

MULTIPLE DWELLINGS

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The use of features such as louvres, lattice, pitched roofs and awnings is reminiscent of traditional Cairns architecture.



INTRODUCTION

There were relatively few multi-unit developments in Cairns other than boarding houses or holiday bed and breakfast facilities, until the advent of the motel to accommodate caravan and car visitors to Cairns in the 1950s. The establishment of the Sheraton Mirage Resort in Port Douglas in the late 1980's triggered a boom period in Port Douglas which led to the establishment of higher density accommodation units and resorts.

Sheridan Street in Cairns North has a variety of motels from the 1950s to the 1970s and, whilst not all architecturally striking, they are of historical interest. Some of these earlier examples provided wide balconies and overhanging eaves in response to the tropical climate.

Today, the demand for flats and apartments is high due to the changing social structure and demographics of the region's community. Demand is particularly high close to the Cairns city. Unfortunately this is also where much of the character housing in Cairns is situated. The development of large apartment buildings in traditional streetscapes has frequently had a detrimental effect on the character of these older streets. A continuity of rhythm and scale in a streetscape can be achieved through building footprints and the arrangement of windows, doors, verandahs and balconies. These design elements assist to visually 'break down' a larger building into small sections of a similar scale to nearby buildings.

The use of features such as louvres, lattice, pitched roofs and awnings is reminiscent of traditional Cairns architecture. The 'theming' of buildings using Mediterranean, Balinese or other imported styles is also dissipating the local and regional character, and so further weakening the desired style of the region. Influences of Balinese or Mediterranean style are best left to ancillary structures and garden elements where the theme effect can be experienced without unduly detracting from the overall tropical Cairns Style.









Articulate the roof profile to add visual interest and break up the bulk of roof designs.



ROOF PROFILES & EAVES

Visible roof profiles contribute to a Cairns Style as do wide overhangs, cascading roof forms and forms reminiscent of Cairns Queenslanders such as hipped roofs and gable roofs on smaller developments. Important to the Cairns City's skyline are elaborate structures on towers in the CBD. Roofs with a conservative pitch and those constructed of tile replicating a Tuscan or Mediterranean style are not representative of the region's tropical architecture and are inconsistent with the Cairns Style. Large, unbroken roof forms are also detrimental to Cairns Style.

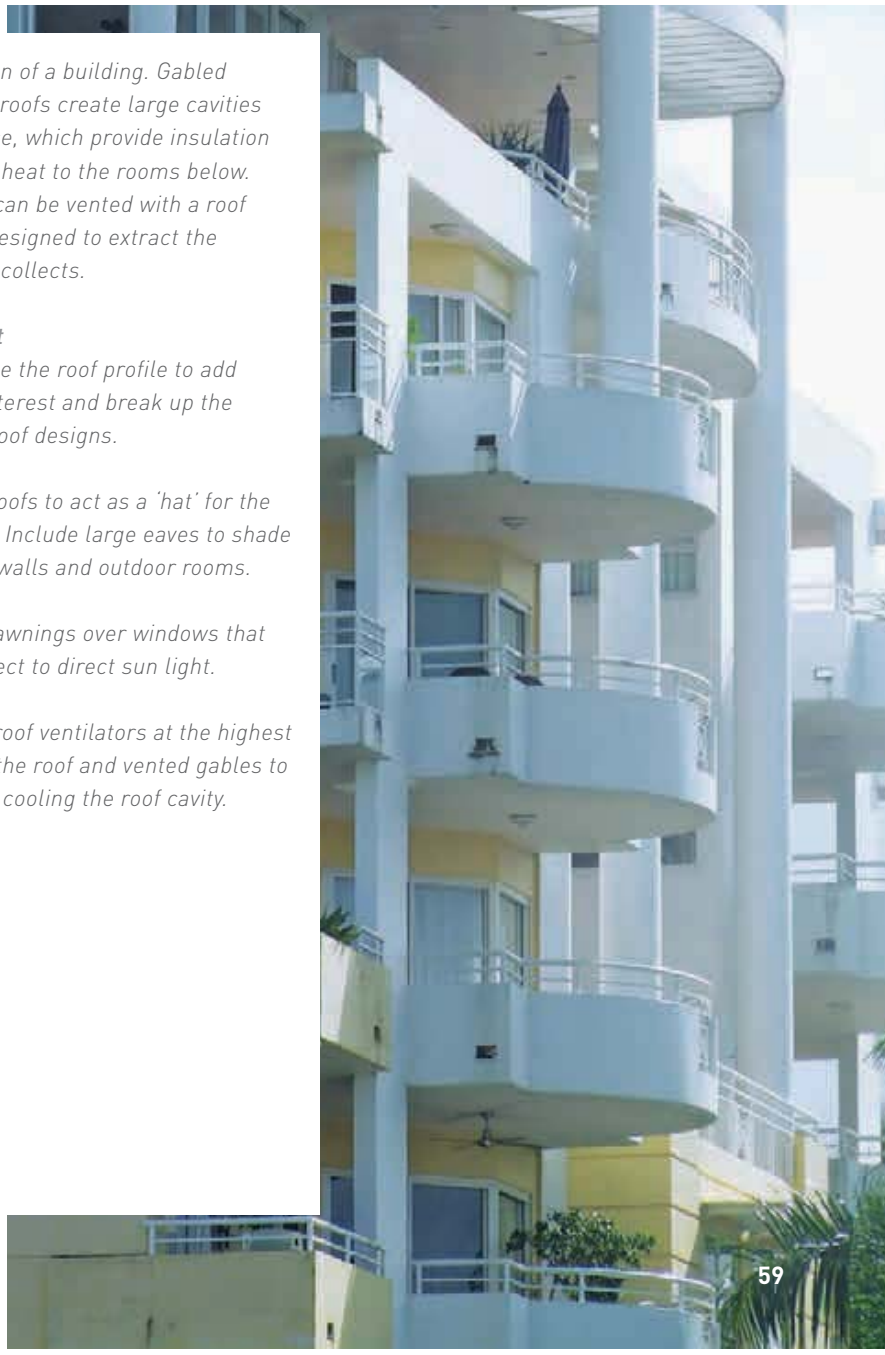
Why it is important

Unique and interesting roof designs on tall multi-unit buildings contribute to a distinct and memorable skyline. Roof designs also contribute significantly to the character of smaller multi-unit housing developments and have a major bearing on the scale and impact on the pattern of a streetscape.

