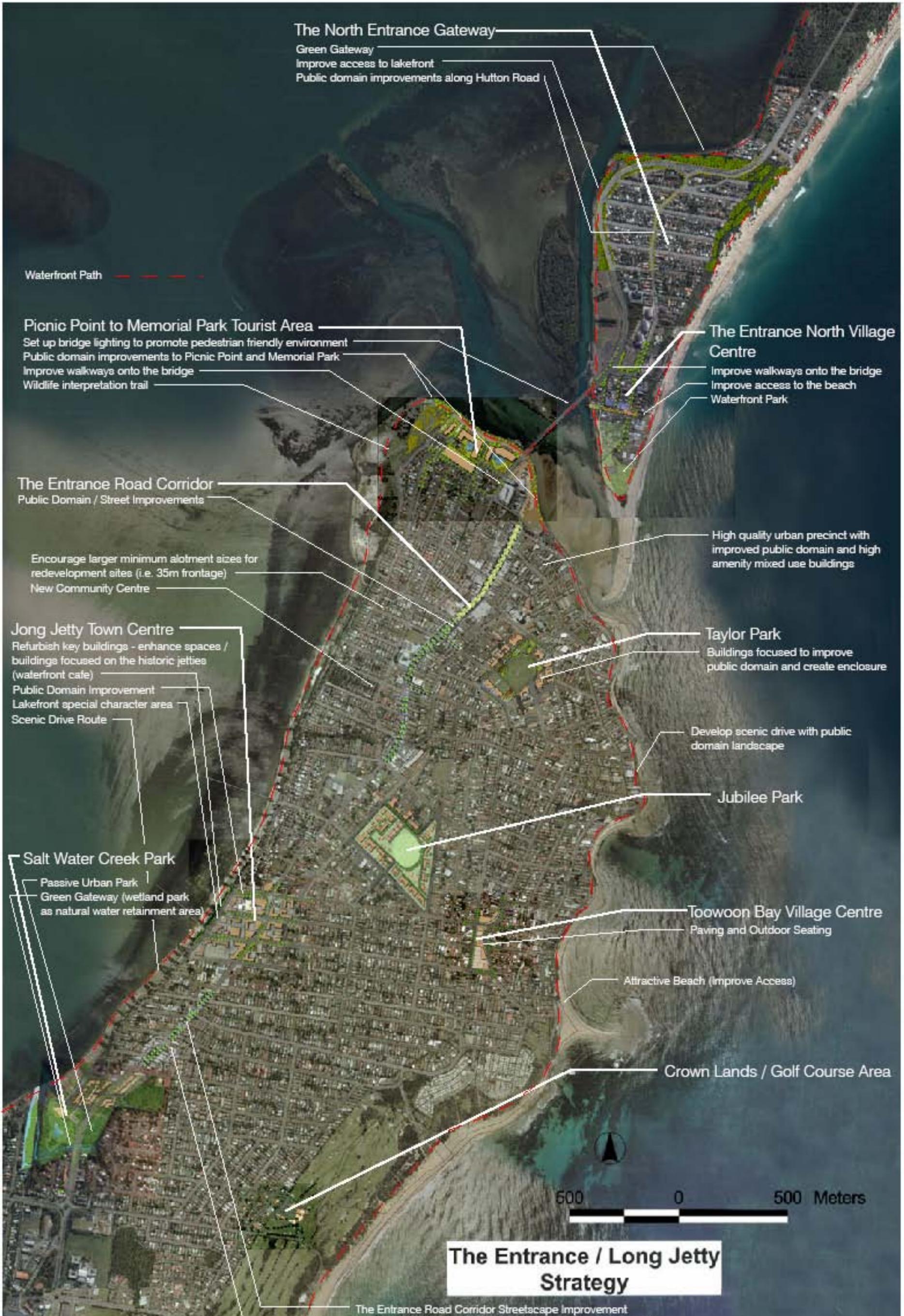


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Chapter 5

Precinct 16
Crown Lands/Golf Course



The North Entrance Gateway

- Green Gateway
- Improve access to lakefront
- Public domain improvements along Hutton Road

Waterfront Path

Picnic Point to Memorial Park Tourist Area

- Set up bridge lighting to promote pedestrian friendly environment
- Public domain improvements to Picnic Point and Memorial Park
- Improve walkways onto the bridge
- Wildlife interpretation trail

The Entrance North Village Centre

- Improve walkways onto the bridge
- Improve access to the beach
- Waterfront Park

The Entrance Road Corridor

- Public Domain / Street Improvements
- Encourage larger minimum allotment sizes for redevelopment sites (i.e. 35m frontage)
- New Community Centre

High quality urban precinct with improved public domain and high amenity mixed use buildings

Jong Jetty Town Centre

- Refurbish key buildings - enhance spaces / buildings focused on the historic jetties (waterfront cafe)
- Public Domain Improvement
- Lakefront special character area
- Scenic Drive Route

Taylor Park

Buildings focused to improve public domain and create enclosure

Develop scenic drive with public domain landscape

Jubilee Park

Salt Water Creek Park

- Passive Urban Park
- Green Gateway (wetland park as natural water retainment area)

Toowoan Bay Village Centre

Paving and Outdoor Seating

Attractive Beach (Improve Access)

Crown Lands / Golf Course Area

600 0 500 Meters

The Entrance / Long Jetty Strategy

The Entrance Road Corridor Streetscape Improvement
Controlled mixed use development along The Entrance Road

Chapter 6

Strategy Plan

Structure Elements

The Urban Structure of The Entrance study area is defined by the physical setting on a narrow Peninsula. The undulating topography of the Peninsula is a strong feature that affects the existing urban structure.

