penetrate the soil to support the healthy growth of trees, protect tree root zones, and reduce stormwater run-off.
7. Co-locate outdoor building services to maximise the opportunity for substantial landscaping.
8. Consider including green roofs and walls to improve sustainability and to soften the appearance of the large buildings.
9. Use a qualified landscape architect early in the design process.



Landscaping can improve the internal privacy of ground floor units and contributes to the landscape character of the street.



Retain existing trees within the front setback whenever possible.



Use landscaping to soften the appearance of driveways.

GLOSSARY

The following glossary explains in plain English the words and key concepts used in these Guidelines and in the Greater Dandenong Planning Scheme's local policy *Clause 22.09 Residential Development and Neighbourhood Character*.

Term	Definition
Active frontage	Refers to street frontages where there is an active visual engagement between people in the street and those in the ground floors of buildings. This quality is assisted where the front facade of buildings, including the main entrance, face and open towards the street.
Articulated	The way a building is shaped and detailed to create visual interest and building definition.
Borrowed light	Light provided to an internal room through another room.
Building height	The vertical distance from natural ground level to the roof or parapet at any point. Each residential zone, or schedule to a zone, specifies a 'Maximum building height requirement for a dwelling or residential building' which will be expressed as either a 'mandatory' or 'discretionary' control. Mandatory building heights cannot be exceeded or varied or appealed at VCAT; whereas discretionary controls can be varied by Council or VCAT with a planning permit.
Bulk	'Bulk' or building 'Massing' refers to the height, width and depth of a building in relation to other surrounding buildings, the street, setbacks and surrounding open space. Bulk also relates to the appearance of a building and how the design is broken up or 'articulated'.
Building services	Functional plant and infrastructure required to service the operation of a building including but not limited to air conditioning units, solar panels, roof mounted equipment, masts, lift over-runs, piping and ducting above the ground floor storey required to service the operation of a building.
Built form	The physical shape of buildings and building elements. For example, " <i>Is the built form out of scale with the streetscape?</i> "
Canopy tree	A canopy tree is defined as any tree with a single or multi stemmed trunk formation that has a total circumference of 110 cm or more at 1.5 metres from the ground.
Development	Includes the construction, alteration or demolition of a building or works, and the subdivision or consolidation of land.
Domestic services	A domestic appliance or apparatus that is normal to and services a dwelling, such as a clothes line, disabled access ramps and handrails, an air conditioner, cooling or heating system, a hot water service, security systems and cameras, shade sails, a barbeque, downpipes, a skylight, and security screens.
Façade	The exterior of a building and its architectural treatments including projections, openings, patterns, finishes and materials. The façade of a building is often the most important aspect from a streetscape standpoint, as it sets the tone for the rest of the building.
Frontage	The road alignment at the front of a lot. If a lot abuts two or more roads, the frontage refers to the road which the building, or proposed building, faces.



Term	Definition
Future Change Area	Residential areas of Greater Dandenong are divided into three Future Change Areas, namely Substantial, Incremental and Limited change because of their locational or character attributes. The Residential Development and Neighbourhood Character local policy of the Greater Dandenong Planning Scheme (Clause 22.09) identifies the preferred built form outcome for each Future Change Area.
Good design	Design that creates new buildings and places that are well suited to their site and setting, and well suited to their intended purpose. Good design is well proportioned, attractively finished and durable. Good design is the objective of this document.
Habitable rooms	Any room of a dwelling that is frequently used for extended periods, such as living rooms and bedrooms.
High density housing	Where more than one new dwelling is constructed and each dwelling does not have its own footprint on the land, rather the units occupy airspace above a common footprint. These dwellings are usually flats or apartments that are part of a mixed-use or broader high density residential development and innovative apartment-type housing with upper level secluded private open spaces and living areas. Private open space areas are usually provided as balconies. Such developments typically share facilities, a driveway, as well as staircases and common walls. In most cases, they will have a lift and a semi-basement or basement car parking area.
Intensity	The density or concentration of uses and built form in a given location.
Interface	The relationship of buildings to the site, street and neighbouring buildings (alignment, setbacks, boundary treatment).
Identified Future Character	The preferred features, details and qualities of a place or building that make a positive contribution to a location or neighbourhood.
Integrated	All elements of the building design are given equal consideration to achieve a co-ordinated, cohesive, harmonious design.
Internal amenity	Elements of a dwelling which make it enjoyable for residents to live in. This includes good levels of light (both sunlight and daylight), natural ventilation to enable the flow of fresh air, visual and acoustic privacy between neighbouring buildings.
Landscape character	A generous amount and size of plantings and canopy trees that have enough space to grow to maturity to make a positive contribution to the characteristics of the neighbourhood.
Low density housing	Generally means single, detached dwellings on individual blocks. Low density housing is commonly associated with typical suburban residential areas and may include traditional single and two storey houses, two dwellings on a single lot (dual occupancy) and villa units. Private open space areas are located at ground level.

