Redland
CITY COUNCIL

MULTIPLE DWELLING DESIGN GUIDE

MAYOR'S FOREWORD

On Redlands Coast we cherish our character, identity and lifestyle – all shaped by our enviable location, adjoining Moreton Bay and regionally significant areas of high environmental and visual quality.

As our city continues to grow and more people call Redlands Coast home, achieving good design will be critical to maintaining the quality of life and amenity currently enjoyed by our residents and visitors alike.

Our Redland City Plan provides an important blueprint for managing how our city will grow, managing expected population growth while at the same time responding to demographic changes and lifestyle trends.

These changes will require greater diversity in our housing options and an increasingly important role for multiple dwellings strategically located throughout the city close to our centres and public transport.

The Multiple Dwelling Design Guide will complement the City Plan by identifying critical design elements which respond to our sub-tropical climate and reflect the identity of Redlands Coast.

We also hope the design guide will promote dialogue between designers, planners, developers and the broader community as we plan for the naturally wonderful growth of our city.

Cr Karen Williams
Redland City Mayor

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Introduction

The aim of the Multiple Dwelling Design Guide (MDDG) is to achieve high standard design outcomes for multiple dwellings within Redland City.

The Redland City Plan (RCP) encourages housing diversity and affordability for residents though a choice of housing product and location. This guide intends to help to provide a vibrant, safe and attractive built environment in a landscape setting to address the housing needs of changing demographics into the future. This guide provides design advice across a range of housing products.

The guide:

- Explains the relationship to the statutory approval process;
- Provides residential design guidance consisting of a set of principles that are aligned with the Redland City Plan, supplemented by images, diagrams and explanatory text; and
- Outlines information that will ensure a well made proposal when preparing and submitting a development application for approval.

RELATIONSHIP WITH THE REDLAND CITY PLAN

This Design Guide will be used as a reference document to guide good design outcomes to support the criteria for assessable development contained within the RCP.

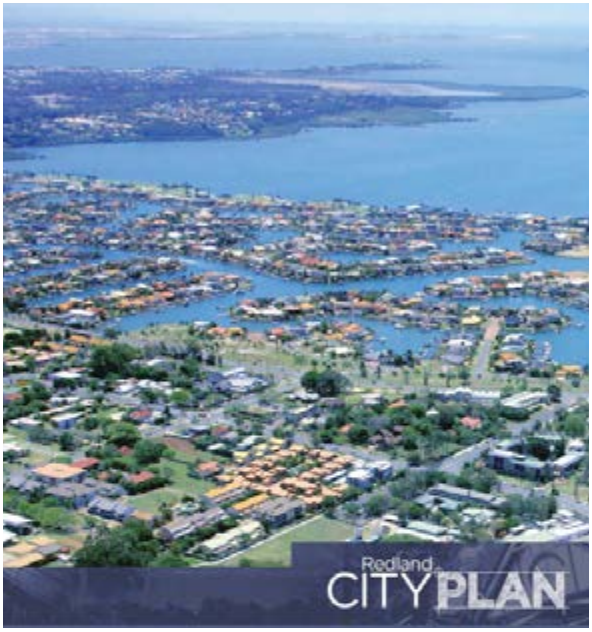
The RCP Strategic Framework identifies the various characteristics which make up a series of residential and separate centres zones which provide opportunities for development of various lot sizes, a range of densities and resulting diversity in housing design.

The Design Guide principally applies to development of multiple dwellings within the Low Medium Density Residential (LMDR) and the Medium Density Residential (MDR) Zones.

Definitions:

The terms used in the MDDG are defined in Schedule 1 of the RCP – Definitions.

For clarification a Multiple Dwelling is defined as a premises containing three or more dwellings for separate households. It includes apartments, flats, units, townhouses, row housing and triplex.



Development Applications and the Assessment Process

PRE-LODGEMENT PROCEDURES

RCC has a Pre-lodgement procedure. This guide provides a resource for pre-lodgement discussions. The guide advocates meeting early in the design and planning process to focus on how to achieve the best design outcome for each development site. This is the key to an efficient assessment process.

It is recommended that consideration is given to the provision of information such as a Concept Design Proposal for the Pre-lodgement meeting.

Design is a process, not just an end result.

A Concept Design Proposal is intended to explain the analysis, the design evolution and principles on which a development proposal is based.

This should be a combination of diagrams, illustrations, photographs and information. This is usually information which will have been collated by the designer through the design process and therefore should not be onerous.

An initial Concept Design Proposal can be submitted for a Pre-lodgement meeting. This would enable the assessment manager to provide an informed initial response to the main issues raised by the proposal.

WHAT IS A CONCEPT DESIGN PROPOSAL?

The Planning Act sets out the mandatory supporting information for Development Applications.

This MDDG recommends that consideration is given to the provision of additional information such as a Concept Design Proposal principally based on diagrams, illustrations and photographs.

It is recommended that a Concept Design Proposal consists of three parts:

1 A site and neighourhood analysis

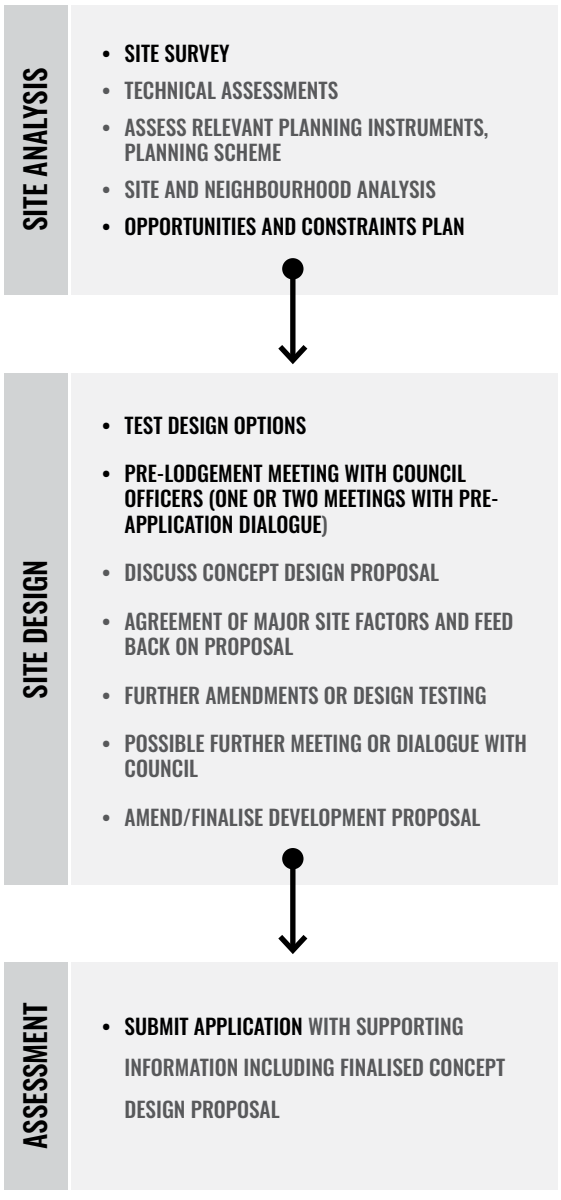
2 Opportunities and constraints analysis and initial design parameters: a summary of the analysis, highlighting the main elements that will inform the initial design parameters.

3 Design testing and response:
Present the development proposal, outline how it responds to the site and surrounding area, how various design concepts have been tested and an explanation of the design rationale in the context of the RCP.

HOW DOES A CONCEPT DESIGN PROPOSAL ADD VALUE TO MY APPLICATION AND DEVELOPMENT?

A Concept Design Proposal is a non-mandatory document but a well prepared one may reduce the need for officers to ask for further information during the application process as it can clearly present the rationale for why design decisions have been made. It can also help to avoid costly amendments to the proposal at later stages and facilitate an expedited assessment process. Furthermore, it can be used as a useful tool for engagement and explanation to residents who may otherwise raise concerns and submissions.

DESIGN PROCESS



The Design Principles

SUBTROPICAL DESIGN

CONTEXT

South East Queensland is Australia's only sub-tropical metropolitan region. Residents of Redlan City enjoy the character and lifestyle provided by its bayside location, parklands and urban and rur settings. As a result, the multiple dwellings withi the Redlands should have climatically responsive designs, creating attractive streetscapes within s and liveable environments.

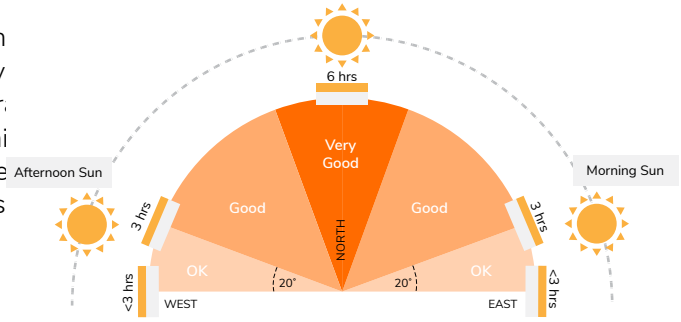
Development in Redlands takes full advantage of the subtropical climate and prevailing coastal breezes through creative and responsive design and orientation. Good sub tropical design practices and solutions can minimise energy use and environmental impacts.

In the RCP subtropical and climatically responsive design character is described as the use of deep verandahs, decks, and eaves and the integration of buildings within landscape planting.

Trees are a valuable urban asset and a key component of the landscape setting within Redlands, contributing to the visual amenity plus providing environmental benefits. These need to be planned and managed alongside other urban infrastructure.

Materials commonly used in vernacular styles are corrugated metal sheet, timber weatherboards. Many more contemporary designs and residential building forms have incorporated timber and light weight materials which complement traditional materials.

OUR CLIMATE



The hours of sunlight that can be expected in mid winter are directly related to the orientation of the façade. This diagram shows the optimal orientation for habitable rooms and balconies.

THE TRADITIONAL CHARACTER OF THE REDLANDS

The Design Principles have evolved to guide a contemporary response to the local climate, and traditional built form and characteristics in the Redlands as displayed in the examples on this page.

Typical traditional characteristics of Redlands streetscape and residential design

- Mature street trees
- Buildings orientated to the street
- Dwellings with direct pedestrian access to the street
- Lightweight materials
- Climate responsive design
- Indoor/Outdoor living
- Pitched roof form
- Modulation of facades
- Articulation of entrances and openings

Addresses both street frontages Multiple roof pitches and varying heights Projections and recesses in facade Outdoor living – wrap around covered balcony

First floor projection Operable windows maximize natural ventilation and prevailing bay breezes Chamfer board wall cladding

Direct pedestrian access to the street Pitched roof with articulated entrance Parking under house or behind building frontage House set back from road frontage with landscaping/trees contributing to streetscape

Bull nose roof on verandah Timber picket fence Light with materials, timber frame and corrugated iron Articulated entrance with Timber arbor Landscape strip along frontage

FORM & SCALE

Good design achieves a scale, bulk and height appropriate to the existing or desired future character
of the street and surrounding buildings.

An appropriate built form for a site should have regard to building alignments, proportions, building type and articulation.

BUILDING ENVELOPES

A building envelope is a three dimensional volume that defines the outermost part of a site that the building can occupy.

Building envelopes set the appropriate scale of future development in terms of bulk and height relative to the streetscape, public and private open spaces, and block sizes in a particular location.

Built form provisions are set out in the RCP. Each of the residential zone codes in the Planning Scheme sets out the related Performance Outcomes and Acceptable Outcomes particularly relating to

- Site cover
- Building height
- Building setbacks

In addition the context and characteristics of each site will influence the building envelope.

The Planning Scheme Polices within the City Plan provide additional information and guidance on local planning matters including: technical standards for Infrastructure Works (PSP2). This includes guidance on Landscaping and Waste Management.

The design guide therefore does not duplicate these City Plan code requirements and Planning Scheme Policies but provides supplementary advice.