The study area is fortunate to be surrounded by scenic water views and beaches that create a unique seaside quality of life. This strategy aims to highlight these attractive attributes that make The Entrance a special place. Based on future and historic predictions, the study area is considered to be adequately zoned to facilitate future development capacity to be reached by the year 2031. Some redevelopment will occur especially in the Town Centre and Long Jetty.

Placemaking

The next step is making the existing built environment succeed as a place to live and visit. It is proposed that The Entrance Peninsula Strategy employ the principles of Placemaking. This is defined as creating places and not just a collection of individual buildings with no relationship to each other or the greater neighbourhood or district. Placemaking is about designing to maintain, restore, and develop the unique aspects of a particular place rich with opportunities for social interaction which makes residents proud to live there and attracts visitors.

The following placemaking elements form a preferred urban structure for The Entrance Peninsula:

- Public Domain/Streetscape.
- Visual Character – Gateways.
- Recreation amenities.
- Density and scale of development (maintain the current relationship of building heights to topography where appropriate).
- Heritage preservation.
- Pedestrian friendly environment.
- Mobility alternatives.

Key Strategies

Following site analysis and a review of community issues, a strategy plan and action plan have been prepared. The main elements of the Strategy illustrated in the figure on the adjoining page are:

- A publicly accessible greenbelt that surrounds the Peninsula and The Entrance North.
- A public domain that includes the foreshores, streetscapes and parks that is well maintained and creates opportunities for community interaction and recreation. This would include making improvements to Taylor Park, Jubilee Park, Saltwater Creek Reserve Park and Tuggerah Lake Foreshore Reserve.
- A new streetscape along The Entrance Road that creates an attractive corridor and provides a positive visual experience while improving traffic flow.
- A redefined neighbourhood retail centre in Long Jetty that consolidates the existing retail strip into a defined walkable precinct, offering local convenience stores and tourist amenities.
- Revisions to development controls that expand DCP 60 to cover the entire study area (see Chapter 5)
- Maintenance of The Entrance Town Centre as the main focus of retail and tourist accommodation through promotion activities and streetscape improvements to all streets.
- Enhancement of the Toowoan Bay Village Centre to maintain its unique character.
- Creating a wayfinding directional signage system to make it easier for tourists to get around.
- Creating green gateways to The Entrance Peninsula at Saltwater Creek Reserve Park and The Entrance North.
- Highlighting the heritage of The Entrance through interpretive signs and enhancement of the heritage significance of places like the Lake's jetties while developing planning controls that appropriately address heritage sites.
- Creating a more "car free" environment by providing mobility alternatives within The Entrance such as a circulator bus, cycle routes and pedestrian amenities.
- Maintaining the coastal village character of The Entrance North.
- Enhancing the small commercial/retail centre for residents of The Entrance North in Hutton Road/Hargraves Street.
- Maintaining and improving access to the beaches including for people of all abilities, by car, bike and foot.
- Enhancing visual landmarks such as lighting The Entrance Bridge and preserving views to the jetties, beaches, Tuggerah Lake, The Entrance Channel, the Pacific Ocean and mountains.

Chapter 7

Place Making Implementation Plan

7.1 Implementation Method

7.1. Implementation Method

To implement the place making recommendations set out in this Strategy Plan, a series of additional actions should take place.

This approach aims to stage each of the project recommendations according to priority, and funding. It involves both short and long-term actions.

Design solutions should not be separated from the economic imperative to promote retail, employment and tourism growth within the peninsula.

The methods for implementing the Strategy Plan address the following:

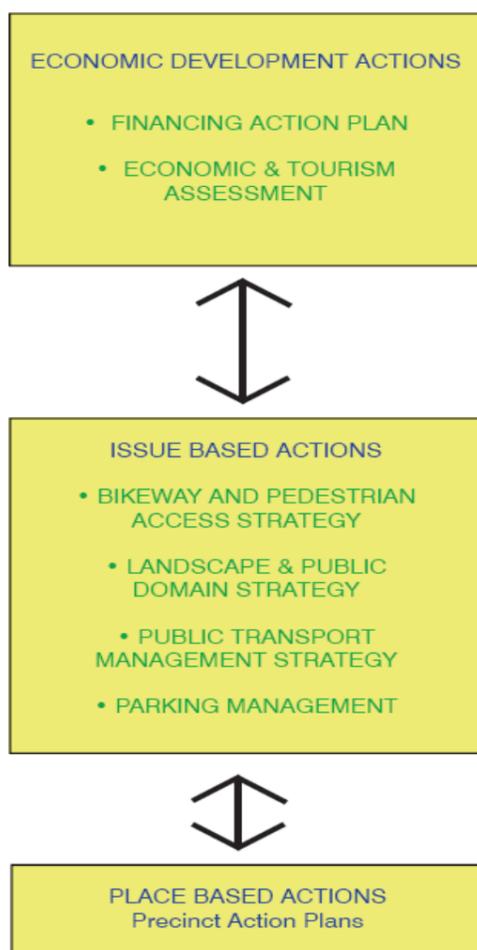
- a) **Why?** - Economic Goals / Objectives:
There is a need to determine, at least broadly, the retail, employment and tourism enhancement goals for the peninsula as this will impact upon the order of priority of each project and the desired results and timeframe. These will come predominantly from conducting a Retail, Employment & Tourism Strategy in conjunction with The Entrance Town Centre Management.
- b) **When?** - Phasing:
There is also a need to assess the Priority of Works. This Plan can be used as a starting point to identify key projects where changes can commence immediately and for those works that will take place over the long-term.
- c) **How?** - Finance / Funding:
As part of this process it is necessary to assess Council's ability to manage and finance these projects. This will require a review of all funding mechanisms including an assessment of Council's Development Contribution Plans. Council should also inquire into future Public-Private Partnership Projects and how these could be managed. The aim would be to conduct a detailed review of all funding options. The most-cost effective strategies should be identified (though cost should not always be a prime factor where a project is determined to be essential).
- e) **Who?** - Organisational Structure:
There needs to be a clear organisation of people who will be responsible for the overall implementation of the Strategic Plan and each of the individual Projects that have been identified.