GLOSSARY

Term	Definition
Medium density housing	Where more than one dwelling is constructed on a single lot and each dwelling has its own, separate building footprint on the land. These dwellings commonly share a driveway. In some locations, medium density housing will include 2 and 3 storey units or townhouses, while in other places 1 or 2 storey residential buildings may be the norm. Townhouses can be attached or semi-detached.
Passive design	Design that takes advantage of the climate to maintain a comfortable temperature range in the home. Passive design reduces or eliminates the need for artificial heating or cooling, which accounts for about 40% of energy use in the average Australian home.
Passive surveillance	The ability of people to view or overlook a public or common space, such as a common driveway or street, when going about their normal business. This is achieved through the building design, layout and use of rooms and contributes to the safety of these areas.
Planning Scheme	Controls land use and development within a municipality. It contains State and local planning policies, zones, overlays, particular provisions, general provisions, definitions and maps
Predominant street pattern	The size of the setbacks are similar if not the same dimension as those of surrounding properties and in the broader neighbourhood to maintain and reinforce the pattern and existing rhythm of spacing between dwellings.
Private Open Space	An outdoor area of a dwelling or residential building or land for the exclusive use of the occupants. Secluded Private Open Space is the part of private open space primarily intended for outdoor living activities which enjoy a reasonable amount of privacy.
ResCode	ResCode (Residential Development Standards) is a residential design code that applies to all residential land throughout Victoria.
Rationale	Clause 22.09 includes a 'Rationale' or explanation of the reason for each Future Change Area.
Scale	The size, bulk and perception of a building and spaces. For example, a large building set amongst other smaller buildings may seem 'out of scale'.
Screening	The use of architectural features and/or landscaping to achieve privacy for both residents of the building and adjoining properties. The design of screening should not compromise the quality of the outlook, access to light or the building façade.
Setbacks	The distance between a building or building element and a front, side or rear boundary or other reference points (for example, podium edges). The Planning Scheme defines the setback as the minimum distance from any allotment boundary to a building. For example, " <i>The building setback is 3 metres at the first floor level</i> ".
Sleeved	A design method used to 'hide' an at-grade car park so it cannot be seen from the street by putting a strip of apartments, offices or shops in front of the car park at the street frontage.



Term	Definition
Spines of open space	Consistent pattern of perimeter planting, vegetation and size of Private Open Space at the rear of properties that contributes to the landscape character and amenity of residential neighbourhoods.
Streetscape	The overall impression, appearance and form of the street, as composed of elements of building frontages, architectural styles, building scale, setbacks, rhythm and trees and other features of the landscape.
Sustainable design	A key priority in the development of today's built environment. Sustainable design protects our environment, secures today's living standards and future-proofs our community against rising energy, water and waste disposal costs.
Sustainable Design Assessment in the Planning Process (SDAPP)	The SDAPP framework refers to the inclusion of key environmental performance considerations into the planning permit approvals process in order to achieve more sustainable outcomes for the long-term benefit of the wider community.

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Information on applying for planning and building permits, including checklists and forms are available at www.greaterdandenong.com.

DISCLAIMER

1. This brochure is not a statutory document. It has been prepared to help improve the quality, design and sustainability of residential development.
2. The photographs used in this brochure are sourced from locations inside and outside the City of Greater Dandenong municipal area for the purposes of illustration only.
3. If you apply for a Planning Permit, copying or recreating any design from the examples illustrated in this brochure does not guarantee approval of the planning permit. Each proposal is assessed on an individual basis.



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