THE 7 DESIGN PRINCIPLES

The 7 design principles set out in this Design Guide contain the elements that contribute to climatic responsive designs, with the creation of attractive streetscapes with a sense of Redlands identity and liveable and safe environments.

The design principles are directly related to Performance Outcomes in the relevant zones in the RCP.

These principles are applicable to all forms of multiple dwellings. Examples are provided for a range of residential lot sizes/configurations and a variety of built forms.

The Design Principles are:
1 - Street Presence/Built Form/Articulation
2 - Solar Penetration
3 - Natural Ventilation
4 - Open Space
5 - Landscaping
6 - Access and Parking
7 - Servicing

1 - STREET PRESENCE/BUILT FORM/ ARTICULATION

INTRODUCTION

Streetscapes are defined by a combination of public elements (carriageways, kerbs and footpaths) and private elements (street setbacks, fences and building facade). These elements should work together to create attractive streets and public spaces.

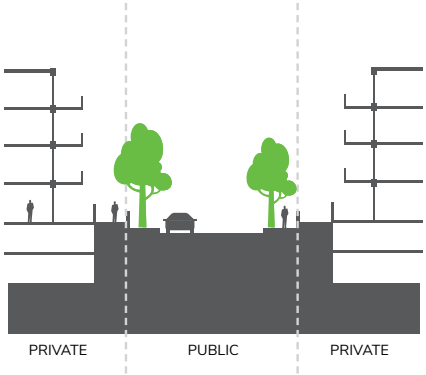
The interaction of a building at ground level is critical to delivering successful streetscapes.

Building façades provide visual interest along the street while respecting, complementing and adding to the character of the local area.

The roof is an important element in the overall composition and design of a building. Quality roof design provides a positive addition to the character of an area and can form an important part of the skyline.

DESIGN CONSIDERATIONS

- Provide good interaction with streets and public spaces by locating habitable rooms at ground floor level. Upper levels contain terraces and balconies to support passive surveillance
- Allow for casual surveillance of main pedestrian entrances and communal open space without compromising privacy of dwellings
- Break up the appearance of large buildings by incorporating design elements such as roof form, projections and recesses, that reflect the existing streetscape rhythm and scale
- Buildings should be articulated to complement the character of the street by using similar proportioned roof forms, doors, windows or verandahs
- Entrances should be visible and obvious from the street or public thoroughfare
- Key corners are given prominence through a change in articulation, materials or colour, roof expression or changes in height
- Develop a colour and materials palette to ensure the look and feel of elements such as letter boxes fences, balustrades, screens and pergolas integrate with the overall appearance of the building
- A palette of textures, materials, detail and colour that are proportional and arranged in patterns
- Public art or treatments to exterior blank walls
- Avoid lengths of unarticulated blank walls and monotonous building materials and colour



Streetscapes are defined by a combination of public elements (carriageways, kerbs, verges and footpaths) and private elements (street setbacks, fences and building facades).

A mixed use building that creates a street presence, with an open aspect which invites access to the commercial floor whilst the residential units have a layered articulation with a palette of materials.

Units address the street with direct pedestrian access which balances openness with privacy.

01 STREET LIFE

For townhouse and low rise multiple dwellings front gardens should orientate towards streets and public spaces, preferably with front doors and/or direct pedestrian access to these.

Balconies should face onto and overlook streets and public spaces. Balconies, fence height and transparency allow passive surveillance to the street.

The repetition of a simple design can often create a rhythm to the streetscape.

Pedestrian and vehicular entrances should be separate, car access and garages should not dominate the streetscape. Higher density housing forms should be developed with rear vehicle access, where possible or at least screened from the street to achieve high quality streetscapes.

Buildings address the street. Entrances at both ground floor and above are clearly visible.

This apartment block contributes to the streetscape with projecting balconies and also provides direct pedestrian access for each of the ground floor units.

02 CORNERS COUNT

Careful attention to the design of key corners can make a significant contribution to the character of area. The colour and design can create a distinct façade for both front and side elevations on a key corner.

The continuity of the simple materials and colour palette, together with the design of townhouses can flow around the corner.

The use of bold design features adds prominence to the corner.

Key corners may extend to street edges, with taller, more vertical facade treatments.

The continuity of the simple materials and colour palette, together with the design of the townhouses flows around the corner

03 FRONT DOORS & OPENINGS

Pedestrian entries should be positively reinforced, integrated and transparent. Front entries of buildings should be expressed as feature elements of the building and be obvious without the need for signage. Entrances should have a high degree of passive surveillance and definition.

Front doors addressing the street.

04 FACADE DETAIL

Building articulation such as balconies and variation in depth of window reveals provide visual interest to the façade.

Visual interest can be enhanced with a variety of balustrading expressions with solid, glazed, angled, or curved treatments.

Contrasting materials and colours on facades create visual interest, a vertical emphasis and visually reduce the bulk of taller buildings

Balconies can still add outdoor living space and visual feathering at key corners, with a textured and articulated facade to a west facing elevation

05 CASUAL SURVEILLANCE

The orientation of living areas and active frontages towards streets and public places increases the level of casual surveillance. This requires a balance between building and landscape design in order to provide adequate levels of privacy while ensuring casual surveillance of public spaces

Building articulation, casual surveillance and direct entry to the street, all contribute to the streetscape

Pedestrian entrance with good visibility and definition

06 ROOFS

- Larger buildings should have a distinct roof that:
  - breaks down the scale of the building
  - relates to the street
  - maximises solar access during winter and provides shade during summer

Articulated roofs throughout the design.

Pitched roof form and articulation breaks down the scale of an apartment building

07 FENCING & WALLS

Front fences and walls along street frontages should use visually permeable materials and treatments.

Where fencing is used, ensure a mixture of building materials are used which complement the design of the buildings. Vegetation screening and planter boxes can also be incorporated into the design to soften the visual impacts of large fence lines.

Railings with landscaping provide transparency to the street, the raised aspect provides an amount of privacy.

Fencing materials allow for casual surveillance whilst also maintaining privacy for residents.