Chapter 7

Place Making Implementation Plan

7.2 Summary of Implementation Plan

7.2.1 Phasing



7.2 Summary of Implementation Plan

For The Entrance to move forward there needs to be a systematic process to deal with implementing the range of development and public domain issues described in this report.

1. Economic Development Actions:

Economic Development actions will consist of

- a) Financing Action Plan; and
- b) Economic and Tourism Assessment

These actions are aimed at determining the financial constraints that affect the timing and prioritization of identified capital works. The Economic and Tourism Assessment will help identify economic condition of The Entrance and ways to promote tourism and economic growth.

These strategies would need to be completed by Council or a specialist consultant.

2. Issue-Based Actions:

These actions are Issue-Based in that they focus on specific elements that affect The Entrance peninsula that are vital to the area's function and amenity.

Issue-Based Actions are:

- a) Bikeway and Pedestrian Access Strategy;
- b) Landscape and Public Domain Strategy;
- c) Public Transport Management Strategy;
- d) Parking Management Strategy

3. Place-Based Actions:

Using the precinct recommendations described in Chapter 5, a series of place based action plans should be compiled.

- Study Area - General
- Precinct 1 The Entrance North Gateway
- Precinct 2 The Entrance North Village Centre
- Precinct 3 Picnic Point to Memorial Park Tourist Area
- Precinct 4 The Entrance Channel Recreation and Residential
- Precinct 5 High Density Residential
- Precinct 6 The Entrance Town Centre
- Precinct 7 Residential Transition (Low to Medium Density)
- Precinct 8 Long Jetty Town Centre to Saltwater Creek Reserve Park
- Precinct 9 Low to Medium Density Residential
- Precinct 10 Taylor Park Residential Transition
- Precinct 11 The Entrance Road Corridor
- Precinct 12 Oceanside Residential
- Precinct 13 Toowoyn Bay Village Centre
- Precinct 14 Jubilee Park
- Precinct 15 Low Density Residential - South
- Precinct 16 Crown Lands/Golf Course

7.2.1 Phasing

All of the recommendations under The Entrance Strategy Plan overlap in a myriad of ways and it may be difficult to determine a way forward for their implementation. Thus, a phasing plan is needed to prioritize projects.

Immediate Priorities

a) Financing Action Plan

A Financing Action Plan should be conducted to determine the costs associated with the works set out in this plan, what funds may be available and how they can be accessed (private/public partnerships, grants, etc). Council should work with TETCM to come up with funding options where Centre Management can contribute such as increasing levies. State government programs may have grant funds available. Other options include public bond financing and user fees. A more complete list of options would need to be analysed.

b) Economic and Tourism Strategy

The key drivers for any change in the peninsula need to incorporate retail, employment and tourism goals of providing better employment opportunities and creating a defined image for tourist promotion campaigns. A retail plan is in the process of being prepared.

Longer Term Priorities

a) Bikeway and Pedestrian Access Strategy

The Wyong Bicycle Plan is being updated. It proposes a loop around the foreshore of the study area and links to the beaches and north to the National Park and west to Wyong. Directional signage could be improved and secure bicycle parking facilities identified.

b) Landscape and Public Domain Strategy

The Landscape and Public Domain Strategy will require the creation of a capital budget to identify specific public improvements. A detailed landscape assessment and design will be required which include a signage and way-finding plan. The signage plan should respond to any navigation issues raised by the Tourism Assessment. A lighting plan would need to be included. The upgrade of street and pedestrian lighting will be an expensive process that may involve extensive street works. Work will need to be coordinated with the RTA.

c) Public Transport Management Strategy

The Public Transport Strategy should encourage a more "car free" peninsula. A detailed plan will need to consider the growth patterns of the peninsula, origin and destination data to areas outside the study boundaries and include an estimate of capital costs.

d) Parking Management Strategy

Most of the key sites for parking facilities are under Council ownership and many offer the opportunity to consolidate parking into new multi storey garages. This could reduce the demand for on-street parking. A parking study should be conducted to determine parking needs and shortcomings.

Chapter 7

Detailed Strategies

7.3 Economic and Tourism Enhancement Strategy

Economic and Tourism Enhancement Strategy

Aim of this Strategy

The type of image that The Entrance projects as a tourist destination is paramount to maintaining the economic vitality of the area. Therefore defining what the tourism strategy will be is a key action.

The aim of the Retail, Employment and Tourism Enhancement Strategy is to determine what key goals and objectives are needed for the peninsula in the future in order to enhance its retail, employment and tourism functions.

It is not the brief, nor the specialty of the Consultants to set out the detail of how the Economic and Tourism Enhancement Strategy should develop. However, the issues that need to be considered include, but are not limited to:

- 1) Future employment prospects in The Entrance area and the town centre and how these could be enhanced;
- 2) Future retail and commercial infrastructure needs and how these can build a strong economic base for the peninsula;
- 3) Future tourism growth and infrastructure needs and how these enhance the future attraction and image of the peninsula; and
- 4) Creating and promoting an image of The Entrance to potential visitors.