For multi-unit developments in residential neighbourhoods, a cascading roof line can be an essential transition between such a development and the neighbouring detached houses. Appropriately designed roof structures have the ability to reduce energy consumption of a building. Gabled and hipped roofs create large cavities of roof space, which provide insulation against the heat to the rooms below. This cavity can be vented with a roof ventilator designed to extract the hot air that collects.

How to do it

- *Articulate the roof profile to add visual interest and break up the bulk of roof designs.*
- *Design roofs to act as a 'hat' for the building. Include large eaves to shade exterior walls and outdoor rooms.*
- *Include awnings over windows that are subject to direct sun light.*
- *Include roof ventilators at the highest point of the roof and vented gables to assist in cooling the roof cavity.*





Windows and awnings contribute to the scale and appearance of the building.



WINDOWS & AWNINGS

The use of windows including casements and louvres in multi-unit dwellings has the same ventilation and thermal comfort benefits as in houses. This is particularly the case when windows are located to capture prevailing breezes and create cross ventilation within individual units. Awnings that shade windows not shaded by the roof further benefit the residents' comfort.

Multiple dwellings can readily include classic elements such as lattice, slats and louvres in a range of truly modern, functional and architecturally distinctive building enhancements that offer shade, shelter, security, privacy, decoration,adornment and individuality.

Windows and awnings contribute to the scale and appearance of the building. They deliver character and interest and also function and purpose.

Choosing window types, styles, sizes and arrangements that complement or reference traditional window types will make a positive contribution to Cairns Style. This is particularly important for developments in traditional streetscapes and character precincts.

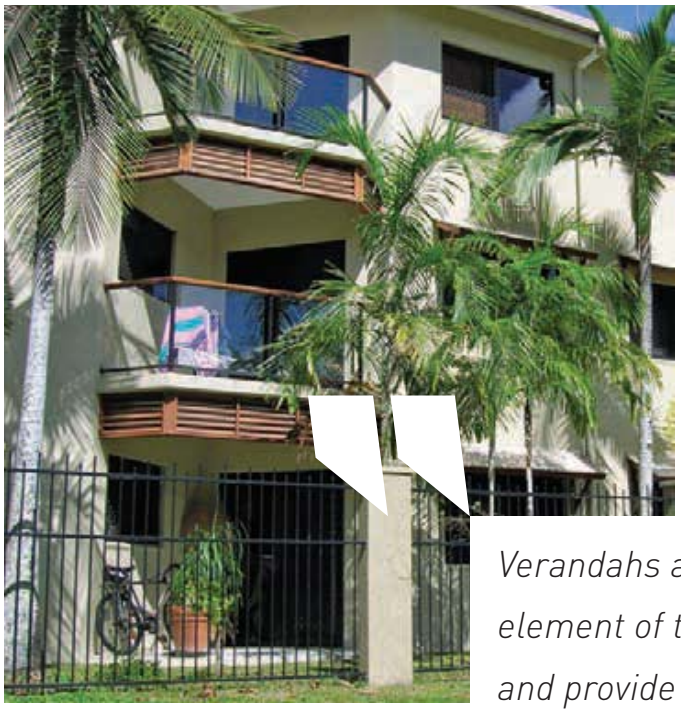
Why it is important

The provision of external devices providing shading over windows is an effective way to reduce the amount of heat entering a building.

Natural ventilation is the primary method for cooling buildings without mechanical assistance in hot and humid climates. Passive cooling can reduce or even eliminate the need for air conditioning. The best way to employ passive cooling is through openings in the form of windows, doors, louvres and screens.

How to do it

- *Provide window hoods or other devices to provide shade and protection from the rain to all window openings.*
- *Avoid positioning large areas of glass along the western aspects of buildings. Consider the orientation of the building.*
- *Maximise the number of south and east orientated windows to capture the prevailing south-easterly and north-easterly breezes.*
- *Units should be designed to incorporate openings at opposing sides to enable cross ventilation through dwellings.*





Verandahs and balconies are a significant element of the Cairns vernacular architecture and provide a distinctive expression.





OUTDOOR ROOMS



Verandahs and balconies are a significant architectural element of the Cairns vernacular architecture and provides a distinctive expression. They have also become a favoured living space of Cairns residents.

In multi-unit developments the inclusion of a generous balcony delivers a sense of open space and can provide much needed additional living space. Balconies or outdoor rooms, when designed thoughtfully, improve the aesthetics of a building and reduce the apparent mass through the articulation of the facade, the introduction of shaded spaces (as found in Queenslanders) and the use of different, lightweight materials and textures.

Why it is important

When designed and positioned appropriately, outdoor rooms will provide residents with privacy, access to cooling breezes and a refuge from the intense heat and wet season deluge associated with the tropical climate. Well designed outdoor rooms provide for year-round outdoor living.

How to do it

- *Include ceiling fans to make the area more usable in the summer months.*
- *Orientate units to avoid summer sun and obtain access to cooling breezes.*
- *Incorporate louvres, batten screens or bifold doors that can be adjusted to manipulate the climatic conditions and maintain privacy.*
- *Plant tropical vegetation to shade and cool outdoor rooms of first and second storey units.*
- *Ensure outdoor rooms have an area large enough to provide protection from the weather and to contain tables and chairs and other furnishings. A dimension of 3m x 3m should be used as a guide to a minimum useable space.*
- *Avoid locating air conditioning units on or adjacent to outdoor rooms as this greatly reduces the liveability of the area.*
- *Ensure all outdoor rooms/verandahs are afforded a roof to avoid rain penetration to areas below.*



MATERIALS

A limited range of materials are used for structural components of multi-unit housing developments with brick and block being the most prevalent construction method. Notwithstanding this, timber, steel, metal sheeting, louvres, chamfer board and glass are often included for awnings, gate-houses and to highlight architectural detail.

Why it is important

The use of a very limited palette of materials can make a building look plain and bulky. It is important when designing a scheme to incorporate a balanced mix of materials, textures and finishes, including materials derived from traditional buildings, in a consistent manner across the project. This will result in a project that is stylistically cohesive but adds texture and scale to a streetscape.

How to do it

- *Block walls can be rendered and painted in light and bright colours appropriate for the tropics.*
- *Use chamfer board, corrugated iron or mini orb over block work to provide visual interest and to continue the use of materials and textures consistent with Cairns Queenslanders.*
- *Construct awnings of timber and metal sheeting. A combination of these materials enhances the architectural detail of buildings.*
- *Incorporate louvres or casement windows to add texture and style.*
- *Detail balustrades with materials or elements that complement and reference traditional housing.*
- *Incorporate timber batten screens to provide privacy, texture and visual interest.*



COLOURS

Traditional Cairns colours are simple, light and bright, typified by the use of white, cream and pastels. To the detriment of Cairns Style, many multi-unit developments have been constructed with a Mediterranean or Tuscan theme inconsistent with the region's style. Notwithstanding this, there are many examples that reflect the tropical Cairns Style.