2 - SOLAR PENETRATION

INTRODUCTION

Solar and daylight access reduces reliance on artificial lighting and heating, as well as improving energy efficiency and residential amenity. The aim is to maximise solar access and natural light to habitable rooms, primary windows and private open space.

In South East Queensland, sun entry is desirable from mid-April to mid-October. A moveable shade device should be used on north-facing openings to exclude sun entry from mid-October to mid-April.

Good solar access into a building can reduce the need for artificial lighting. Good orientation and exposure to natural light through the use of glass and windows, optimises light while minimising heat load.

The use of light wells, atriums and skylights to allow the penetration of natural light to common areas of buildings is important in creating attractive and welcoming spaces especially where access to natural daylight is restricted or difficult to achieve for privacy or other reasons.

DESIGN CONSIDERATIONS

- Maximise northern aspect dwellings
- Orientate all habitable room windows, private secluded open space and balconies and courtyards to the north whenever possible
- Living areas are best located to the north and service areas to the south and west
- Minimise the number of single aspect south facing apartments
- Consider shallow apartment layouts, two storey and mezzanine level apartments which maximise daylight penetration
- Design common corridors and lift lobbies with natural light
- Building setbacks and separation distances seek to ensure daylight penetrates all sides of a building
- Generous floor to ceiling heights along with permeable façades allow natural light to penetrate further into buildings

Common corridors and stairwell designed to be naturally lit

North facing balconies and living areas maximise nature light

01 ORIENTATION

The hours of sunlight that can be expected in mid winter are directly related to the orientation of the facade. The diagram on pg7 shows the optimal orientation for habitable rooms and balconies.

Lot and block layout design should facilitate good housing orientation optimising solar access to inner courtyards during cooler months and the shading potential during the summer months.

02 WINDOWS & ROOFS

Solar access to apartments can be maximised by angling roofs to the north and east. Hoods and overhangs shade walls and windows from the summer sun.

03 LOUVERS & SCREENS

Screens and louvers are effective elements to assist in sun protection, adjustable screens allow for solar penetration in winter months and block sun during summer months.

Vertical blinds and window hoods are effective for sun management and add aesthetic interest and depth to the facade.

Variation in vertical and horizontal screening

Dwellings with east facing aspects can also benefit from angled roofs, overhanging eaves and screens.

Variation in building depth, hoods, projections and screening provides solar access and effective shading

This apartment block has a north eastern aspect. The artistic screening provides a distinct identity and gives vertical emphasis to break up the long facade.

3 - NATURAL VENTILATION

INTRODUCTION

Natural ventilation responds to the local climate and reduces the need for mechanical ventilation and air conditioning thereby increasing energy efficiency, environmental performance and ongoing savings on household energy bills.

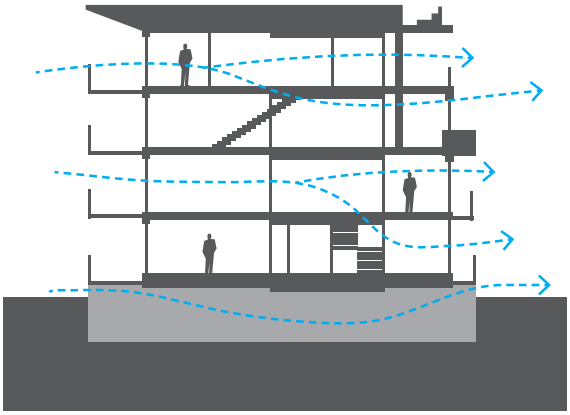
The subtropical climate encourages structures which can be adjusted to suit the weather.

Incorporating operable elements into the building design and layout, such as windows, doors and movable walls, into the façades provides occupants greater control over the internal environment while allowing interaction with life and activity on the street.

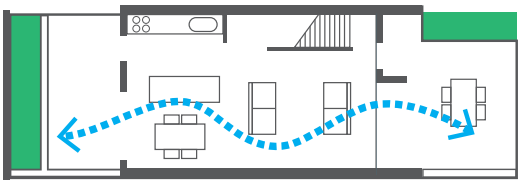
The constant movement of fresh air through buildings and spaces increases indoor health while saving on capital and ongoing costs for mechanically ventilated spaces.

DESIGN CONSIDERATIONS

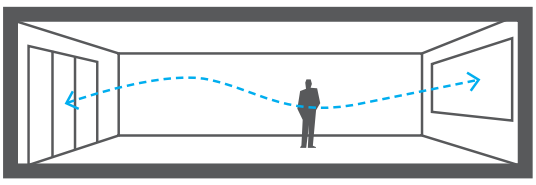
- Habitable rooms with dual orientation are encouraged to facilitate good cross-ventilation
- Consider shallow apartment layouts, two storey and mezzanine level apartments
- Minimise the number of single aspect south facing apartments
- Design common corridors and lift lobbies with natural light



Habitable rooms with dual orientation are encouraged to facilitate good cross-ventilation



Cross ventilation in a dwelling.



Higher density apartment blocks may have a narrow floor plan to maximise north facing apartments and cross ventilation

01 CROSS VENTILATION

Habitable rooms with dual orientation are encouraged to facilitate good cross-ventilation. For multiple dwellings such as apartment blocks a narrow floor plan can maximise north facing apartments and allow cross ventilation. Dual aspect apartments, with doors and windows that can be opened maximise natural ventilation.

02 WINDOWS & ROOFS

Operable windows and openings in façades are oriented towards cooling breezes providing cross-ventilation and allow the passage of daylight while reducing unwanted heat transfer.

The placement of these needs to be considered in the context of building setbacks, privacy and adjoining structures to allow the penetration of light and air through buildings and spaces.

03 LOUVRES & SCREENS

Screens and louvres help to layer façades providing variety and detail. These elements also allow the flow of breezes through buildings. Larger operable elements such as moveable screens, doors and windows operate to control light, air and privacy and allow seamless transition between indoor and outdoor spaces.

Dual aspects apartments, with doors and windows that can be opened maximise natural ventilation opportunities. Common lift areas have natural light

Shallow apartment block with narrow floor plan maximises cross ventilation.