Chapter 7

Detailed Strategies

7.4 Cycle and Pedestrian Access Action Plan



Fig 7.4.1 Example: Elevated Lakefront Boardwalk
(Source: Dickson Rothschild)



Fig 7.4.2 Example: Coastline Boardwalk
(Source: Dickson Rothschild)



Fig 7.4.3 Example: Clearly marked bike path
(Source: Transport Planet)



Fig 7.4.4 Example: Textured pedestrian crossing
(Source: Transport Planet)

The Wyong Bicycle Plan is in the process of being updated. It is recommended that the following be incorporated into the plan as it relates to The Entrance. Pedestrian access is of particular concern given the large number of tourists who visit the area and the desire to walk along the foreshore.

Design Objectives

- To provide equitable, safe, accessible and convenient cycle and pedestrian facilities that meet the needs of the community to the appropriate standards;
- To encourage more people to walk and cycle both as a means of getting around and for health and recreation;
- To reduce car usage;
- To minimise pedestrians'/cyclists' exposure to noise and air pollution from vehicles;
- To provide integrated facilities with the surrounding region and with public transport; and
- To improve the physical connection and awareness of connections between the hinterland and the lakefront and coastline.

Design Strategies & Recommendations

1. Maintain the continuous network of pedestrian and cycle pathways that exist on The Entrance Peninsula.
2. Clarify that existing pathways are shared facilities and paint a line down the middle of paths to separate users (bikes on side near the kerb and pedestrians on other side) or to separate flows, have arrows indicating direction same as traffic flow.
3. Provide even wider paths (greater than 3 metres) along popular routes, such as along Tuggerah Lake Foreshore Reserve.
4. Provide support facilities such as a network map, signage, toilet blocks, drinking fountains, secure bicycle parking stations, cover/shelter points, seating, trees for shaded avenues, lighting and emergency phones in parks and along pathways for comfort, enjoyment and security of path users.
5. Provide clear and direct pedestrian routes. They should be free of barriers and take pedestrians directly where they want to go. The pedestrian route should have attractive paving, lighting and interpretive/informative signage along the way.
6. Pedestrian footways should be separated from traffic wherever possible and be readily accessible to the disabled;

7. Provide links in roadways, pathways and trails from the peninsula to other suburbs for recreation, commuting and tourism.
8. Develop a cohesive signage on recreational paths showing destinations, distances and other connecting pathways.
9. Extend the existing Waterfront Pedestrian Mall from The Entrance Town Centre to Picnic Point with attractive paving, lighting and cohesive signage system.
10. Ensure that the all cycle routes are fully integrated with public transport to facilitate cycle use as part of longer journeys.
11. Adequate cycle parking to be provided at educational establishments, retail centres, public transport interchanges, leisure facilities, and tourist attractors.
12. Clearly identify shared zones/areas where pedestrian/bicycle and vehicular traffic will conflict by using different coloured pavement, signage, painted road symbols and the like.

Chapter 7

Detailed Strategies

7.5 Landscape and Public Domain Action Strategy



Fig 7.5.1 Example: Banners reinforce leisure atmosphere (Source: Dickson Rothschild)



Fig 7.5.2 Example: Special Paving Material (Source: Dickson Rothschild)



Fig 7.5.3 Example: Decorative style street lighting (Source: Dickson Rothschild)

This is a key element of placemaking. The purpose of this action strategy is to ensure that the quality, diversity and capacity of the public domain will be enhanced.

Design Objectives

- To consider the needs of people with access difficulties in design of the public domain;
- To ensure new development contributes to the quality enrichment and enhancement of the public domain;
- To encourage high quality landscape design of public spaces, of the interface between public spaces and private development, and within new development;
- To utilise innovative design, detailing and materials to capture the character of the peninsula and create a memorable street environment;
- To provide protection from the elements-sun, wind and rain;
- To facilitate the involvement of artists and designers to bring creative solutions to street furniture and public art;
- To establish a visual integrity and continuity for the streetscape and enhance orientation and movement through spaces; and
- To create wayfinding signage that is responsive to heritage and context.

Design Strategies and Recommendations

1. Logo/Branding

Build upon the existing work of TETCM.

2. Banners

Expand the banner program of TETCM to other areas of the study area such as at Long Jetty, The Entrance North Village Centre and at gateway points.

3. Paving Improvement

Parts of The Entrance Town Centre have a strong consistent paving design which coordinates well with the street furniture and planting. The existing paving design has brought a distinct character to the area. It is recommended that new paving be installed in other parts of The Entrance.

Paving is an important element that helps enhancing the image and character of the commercial centres within the peninsula.

All new paving should take into account slip resistance, weather resistance, wear and weight support in addition to colour and size. There are a number of Australian Standards regarding paving, for slip resistance a resistance value of R10 is suggested for outdoor pavers as referenced in AS/NZS4586 1999.

Maximum abrasion index regarding wear should be appropriate for an areas level of

pedestrian usage as discussed in AS/NZS4456.9-2003.

Recommendations for Specific Sites:

Each commercial centre of The Entrance study area has a different character. This character should be enhanced through site specific paving design relating to the built form, and reflect community aspirations and sense of place. The major commercial centres within the study area are listed below:

- a) The Entrance Town Centre and Proposed Residential Tourist Zone culminating at Picnic Point

Recommendations:

- Retain and maintain existing paving on The Entrance Road in the Town Centre.
- New paving design to the proposed Picnic Point Tourist Centre is to complement the waterfront area. The paving design must be complementary to the existing paving pattern and colour at The Entrance Town Centre and extend along Tuggerah Parade and the waterfront pedestrian mall.
- All secondary streets close to The Entrance Town Centre would use a less expensive paving material using a range in contrast to the primary street.