Why it is important

The tropical style of Cairns is strengthened by a memorable palette of colours taking cues from the surrounding natural environment yet respectful of the region's traditional colour schemes.

Light coloured surfaces reflect heat, while dark surfaces absorb heat. Variations of light and bright colours look attractive in the bright winter sunlight and can be uplifting on overcast days frequent in the wet season.

How to do it

- *Choose light colours to reflect heat.*
- *Use colour trims to create interest and emphasise architectural features.*
- *Avoid using contemporary colours from southern areas as these originated in different climatic conditions representing different urban environments.*

CHARACTER PATTERN

The inner city suburbs of Cairns contain many older, character houses. The patterns and rhythms of these streets are an essential and defining component of Cairns Style. There is a high demand for units and other higher density residential forms in these areas which can conflict with the character and style of the older streetscapes.

Particular care and attention must be given to the planning and design of new buildings in these character areas to ensure the style and character of the area is enhanced rather than eroded. Each street has a particular rhythm and scale that is defined by the width of the street, the size of housing lots and the size and height of houses.

At the street frontage, new buildings need to complement this rhythm and scale. For example, many Cairns streets offer a vertical pattern. This can be reinforced by articulating balconies and using vertical posts in new buildings, whereas strong horizontal lines may detract from the street pattern. Scaling down the building footprint and articulating the front elevation so that individual components are consistent with the width of adjoining houses will further complement the street pattern. Providing cascading roofs and staggered heights can reduce the apparent height of the building at the street, making it less intrusive in the streetscape.

The appropriate choice and arrangement of windows, doors, verandahs, awnings and roof profile can also make the building more compatible by visually 'breaking down' a larger building into small sections of a similar scale to nearby buildings.

Why it is important

Traditional streetscapes reveal the pattern of early residential development in Cairns. The often inappropriate and inconsistent scale, design and patterns of multi-unit housing in traditional streetscapes weakens the character of these precincts and erodes their integrity as an insight into early Cairns history.

How to do it

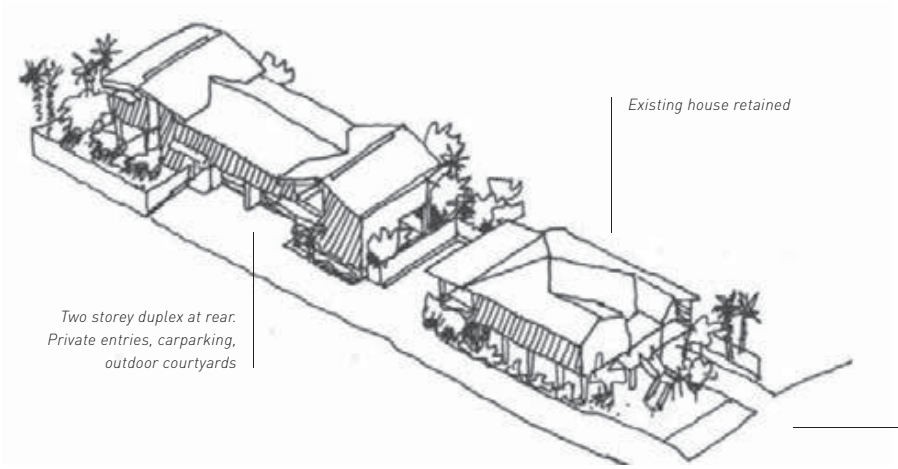
- *Design developments with a transition of building heights, consistent with adjacent residential development on the periphery, to higher in the centre of the scheme.*
- *Divide larger schemes into separate buildings similar to the scale of surrounding houses. This will also encourage airflow between buildings and provide areas for tropical landscaping.*
- *Retain 'traditional' housing and locate infill development at the rear of the property.*



SCENARIO 1: SMALL INFILL SITE

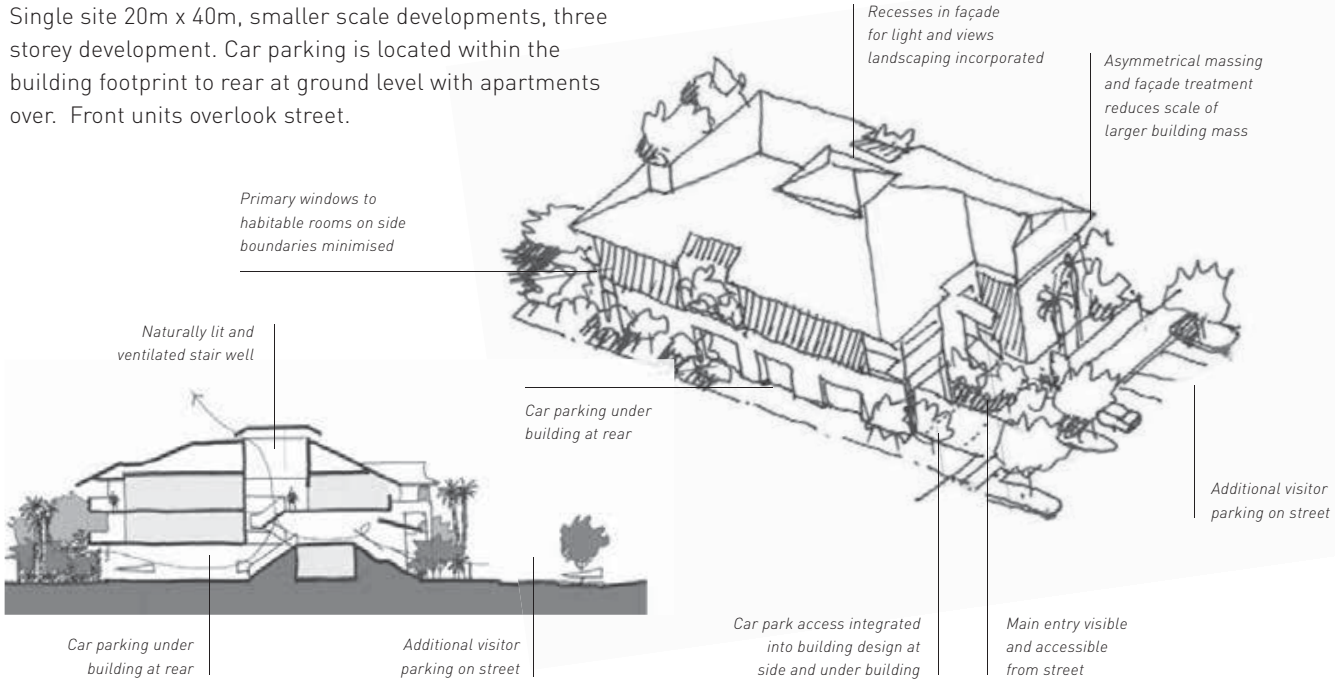
Single site 15m x 40m, smaller scale development, two storey townhouse, duplex form of development, with existing dwelling/s retained. Parking on ground within private garages. All dwellings have private outdoor space.