Elevated eaves creates shading and captures cooling breeze plus breeze filtered through screens at entrance and circulation points between the dwelling units.

4 - OPEN SPACE

INTRODUCTION

Private open spaces are outdoor spaces, including gardens, courtyards, terraces and balconies. Because of the important indoor-outdoor connections in a sub-tropical climate, the design, orientation and usability of these spaces are critical. Versatile outdoor living space in multi-residential buildings is vital in a sub-tropical climate, as found in South-East Queensland.

Communal open space allows for casual social interaction for larger multiple dwelling developments. It provides opportunities for internal recreation, landscape and visual relief plus it can provide opportunities for deep planting which can help create pleasant micro climates within large development sites. Communal space also provides opportunities to retain larger trees on development sites.

DESIGN CONSIDERATIONS

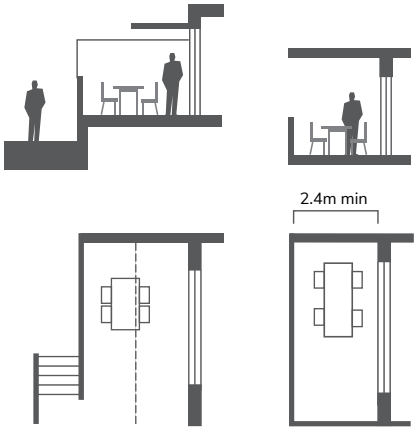
- All dwelling units which have access at ground level should have ground floor private terraces/garden areas.
- Orientation of private open spaces and balconies should predominately face north or east in order to improve access to warmth and light during the cooler months.
- Primary open space and balconies should be orientated with the longer side facing outwards or be open to the sky to optimise daylight access into adjacent rooms
- Noisy locations may necessitate different solutions such as enclosed wintergardens, balconies with openable walls, bay windows or Juliet balconies
- Communal open space should be positioned in an accessible location which can be on roof tops, on podiums or at ground, with passive surveillance. Important design considerations include safety, amenity and durability.

01 PRIVATE SPACE & BALCONIES

Maximum privacy of internal spaces and outdoor areas is highly desirable. Direct overlooking and overshadowing, particularly in the case of two storey buildings, of neighbouring buildings and their private outdoor spaces can be minimised by considering building layout and location, design of windows and balconies, screening devices and landscaping.

Appropriate building and landscape measures such as sensitive window location and avoidance of verandahs of adjoining dwellings facing each other, use of privacy screens and shade devices and screen planting should be utilised to improve visual privacy.

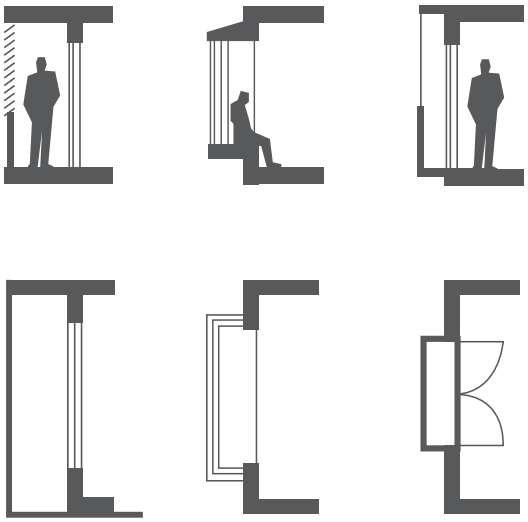
These units benefit from two balconies. The depth of each balcony is sized to suit its function.



At ground floor private terraces may be appropriate. The depth of balconies should allow for table and seating to be accommodated.

To achieve privacy the following should be considered:

- Staggering windows to avoid direct outlook to neighbours private open space, bedrooms and living rooms.
- Avoid decks and balconies of adjoining properties facing each other across side boundaries. If they do overlook they must incorporate privacy measures such as sliding panels, louvres or battening.
- In dwellings two storey and above, , sill heights of at least 1.5 metres above floor level or fixed translucent glazing in any part of the window below 1.5 metres.



Noisy locations may necessitate different solutions such as enclosed wintergardens, balconies with openable walls, bay windows or Juliet balconies

Balconies are essential to all multi storey residential development. As a key expression of the built form they serve a public function as part of the visual expression of a building. They provide opportunities to articulate the facade helping break up long lengths of wall planes and can assist in providing shade to façades to reduce heat load.

Most importantly balconies create private outdoor space for recreation and enjoyment plus they provide access to natural light, air, views and landscape. Balconies also provide opportunity for interaction and surveillance of street and public space and so provide a public expression of the internal function of buildings.

Balconies can vary in shape and size but they need to be of sufficient depth to be useable.

Air conditioning units and other equipment should ideally be located on roofs, in basements, or fully integrated into the building design so as to not detract from private open space.

Balconies enhance the amenity and indoor/outdoor lifestyle of residents. Building articulation such as balconies and deeper window reveals provide visual interest to the facade.

Balconies provide open living areas, sun and breeze is filtered naturally by street trees.

02 COMMUNAL OPEN SPACE

Facilities should be provided within communal open spaces and common spaces for a range of age groups. These may incorporate some of the following elements:

- Seating for individuals or groups;
- Barbecue areas;
- Play equipment or play areas; and
- Swimming pools, gyms, tennis courts or common rooms.

Pedestrian connectivity to key locations is essential to integration with the existing urban fabric. Pedestrian routes need to be safe, well lit and with passive surveillance.

Communal open space with good passive surveillance from surrounding dwellings.

Public open space with facilities in a central and visible postion

Communal open space raised above a drainage area. Whilst this is not central a well lit footpath route runs past the bbq area, which allows for passive surveillance

Communal open space in central, visible position

Advanx East
Place Design Group

5 - LANDSCAPING

INTRODUCTION

Landscaping is a key characteristic of Redland City. Appropriate landscaping reinforces the sense of being in a landscape setting.

Hard landscapes to describe the construction materials used, while soft landscapes refer to ecological components such as grass, shrubs and trees. Both hard and soft landscape design contributes to the building setting.