- b) Long Jetty Retail Centre

The Long Jetty Retail Centre's revitalization has been proposed as a vibrant precinct with a supermarket, grocer and specialty shops catering to the surrounding neighbourhood.

Recommendations:

- Commercial areas should be defined with a single paving design to encompass all active frontages.
- Paving pattern and colour should relate to the existing historic urban form character and be compatible with the historical character of Long Jetty Hotel.

- c) Toowoong Bay Village Centre

Toowoong Bay Village Centre is a village centre for residents. It is a quiet precinct servicing the local neighbourhood.

Recommendations:

- The Village Centre along Toowoong Bay Road should be defined with a single paving strategy to encompass all active frontages.
- The new paving pattern and colour should compliment the existing urban form and main street character. Brick or stone paving that relates to existing building materials may be appropriate.

Chapter 7

Detailed Strategies

7.5 Landscape and Public Domain Action Strategy



Fig 7.5.4 Example: Attractive bus shelter (Source: English Partnerships)



Fig 7.5.5 Example: Simple Bicycle Security Stand (Source: Street Furniture Australia)



Fig 7.5.6 Example: Timber Bollards (Source: Street Furniture Australia)

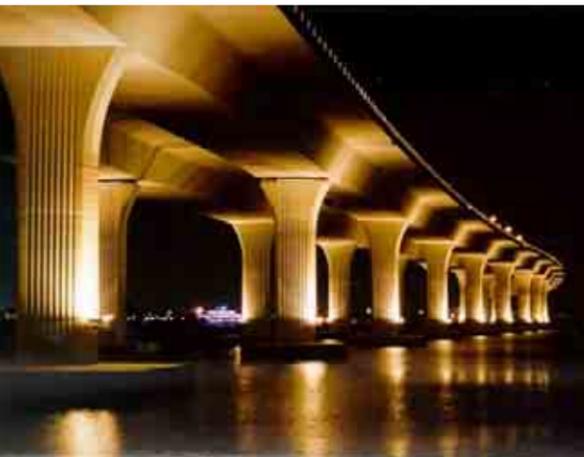


Fig 7.5.7 Example: Bridge lighting (Roosevelt Bridge, Stuart Florida) (Source: United Bridge Lighting)

d) The Entrance North Village Centre

The Entrance North Village Centre is a commercial area servicing the local neighbourhood. The area has potential to become a small vibrant convenience shopping area with cafés and restaurants associated with its proximity to the water.

Recommendations:

- The Village Centre along Hutton Road and Hargraves Street should be defined with a single paving strategy to encompass all active frontages.
- The new paving pattern and colour should relate to the existing urban form and character and take into account existing building materials, density of development, topographic context and climate.

4. Upgrading Urban Elements

Urban elements can be used to reinforce the public domain and provide a sense of place and unifying theme, and enhancing community ownership and appreciation.

Urban elements are defined as street furniture, bus shelters, seating, notice boards and signage. They should be custom designed to complement the peninsula's coastal character and provide a cohesive identity to the peninsula as a whole.

Recommendation 1 – Bicycle Stands

- Bicycle stands should be simple and practical in design for easy access and secure bicycle parking of all sizes. Its design should be unobtrusive and fit with the character of the area.

Recommendation 2 – Rubbish Bin Enclosures

- Rubbish bin enclosures should be custom designed to complement the natural character/coastal theme, while providing a cohesive identity to the peninsula as a whole.
- Bin enclosures should be placed near street poles or other features where possible to reduce clutter.

Recommendation 3 – Bollards and Fencing

- Bollards should be carefully selected according to its aesthetic character, durability and functional qualities.
- The external finish should be compatible with the character of the surrounding locality.
- Fencing should be simply designed and should not compete with the surrounding views, while provide safety for pedestrians.
- Fencing material should be highly resistant to vandalism and have longevity and durability.

Recommendation 4 – Signage

- Pedestrian signs must be located where they can be easily identified and provide easily interpreted information. Signage must be of an appropriate scale and style that fits with the coastal character of the Peninsula and the context of the surrounding area.
- Provide a landmark destination sign at the Salt Water Creek Park Gateway and The Entrance North Gateway to enhance a sense of welcoming and arrival. It is suggested that each sign should be located within a planted landscaped area designating its proper space on the ground.
- A range of pedestrian-level 'detailed information' signs need to be provided throughout the peninsula. These include:
 - Maps of the peninsula.
 - Transport information showing various means to get around.
 - Visitor information and tourist attractions.
 - Key destinations/ nodes/ transport links.
 - Toilets.
- It is recommended that the Council prepare "Signage Guidelines" to procure a signage system that can be used across the peninsula as a whole, and may be adapted for other location in Wyong Shire. Council's LEP and DCP should be amended to incorporate these requirements.

Recommendation 5 – Lighting

- Pedestrian scale lighting should be installed that illuminates the pathway properly.
- All pole lights use the same colour and style of pole and fixture.
- The Entrance Bridge should be fitted with accent lights to create landmark element much like the Sydney Harbour Bridge. See the photo at left as an example.
- Lights must be of an appropriate scale and style to reflect the coastal character of the Peninsula.

5. Public Art

A programme should be initiated to in accordance with Council's Public Art Strategy currently being adopted to identify sites for the placement of public art within The Entrance. This will add to the visual uniqueness of the area and could become a tourist attraction. Council should require development of a certain size or location set aside 1% of their construction costs for public art. This type of program has been successfully implemented in places worldwide as a place making tool. Public art funding is an element in the Draft Statewide Contribution Plan.