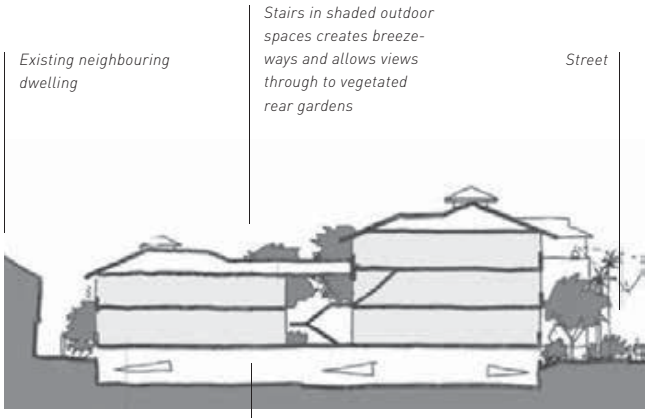
SCENARIO 2: SINGLE SITE INFILL

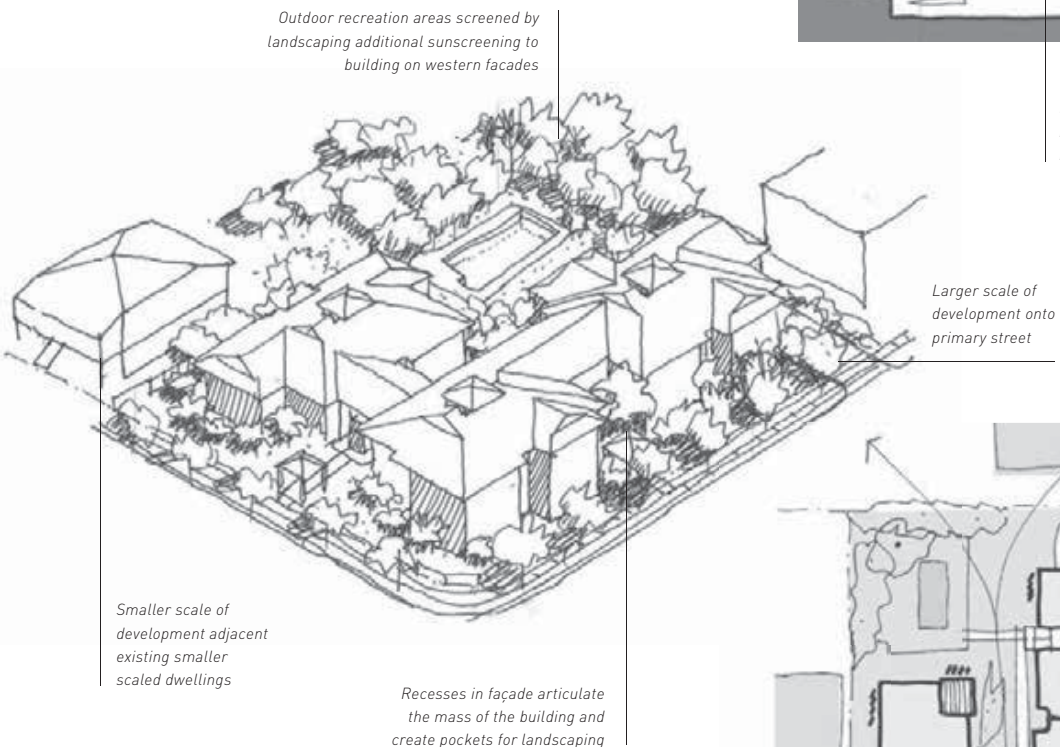
Single site 20m x 40m, smaller scale developments, three storey development. Car parking is located within the building footprint to rear at ground level with apartments over. Front units overlook street.

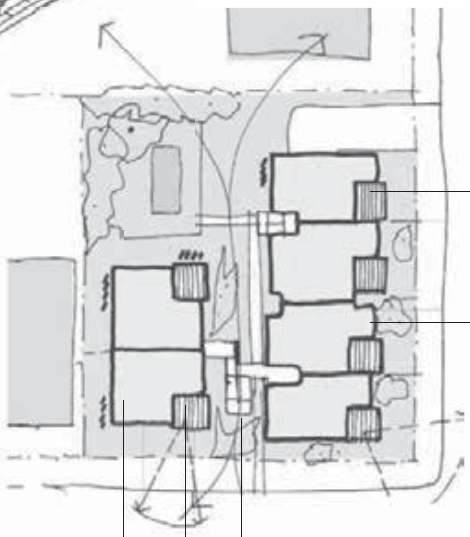


SCENARIO 3: LARGER SITES 2-3 LOTS

Larger sites, including corners where smaller order residential streets intersect with higher order streets. Site area approximately 35m x 40m. More intense scale of development, three storeys facing busier street and incorporating two storeys on lesser streets where development transitions to existing dwellings. Car parking is located within the building footprint within a semi basement or basement car park. Shared outdoor areas are located at rear of site creating outlook for the dwellings within the development.