Landscaped gardens can reflect the sub-tropical environment in which the buildings will stand. The South East Queensland sub-tropical environment is home to a vast array of lush foliage and vibrant plant life.

The street interface is critical both in terms of contribution to the landscaping and in crime prevention through environmental design.

Further detail is provided in *Planning Scheme Policy 2 Infrastructure Works*.

DESIGN CONSIDERATIONS

- The design needs to be coordinated with other disciplines to ensure the building design and service locations complement the landscape and public domain.
- Retain and incorporate existing trees/ significant vegetation where possible
- Retain street trees and allow additional planting with appropriate species
- Landscaped areas should take advantage of existing site conditions such as changes in level and views
- Allow for establishment of deep rooted trees and mature perimeter planting by providing adequate space between site boundaries and building, car park, basement structure and along common driveways
- 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
- Tree species and size should respond to orientation
- Avoid narrow landscaping strips on boundaries which are unable to accommodate significant plants due to their restricted dimensions
- Consider permeable ground surfaces that allow rainwater to penetrate the soil to support the healthy growth of trees, protect tree root zones, and treat/reduce stormwater run-off
- Co-locate outdoor building services to maximise the opportunity for substantial landscaping
- Where appropriate building designs should incorporate opportunities for planting on structures. Design solutions may include green walls or green roofs, particularly where roofs are visible from the public domain.

Varied hard and soft landscaping with mature planting within the site add character and provide shade

Existing trees retained on frontage contribute to cooler pathways for breezes entering the dwellings

01 EXISTING STREET TREES

Existing street trees are a critical part of the urban landscape character of Redland City. Priority should be given to the retention of these trees. They contribute to the visual amenity, provide shade and can filter cooling breezes.

Poincianas are a notable part of the character of the Redlands

02 USE NATIVE SPECIES

The preference is to use local native species in landscaping, which will also provide habitat and food resources for local fauna species.

03 PLANTING FOR SHADE

Vegetation provides shade, reducing the urban heat island effect and cooling our public spaces. It contributes significant visual amenity and interaction with the natural environment, which has been proven to calm anxiety and contribute to overall health. Large shade trees and landscaping promote cool pathways for breezes entering buildings and contribute to the energy efficiency of buildings especially on western elevations.

Deep planting in front setback assists with shade and cooling environment for the apartments

04 DEEP PLANTING

Deep planting within the development should be provided at both the front and rear of development. This assists with privacy and separation of buildings. Semi and underground basements need to be setback from front and rear boundaries to allow the growth of canopy trees over time.

Similarly, planting adjacent to any retaining walls will assist in softening the visual impact of these walls.

Extensive landscaped areas both facing the frontage plus within the site.

6 - ACCESS & PARKING

INTRODUCTION

Managing the location of car parking is important for a positive impact on streetscape character, pedestrian access and amenity. The location, type and design of vehicle access points can have significant impact on the streetscape, the site layout and the building façade design.

High quality materials should be used for hard surfaces, particularly for main accesses and key spaces, to maximise the lifespan of the materials and minimise maintenance costs. Materials can be used to indicate different functions and activities – for example paving slabs to pedestrian areas and blocks/sets to shared surfaces and carriageways.

DESIGN CONSIDERATIONS

- For apartments, at grade and semi-basement car parks should be sleeved (hidden) behind ground floor units.
- When designing car parking basement areas, provide adequate ground level site boundary setbacks to allow substantial landscaping such as canopy trees with deep roots
- Hard standing areas (including for visitors) for parking should not be provided forward of the building line
- Varied materials for access road can punctuate and visually shorten the length of the access road
- Change in surface materials can also act as a traffic calming device
- Bicycle storage and visitor car parks need to be practical, safe and easily accessible from the main public thoroughfare
- Visitor parking should be legible and identifiable from the vehicular entrance

01 ACTIVE TRANSPORT

A key way to influence behaviour is to integrate active transport facilities, such as cycle centres and 'end of trip facilities' into the fabric of our towns and its buildings. Their addition contributes to active, healthy lifestyles and can improve occupant productivity all while reducing carbon emissions and traffic congestion.

Bicycle parking should be secure and easy to access from common areas, for example near entry/exit points of a site to make it convenient for users.

Shared surface clearly delineated by materials and markings

Parking integrated into the building design. Varied materials for access road punctuates and visually shortens the length of the access road. Change in materials can act as a traffic calming device

02 ACCESS & DRIVEWAYS

In general access-ways should not visually dominate the form of development.

Access driveways should have limited views by placement of building, staggered road alignment, planting and landscape treatment and varied materials. These elements can visually shorten the length of the access road.

A change in materials and the use of consistent materials for pedestrian and vehicular spaces can act as a traffic calming device.

For apartments, the impact of vehicle access points can be minimised by locating them on secondary/rear frontages.

Shared access with garages set back beneath housing helps to reduce the footprint of car parking at ground level and visual impact.

03 ONSITE PARKING

For apartments, basement and semi basements are the preferred treatment for car parking areas. These should be contained within the building line to enable deep planting areas to occur in setback areas. Natural ventilation must be provided to basement and sub basement car parking areas. Ventilation grills or screening devices for car parking openings should be integrated into the façade and landscape design.

For apartments, the impact of vehicle access points can be minimised by locating them on secondary/rear frontages

At grade car parking is behind the building line and does not dominate the streetscape

Staggered building alignment and landscaping reduces the visual impact of the internal road.

7 - SERVICING

INTRODUCTION

Multiple dwellings have intensive servicing requirements (energy, boosters, pumps, waste, water, telecommunications, basement ventilation, etc). Servicing requirements need to be considered as an integral part of the initial design to produce effective outcomes.

Waste areas and services should be screened to ensure they do not dominate the streetscape. Common waste collection facilities should be located in areas easily accessible by both residents and municipal waste collection vehicles. Storage areas can be co-located in garages, allocated car parking areas or incorporated into the building design.

Early liaison with RedWaste will assist in achieving site specific solutions for waste collection in order to limit the need for HRV's to enter the site. Service and vehicle entries are best located off secondary side streets.