Chapter 7

Detailed Strategies

7.5 Landscape and Public Domain Action Strategy



Fig 7.5.8 Example: Coastally sensitive design treatments in regards to colouring, materials and roof forms. Source: Dickson Rothschild



Fig 7.5.9 Example: Coastal home with pitched roof forms, pergolas, integrated balcony, landscaping and coastally sensitive materials. Source: Dickson Rothschild



Fig 7.5.10 Example: Use of landscape to promote a coastal character. Source: Dickson Rothschild



Fig 7.5.11 Example: Coastally sensitive balcony and roof design. Source: Alex Popov Architects

6. Coastal Design Criteria

The Entrance Peninsula is a coastal area and development should respond to its unique topography and setting. Dickson Rothschild however, has recommended the repeal of the existing Maritime Design Theme because it limits the diversity of architectural designs and contextual responses and promotes repetition in building forms and design elements.

Due to the many unique building types, terrains and contexts throughout The Entrance Peninsula, general design guidelines do not adequately acknowledge the diversity of the area or the need for a range of building types and outcomes. If anything, general design criteria would easily be misunderstood and misconstrued to result in undesirable urban and architectural design outcomes as has often been the case with the designated Maritime Design Theme.

It is recommended that the DCP be amended to include a specific and well prepared set of Urban Design Guidelines to guide further development of a coastal character in The Entrance Peninsula. These guidelines should take into account Coastal Protection SEPP 71 and The Coastal Design Guidelines for New South Wales as well as the following key issues:

Views and Scenic Context

- Development should recognize the high scenic value within the Peninsula and provide views to the sea and lake whenever possible.
- Development should blend into the surrounding area and relate to existing development, topography and landscape.

Landscape

- High quality landscape outcomes are integral to the maintenance and character of a coastal area and should aid in guiding residents and visitors towards views and strengthening the relationship of an area to the coast.

Materials and Finishes

- Due to the high levels of moisture and salt content, materials used for development should be weather resistant. Rendered paint finishes should be used as well as timber building materials over porous bricks.

Natural Amenity

- Coastal areas are often associated with high wind velocities and roof design should be sloped and articulated to reduce wind uplift. Large flat roofs are discouraged due to their lack of wind sensitive design.
- Development should add extra weight to outdoor living and priority should be given to the connectivity between indoor living and balcony or terrace areas. Pergolas and trusses are often used to link indoor and outdoor areas.

- Large balconies can be unsightly and balustrades should be articulated – half glazed/ half solid to reduce visual impact.

Coastal Protection/ Integration in Design

- All development near the coast should maintain priority for natural amenity and protection.
- Development should blend into the topography of its site with minimal physical impact on the coastline.
- Building design should blend into the natural context with the use of a natural palate of colours, finishes, textures and materials.
- Public access to the coastline should be maintained and encouraged wherever possible and appropriate through urban design, landscaping, zoning regulations and publicly accessible development.
- In regards to aesthetics, for coastal areas it is advised that desirable attributes of the coastal landscape be integrated into development colours, materials, textures and forms.

Environmentally Sustainable Development (ESD)

When developing design guidelines for The Entrance Peninsula, it is the recommendation of Dickson Rothschild that priority be given to Environmentally Sustainable Development (ESD) over aesthetic design features. ESD refers to the integration of technologies in building design that minimise non-renewable energy consumption and water waste while ensuring development that integrates with natural contexts and processes to ensure efficiency and sustainability.

An updated DCP with detailed coastal design guidelines should also provide a set of specific design controls to ensure high quality environmental performance for all new development and urban space in The Entrance Peninsula. The recognition of a coastal character in development also refers to the integration of the natural needs of a development site. The maintenance of a coastal design theme should work in tandem with a strategy for the promotion of Environmentally Sustainable Development.

ESD Design Principles

- Maximise climatic comfort and heat efficiency with window orientation to optimise solar access for living areas and allow for cross ventilation.
- Integrate the surrounding micro-climate (vegetation, landscape and topography) into building design to ensure efficient water drainage, shading and design response to moisture build up.
- Use of movable shading devices to control internal temperatures.
- Use of photovoltaic solar panels to provide building power.
- Collection and re-use of rainwater for toilets.
- Roof windows and glazing on sloped roofs minimises the need for artificial lighting during the day and can provide cross-ventilation through living spaces.

Chapter 7

Detailed Strategies

7.5 Landscape and Public Domain Action Strategy



Fig 7.5.12 Example: Coastal design treatments in regards to roof forms, materials, colours, balconies and shading devices. Source: Dickson Rothschild



Fig 7.5.13 Example: Use of timber and non-porous building materials, varied roof and window forms to evoke a coastal character. Source: Dickson Rothschild



Fig 7.5.14 Example: Coastally sensitive design treatments in regards to colouring, balconies, varied facades and fencing. Source: Dickson Rothschild

The Residential Flat Design Code discusses how to approach design elements like roofs and facades as well as SEPP 65 Design Quality Principles to ensure high quality architectural outcomes for residential developments in New South Wales. This document also provides relevant issues to be addressed in a more detailed urban design guidelines study to inform a DCP. Some key points include:

Balconies

- Balconies should be positioned to achieve maximum solar access.
- Pergolas, shutters, sun screens and operable walls should be used to control sunlight and wind.
- Cantilevered, semi-cantilevered and recessed balconies should be used to respond to daylight, wind, acoustic privacy and visual privacy.