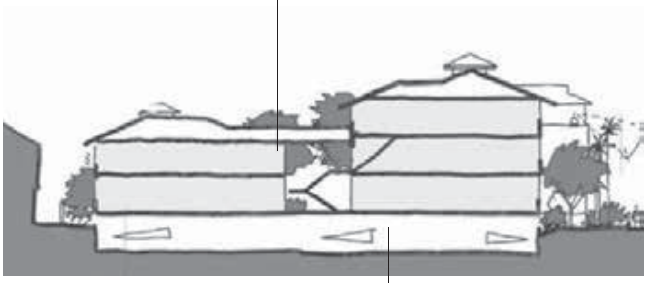




SCENARIO 4: LARGER SCALE DEVELOPMENTS

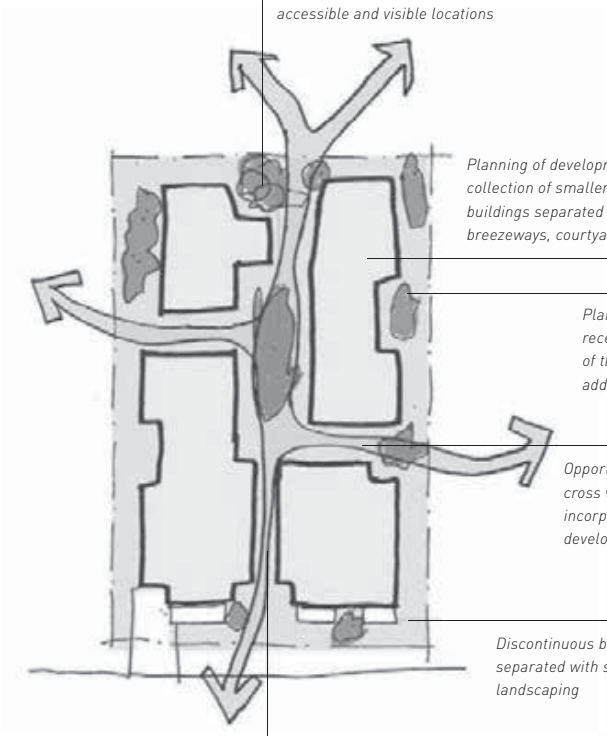
Larger sites with a site area larger than 35m x 40m. More intense scale of development, three storeys but with two storey development interspersed. Car parking is located within the building footprint in a semi basement or basement carpark. Development form is a cluster of buildings. Dwellings overlook the street and semi public gardens within the site or rear.

Vertical circulation in shaded outdoor spaces



Parking in semi-basement within building footprint

Deep planting zone retain existing significant vegetation, acts as a focus for the project, located in accessible and visible locations



Planning of developments as a collection of smaller footprint buildings separated by breezeways, courtyards etc

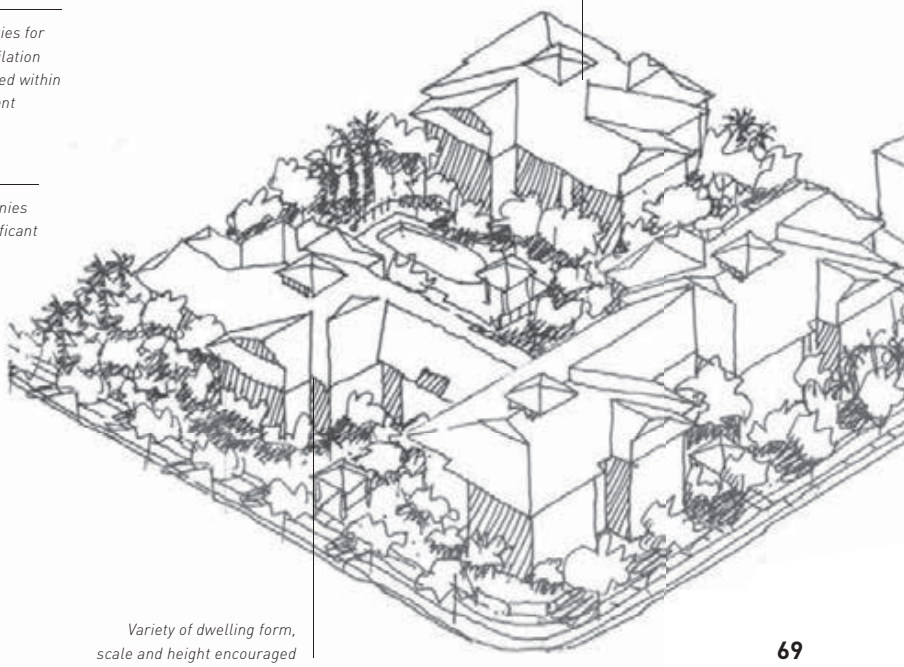
Planning of units creates recesses to articulate the mass of the building. Opportunities for additional landscaped areas

Opportunities for cross ventilation incorporated within development

Discontinuous balconies separated with significant landscaping

Gaps in building assist massing as a collection of smaller buildings, creates breezeways and views through to landscaped rear gardens

Development configured as linked cluster of separate buildings, defining and overlooking shared outdoor areas



Variety of dwelling form, scale and height encouraged


RPS
RPS

5

COMMERCIAL & CIVIC

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The philosophy that guided the design of early commercial buildings…was to protect customers against the rain in the wet season and the heat in the dry.