For larger developments where a waste collection vehicle needs to access internal streets or basement car parking, use the smallest waste vehicle possible to reduce heights and space required for turning paths.

Further detail on waste collection is provided in Planning Scheme Policy 2 Infrastructure Works.

DESIGN CONSIDERATIONS

- Waste collection, loading and servicing areas should be screened.
- For larger developments where a waste collection vehicle needs to access internal streets or basement car parking use the smallest waste vehicle possible to reduce heights and space required for turning paths
- Visual impact of services should be minimised, including location of ventilation duct outlets from basement car parks, electrical substations and detention tanks
- Integrate lift wells and other building services into the overall design
- Services and plant need to be easily accessible for maintenance but can be designed to blend in with overall design

01 REFUSE STORAGE

Waste storage and services should be screened and use similar materials to the overall design. Storage areas should be well ventilated.

Their design and location should be visually consistent with the finishes and materials of the rest of the development.

Screened enclosures are preferably not within front setback.

Waste storage and services are screened and use of similar materials to the fencing to help blend with overall design.

Services and plant discreetly housed near mail boxes.

Services and plant need to be easily accessible for maintenance but can be designed to blend in with overall design and simple palette.

The service boxes visually blend with the colour palette and the landscaping will mature to soften the appearance of the services.

Plant and services screened but still allow for easy access for maintenance and inspection. Services screened to blend in with overall design and simple palette of colours of building.

Service boxes integrated into the colour palette of the scheme.

Multiple services screened within the design.

Refuse storage located within the site and with screening and good ventilation.

Typologies

EXAMPLES OF SITE SOLUTIONS

The following are examples of site configurations for multiple dwellings within Redland City Council.

These examples provide illustrations of how elements from the Design Principles can be incorporated to address the particular constraints that each format of site commonly raises. These are not intended as templates for each configuration as each site should respond to its context.

1. MULTIPLE DWELLINGS ON A NARROW LOT – LOT SIZE 20M X OVER 50M (MDR ZONE)

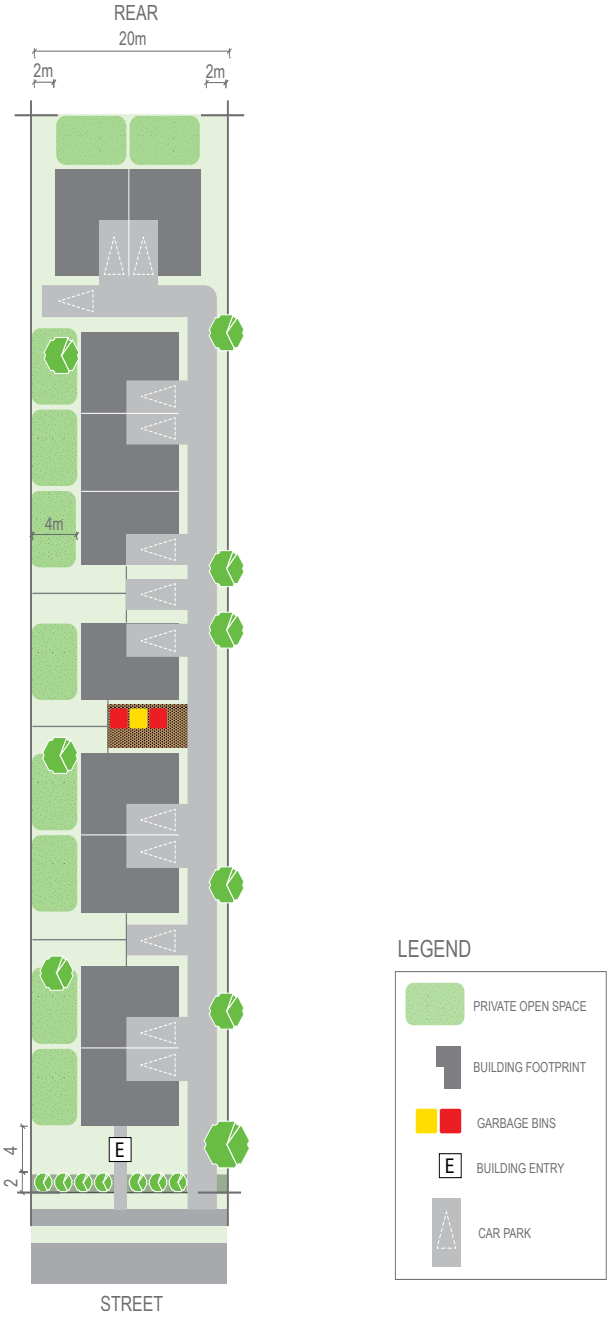
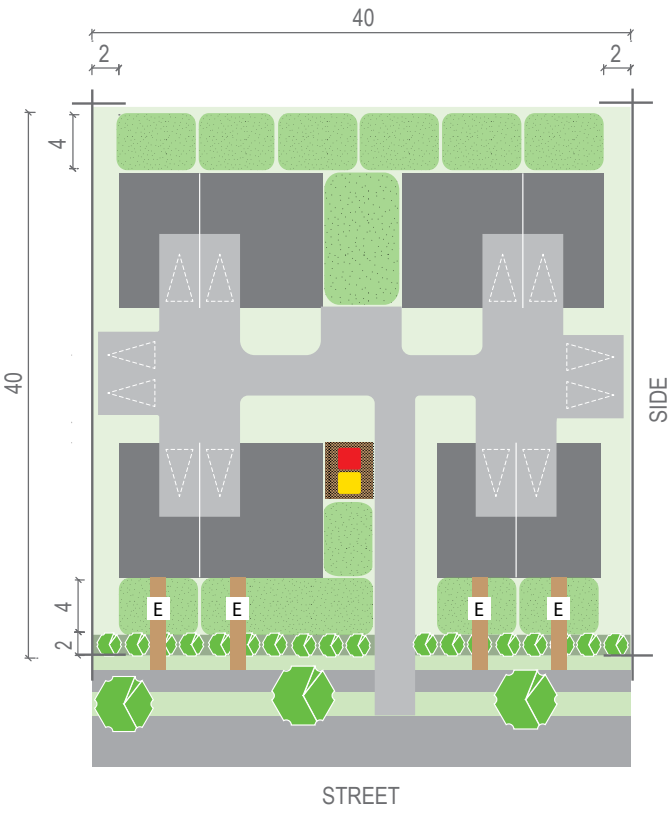


Figure 1 The access road has been positioned to the west of the buildings so that the private side alfresco/courtyards and living spaces for the units can benefit from natural light and ventilation from the north and east

Figure 2 Building facade articulation, varied skillion roof form and mixed material fencing provide interest to the street. The complementary material and colour palette of the built structures are softened by vegetated landscaping. The street interface could be improved by lower or increased transparency in the fencing.