Daylight Access

- Shading devices should be integrated into building design to maximise comfort, this should include horizontal shading for north-facing windows and vertical shading for east or west facing windows.

Façades

- Façade design should respond to the internal layout and residential amenity. Details should be functional and relate to the overall building design as well as the context of the site.

Quality design in development within any context should always incorporate an in depth site analysis and the SEPP 65 Design Quality Principles which outline key design considerations for development. The coastal context of The Entrance Peninsula should play a major role in site analysis which will influence the final character of development including aesthetic elements that relate to the public domain like colour, materials and detailing.

The Residential Flat Design Code provides quality advice in terms of Site Analysis and is shown below:

Site Analysis

(p.39 of The Residential Flat Design Code – Planning NSW)

Site analysis is an important part of the design process. Development proposals need to illustrate design decisions, which are based on careful analysis of the sites conditions and their relationship to the surrounding context. By describing the physical elements of the locality and the conditions impacting on the site, opportunities and constraints for future residential flat development can be understood and addressed in the design.

All of the SEPP 65 Design Quality Principles are integral to the promotion of a coastal character in the Peninsula. While they may not directly address coastal areas, these principles are a useful checklist to ensure high quality design outcomes that relate to the surroundings and provide a sense of place in the public domain.

SEPP 65 Design Quality Principles

(p.98, 99 of The Residential Flat Design Code – Planning NSW)

Principle 1: Context

Good design responds and contributes to its context. Context can be defined as the key natural and built features of an area. Responding to context involves identifying the desirable elements of a location's current character or, in the case of precincts undergoing a transition, the desired future character as stated in planning and design policies. New buildings will thereby contribute to the quality and identity of the area.

Principle 2: Scale

Good design provides an appropriate scale in terms of the bulk and height that suits the scale of the street and the surrounding buildings. Establishing an appropriate scale requires a considered response to the scale of existing development. In precincts undergoing a transition, proposed bulk and height needs to achieve the scale identified for the desired future character of the area.

Principle 3: Built Form

Good design achieves an appropriate built form for a site and the building's purpose, in terms of building alignments, proportions, building type and the manipulation of building elements. Appropriate built form defines the public domain, contributes to the character of streetscapes and parks, including their views and vistas, and provides internal amenity and outlook.

Principle 4: Density

Good design has a density appropriate for a site and its context, in terms of floor space yields (or number of units or residents). Appropriate densities are sustainable and consistent with the existing density in an area or, in precincts undergoing a transition, are consistent with the stated desired future density. Sustainable densities respond to the regional context, availability of infrastructure, public transport, community facilities and environmental quality.

Principle 5: Resource, energy and water efficiency

Good design makes efficient use of natural resources, energy and water throughout its full life cycle, including construction. Sustainability is integral to the design process. Aspects include demolition of existing structures, recycling of materials, selection of appropriate and sustainable materials, adaptability and reuse of buildings, layouts and built form, passive solar design principles, efficient appliances and mechanical services, soil zones for vegetation and reuse of water.

Principle 6: Landscape

Good design recognises that together landscape and buildings operate as an integrated and sustainable system, resulting in greater aesthetic

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Detailed Strategies

7.5 Landscape and Public Domain Action Strategy



Fig 7.5.15 Example: Coastally sensitive dual occupancy building with appropriate balcony, colouring and roof design. Source: Dickson Rothschild



Fig 7.5.16 Example: Coastally sensitive dual occupancy with appropriate materials, colours, details, landscaping and roof design. Source: Dickson Rothschild



Fig 7.5.17 Example: Coastally sensitive apartment design with appropriate colouring, roof forms, shading structures, balcony design and materials. Source: Dickson Rothschild

quality and amenity for both occupants and the adjoining public domain. Landscape design builds on the existing site's natural and cultural features in responsible and creative ways. It enhances the development's natural environmental performance by co-ordinating water and soil management, solar access, micro-climate, tree canopy and habitat values. It contributes to the positive image and contextual fit of development through respect for streetscape and neighbourhood character, or desired future character. Landscape design should optimise useability, privacy and social opportunity, equitable access and respect for neighbours' amenity, and provide for practical establishment and long term management.

Principle 7: Amenity

Good design provides amenity through the physical, spatial and environmental quality of a development. Optimising amenity requires appropriate room dimensions and shapes, access to sunlight, natural ventilation, visual and acoustic privacy, storage, indoor and outdoor space, efficient layouts and service areas, outlook and ease of access for all age groups and degrees of mobility.

Principle 8: Safety and Security

Good design optimises safety and security, both internal to the development and for the public domain. This is achieved by maximising overlooking of public and communal spaces while maintaining internal privacy, avoiding dark and non-visible areas, maximising activity on streets, providing clear, safe access points, providing quality public spaces that cater for desired recreational uses, providing lighting appropriate to the location and desired activities, and clear definition between public and private spaces.

Principle 9: Social Dimensions

Good design responds to the social context and needs of the local community in terms of lifestyles, affordability, and access to social facilities. New developments should optimise the provision of housing to suit the social mix and needs in the neighbourhood or, in the case of precincts undergoing transition, provide for the desired future community.

Principle 10: Aesthetics

Quality aesthetics require the appropriate composition of building elements, textures, materials and colours and reflect the use, internal design and structure of the development. Aesthetics should respond to the environment and context, particularly to desirable elements of the existing streetscape or, in precincts undergoing transition, contribute to the desired future character of the area.