INTRODUCTION

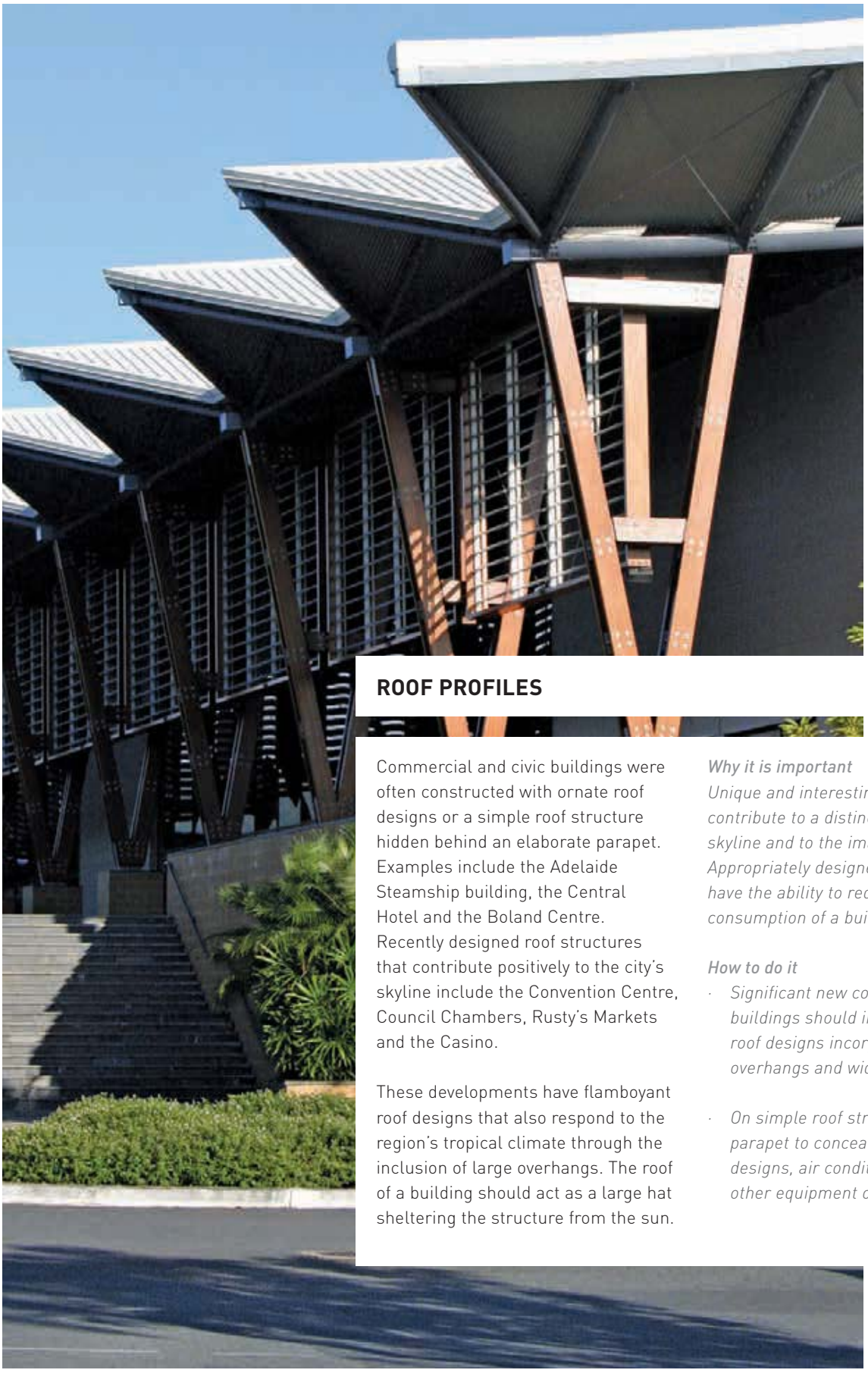
The early twentieth century saw a period of substantial growth in Cairns which resulted in a demand for more buildings in the 1920s and 1930s. Consequently, the character of the Cairns Central Business District is established by buildings of this period and in this respect, Cairns is markedly different from other places in Queensland.

Commercial and civic buildings were traditionally constructed at a human scale of two to three storeys. The philosophy that guided the design of early commercial buildings, particularly retail outlets, was to protect customers against the rain in the wet season and the heat in the dry. Consequently, buildings were designed with wide awnings or a verandah that extended over the footpath to the kerb. Occasionally the second storey was the shopkeeper's living quarters. The verandah provided the hotel customers and shop owner with an outdoor living space. These verandahs were often screened with lattice. The public buildings of the 1920s and 1930s display classical features such as colonnades and porticos. Examples include the former Court House, Regional Art Gallery, Customs House, Cairns Post building and former City Council Chambers now the City Library. Many commercial buildings featured parapets often showing the building name and year of construction. Design, detail and materials varied, but collectively, parapets on the city's interwar buildings combine to provide a recognisable theme throughout the city. In recent times the restoration of older commercial civic buildings has effectively revived older buildings and retrofitted them with modern interior offices and civic spaces.

Hotels were often positioned in prominent locations on street corners and often included broad verandahs that extended along both street frontages. A number of these memorable iconic buildings remain in the region and combine with the remaining local heritage buildings to set the theme and influence the region's style.



Prominent commercial buildings should have flamboyant roof designs that also respond to the region's tropical climate through the inclusion of large overhangs.



ROOF PROFILES

Commercial and civic buildings were often constructed with ornate roof designs or a simple roof structure hidden behind an elaborate parapet. Examples include the Adelaide Steamship building, the Central Hotel and the Boland Centre. Recently designed roof structures that contribute positively to the city's skyline include the Convention Centre, Council Chambers, Rusty's Markets and the Casino.

These developments have flamboyant roof designs that also respond to the region's tropical climate through the inclusion of large overhangs. The roof of a building should act as a large hat sheltering the structure from the sun.

Why it is important

Unique and interesting roof structures contribute to a distinct and memorable skyline and to the image of a city. Appropriately designed roof structures have the ability to reduce energy consumption of a building.

How to do it

- *Significant new commercial and civic buildings should include flamboyant roof designs incorporating large overhangs and wide eaves.*
- *On simple roof structures, use a parapet to conceal uninteresting roof designs, air conditioning units and other equipment on the roof.*



Parapets are a traditional design response used to 'dress up' a building facade by concealing an uninteresting roof line and rooftop plant equipment.



PARAPETS





Parapets are a prevalent architectural element in the city's older single and double storey commercial buildings and feature on most of the interwar buildings. Parapets are very common in the Central Business District and vary in shape, size, construction materials and level of detailing.

Why it is important

Parapets are a traditional design response used to 'dress up' a building facade by concealing an uninteresting roof line and rooftop plant equipment. Modern construction techniques and an increase in building heights and scale have seen an increasing absence of parapets on newer buildings. There are many parapets throughout the Cairns city and collectively these are a distinguishing feature of the city's commercial buildings and contribute to the city's style.

How to do it

- *New parapets should be designed to respect the traditional form without mimicking or reproducing what already exists.*
- *Include a parapet on new single, double and three storey commercial buildings, particularly in the Cairns CBD to hide flat roofs, air conditioning and other roof top equipment.*



VERANDAHS & AWNINGS

Verandahs and awnings are a significant and highly visible element of traditional commercial buildings in Cairns. Their aesthetic value and contribution to the streetscape and character of Cairns' commercial areas is widely acknowledged. In 1977, the National Trust of Queensland wrote "commercial buildings with verandahs are one of the special features of Cairns." Of both aesthetic and functional value, verandahs and awnings are an essential element of Cairns Style for commercial buildings, particularly in the central city area. Aesthetically, verandahs and awnings create deep shade areas, and the vertical posts and balustrades provide a fine vertical scale along the street front. Functionally, the covered area offers protection from the sun and rain, and a cool, inviting place to stroll and window shop. Today, these spaces are increasingly used for alfresco wining and dining, or as a place to sit and watch the world go by. These uses add life and vibrancy to the region's streets.

Traditionally verandahs and awnings were constructed using the vernacular material of 'tin and timber'. Timber posts, balustrades, rails, battens and fretwork were combined in a variety of ways to create a unique look for each building, whilst the patterns and consistency of materials create a consistency of style. These materials are still favoured today, although steel structure is being used more widely.