Figure 3 Landscape scheme softens the appearance of the gun barrel access plus the placement of the end units act as visual stop point

2. MULTIPLE DWELLINGS ON LOT SIZE – LOT SIZE 40M X 40M (MDR ZONE)



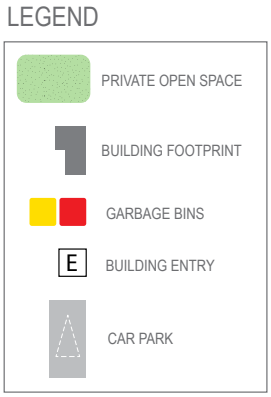


Figure 5 Each frontage unit has direct pedestrian access to the street. Combination of timber fencing and metal railing allows for privacy to courtyards plus transparency for access

Figure 4 Varied depth of facade and articulation of roof line together with the cohesive palette of brick, render and light weight cladding creates an interesting streetscape.

Figure 6 Parking, bin storage and services are discretely located behind the building to improve the visual appearance of the development from the street.

3. LARGER MULTIPLE DWELLING DEVELOPMENT (20 UNITS) WITH COMMUNAL OPEN SPACE AREA (LMDR ZONE)

LEGEND

- PRIVATE OPEN SPACE
- BUILDING FOOTPRINT
- GARBAGE BINS
- E BUILDING ENTRY
- CAR PARK

Figure 8 Entrance to site has a strong landscape setting. The varied paving materials throughout the site defines the shared surface and encourage a low speed traffic environment.

Figure 7 The site is arranged in a rectangular format, the house patterns display a variety of projections and articulation, and the garages are generally recessed so as not to dominate the street.

Figure 9 Communal open space offers privacy but also benefits from passive surveillance. There are 3 areas of communal space in this development to cater for differing settings.

4. MULTIPLE DWELLINGS - MID RISE APARTMENT BLOCK 6 STOREYS (MDR ZONE)

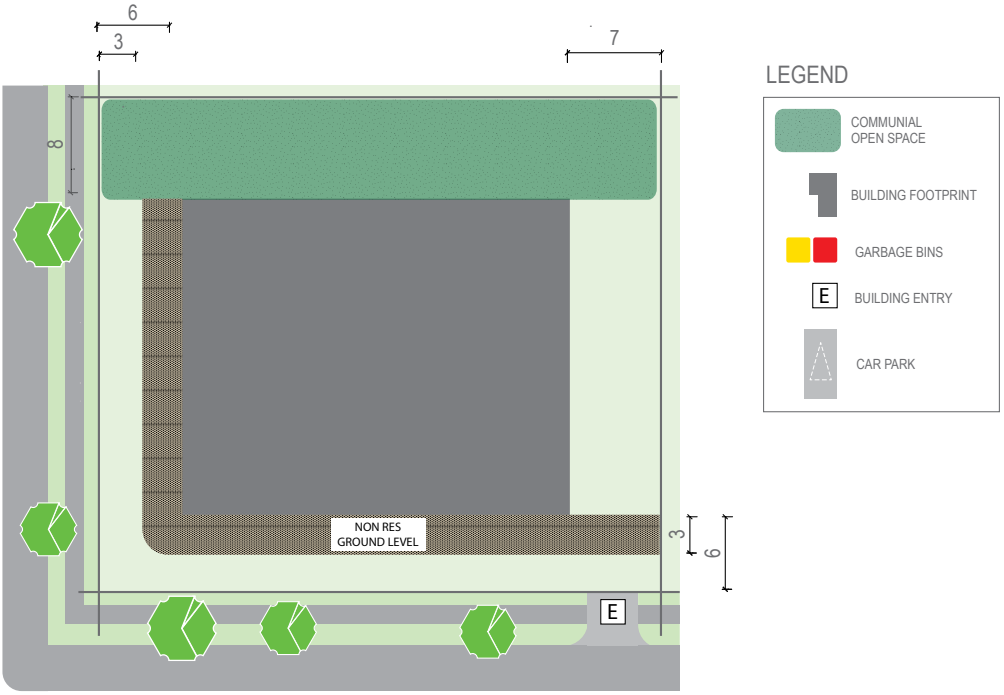


Figure 10 Design includes lattice operable screens, prominent vertical columns, composite timber cladding to the wallls and exposed eaves. All units have private open space that achieveves natural light. Each unit has dual aspect to promote cross ventilation.

Figure 11 Vehicular access is provided off the secondary road frontage. Car parking is mostly within the basement, with visitor parking in undercroft. Services are screened and incorporated into the overall design.

Figure 12 Both the ground floor residential and commercial spaces activate the streetscape. The frontages are articulated and the variation of materials, colour and textures create an attractive façade.

REFERENCES AND RESOURCES

Council of Mayors (SEQ) Revision 2 – May 2012, Model Planning Scheme code, Queensland

Council of Mayors (SEQ) 2011, Next Generation Planning, Queensland

CONTACT US

Council's City Planning and Assessment team is here to help you.

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Information on applying for planning and building permits, including checklists and forms are available at www.redland.qld.gov.au

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 examples/illustrations used in this brochure are sourced from inside and outside of Redlands City Council municipal area for the purpose of illustration only.

3. If you submit a Development Application, copying or recreating any design from the examples illustrations in this brochure does not guarantee approval of the application. Each proposal is assessed on an individual basis.


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