How to do it

- *Consider using timber features, banners, blinds, awnings or signage to create a 'skirt' under the verandah. This adds visual interest and increases the level of protection from the sun and rain.*
- *Use posts, balustrades and other details to create a vertical rhythm.*
- *Ensure the horizontal lines of the verandah or awning match the existing horizontal lines in the street. Where there are no awnings or verandahs, ensure the height of the awning is at a pedestrian scale and will be effective in offering protection from the sun and rain (ideally 3-4 metres).* >



- *Awnings should be designed to cast deep shade on the building and the footpath. Avoid the use of transparent materials for awnings and limit them to areas where light is required within the building.*

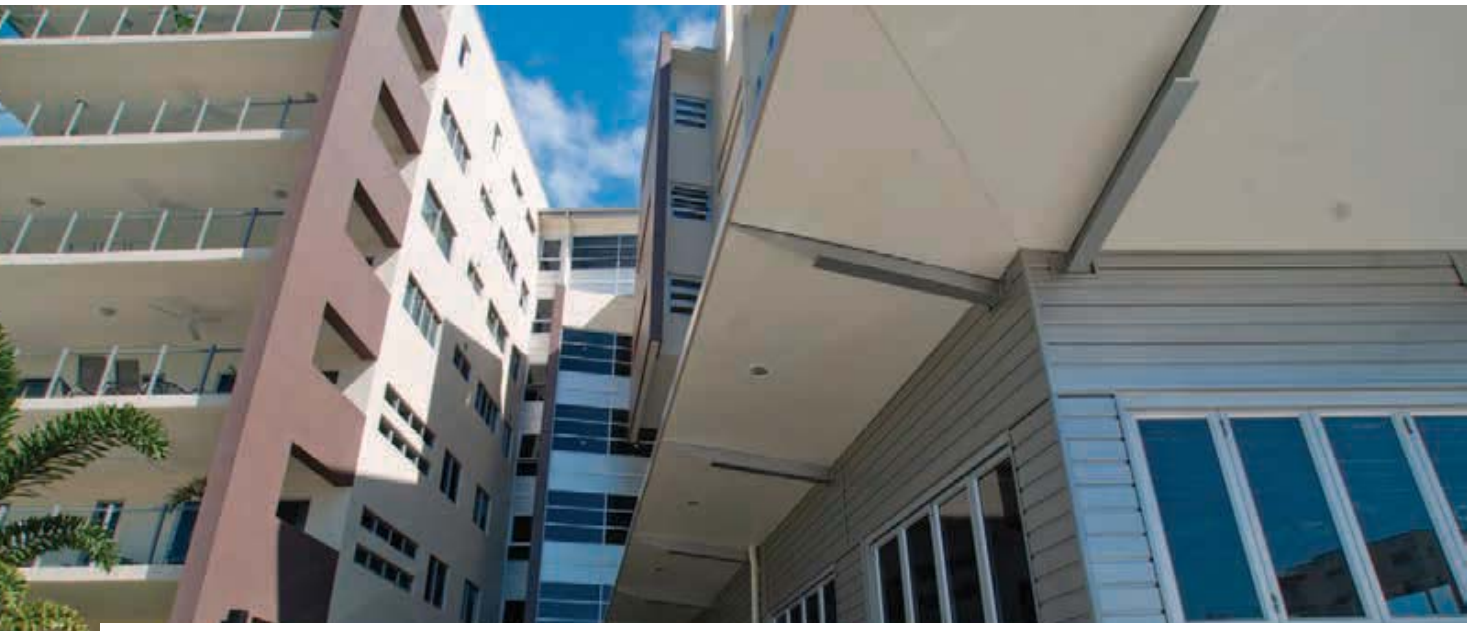
- *Avoid closing in verandahs as this detracts from the streetscape. Consider using lattices, louvres, screens or blinds to provide privacy or protection from sun and rain where required.*

- *Avoid locating air conditioning equipment on verandahs.*

Pedestrian Priority

When designing awnings, priority must be given to the pedestrians' needs. This includes the use of appropriate materials to provide deep shade, a human scale to allow the pedestrian to feel comfortable and an active frontage to provide interest and improve safety for the pedestrians' journey.

Appropriate 'human scale' awnings not only contribute to the streetscape they also are responsive to climatic events and protect pedestrians from the elements – which is a priority in the Far North Queensland environment.



MIXED USE DEVELOPMENT

Making centres attractive as urban spaces, keeping them vibrant for longer periods of the day and making public transport more viable are some of the widely recognised benefits of mixed use development.

Mixed use development can be described as development that includes a blend of retail, commercial, government, community, cultural, education, health, sport and recreation, entertainment and other leisure activities within or in close proximity to medium or high density residential development.

By incorporating mixed use across the region, particularly in established and new centres, we can ensure a vibrant and engaging centre is developed that is safe, comfortable and enjoyable for all users.

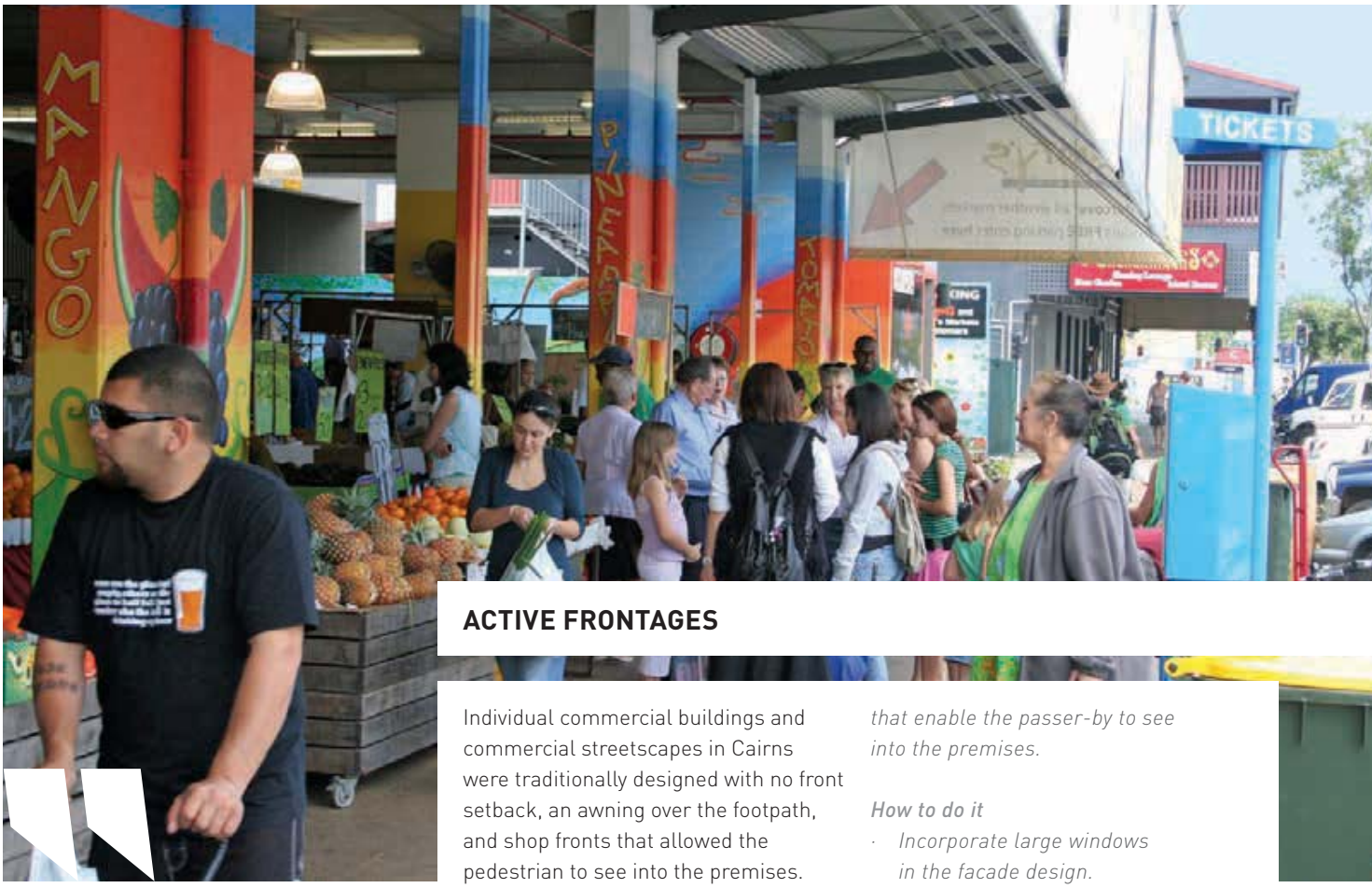
Why it is important

Mixed use development has the following benefits:

- *Promotes increased activity beyond daylight hours promoting safety - higher levels of natural surveillance - 'security of more people around'.*
- *Increases the viability of local shops and facilities.*
- *Provides a range of uses in a single development/centre.*
- *Encourages walking and cycling - bringing health benefits, reducing the need to own a car and thus reducing energy emissions.*
- *Lowers household expenditure on transport.*
- *Creates more socially diverse environments as all users have equal access to facilities, regardless of whether they own a car.*

How to do it

- *Careful site layout and building design are required to ensure mixed use developments function effectively to combine a number of different uses.*
- *Higher density mixed use development should be within reasonable walking distance to public transport services to ensure there is a reduced dependency on private transport.*
- *Retail uses within a mixed development should form part of an active streetscape rather than being located within internalised centres.*
- *Buildings should demonstrate a practical and appealing tropical design response.*



ACTIVE FRONTAGES

The perception of a close human presence adds a feeling of safety in a street.

Urban Design Alliance of Queensland

Individual commercial buildings and commercial streetscapes in Cairns were traditionally designed with no front setback, an awning over the footpath, and shop fronts that allowed the pedestrian to see into the premises.

Consequently, the pedestrian experience was comfortable and interesting due to the close proximity to and interaction with shop windows, entrances and shopkeepers. More recently, these traditional commercial streetscapes have become vibrant places with the introduction of alfresco dining.

Why it is important

Streets are used and experienced by pedestrians. Blank facades, painted glass, screened windows or car parks are detrimental to the pedestrian experience and reduce the safety of the street by removing passive surveillance opportunities. Active frontages include alfresco dining, open shop fronts or large glass windows that enable the passer-by to see into the premises.

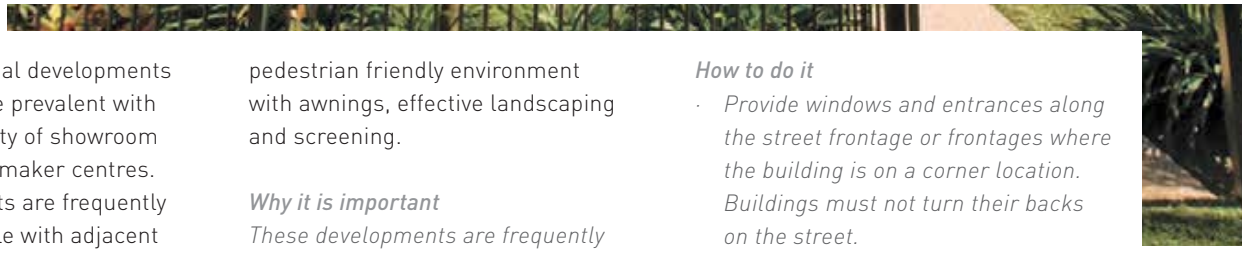
How to do it

- *Incorporate large windows in the facade design.*
- *Do not paint or screen windows that are at street level.*
- *Avoid using security devices that prevent views into the premises. Pedestrians use the street after premises have closed.*
- *Complement traditional window patterns and scale where these are present in the streetscape.*
- *Ensure ground floor of building is occupied by commercial or retail uses and is at grade with the street (i.e. no semi-basement car parking).*


1



BIG BOX COMMERCIAL



'Big box' commercial developments are becoming more prevalent with the rise in popularity of showroom retailing and homemaker centres. These developments are frequently inconsistent in scale with adjacent existing developments and therefore careful consideration has to be given to the design of these boxes to reduce the impacts on the existing streetscape. Large, blank facades along the streetscape are not consistent with Cairns Style and provide no amenity to passing motorists and pedestrians.

There are opportunities for 'Big box' commercial developments to integrate on a more 'human scale' by breaking up large blank walls and increasing the pedestrian friendly environment with awnings, effective landscaping and screening.

Why it is important

These developments are frequently located in prominent locations to improve exposure and advertising, brightly coloured with the corporate colours of the tenant and larger in scale than the surrounding development.

These have the potential to negatively impact on the streetscape if poorly designed. 'Big box' commercial developments should contribute the same level of amenity to the street that traditional retailing does.

How to do it

- *Provide windows and entrances along the street frontage or frontages where the building is on a corner location. Buildings must not turn their backs on the street.*
- *Provide awnings for pedestrian amenity along the street frontage/s.*
- *Use parapets to add visual interest to the building facade.*
- *Set back buildings to be consistent with the existing pattern of the road.*
- *Provide car parking at the side or rear of the development.*