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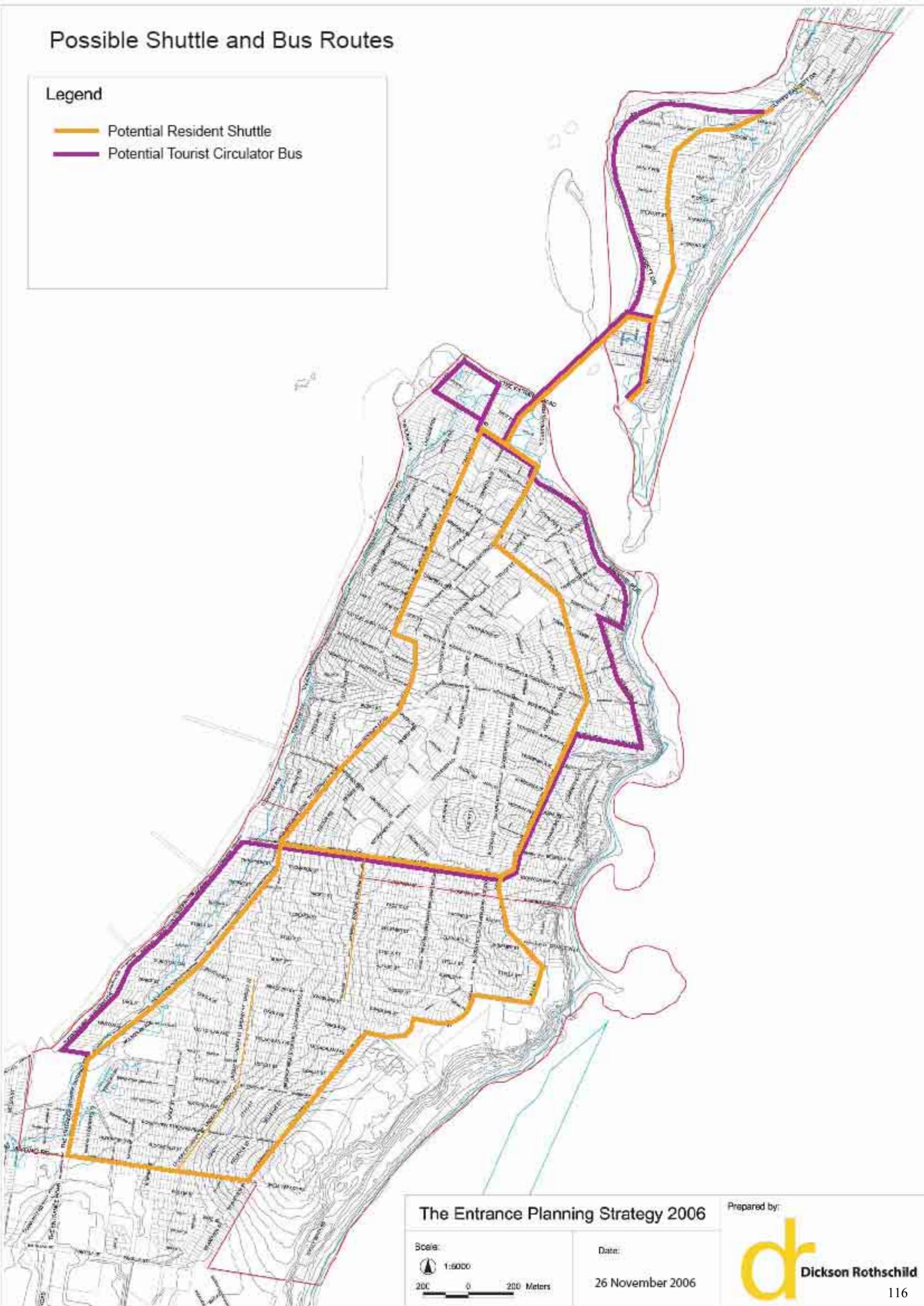
Detailed Strategies

7.5 Landscape and Public Domain Action Strategy

Possible Shuttle and Bus Routes

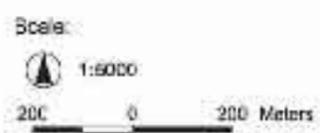
Legend

-  Potential Resident Shuttle
-  Potential Tourist Circulator Bus



The Entrance Planning Strategy 2006

Prepared by:



Date:
26 November 2006

Chapter 7

Detailed Strategies

7.6 Public Transport Management Action Plan



Fig 7.6.1 Example: 'Park and Ride' facilities
Source: Fort Worth City Council, Texas)



Fig 7.6.2 Example: 'Rack and Ride' facilities
Source: Canberra ACTION Bus)



Fig 7.6.3 Example: 'Rack and Ride' facilities
Source: Canberra ACTION Bus)

This strategy presents long term transport infrastructure recommendations for the peninsula. It aims to develop a strategic transportation framework that reduces the amount of automobile usage in The Entrance and allows for the promotion of mobility choices. The goal is to create a more car-free place.

Design Objectives

The strategies and recommendations are prepared under the following four principal objectives:

- Reduce the number of private vehicles and ease congestion in major road corridors.
- Improve the public transport network.
- Improve reliability of public transport.
- Integrate transport access and land use planning.

Design Strategies & Recommendations

1. Reduce the number of private vehicles and ease congestion on major road corridors

Recommendation 1 – Park and Ride scheme

To park and ride, people may drive or bike to a nearby bus stop near a Park and Ride Car Park. Leave the vehicle at any of the designated parking lots and continue the journey hassle-free by bus or ferry.

Recommendations:

- Establish safe park and ride facilities at Salt Water Creek Precinct, proposed Long Jetty Retail Centre, The Entrance Town Centre and the Entrance North Gateway Precinct.
- Provide free car parking, bike parking and other amenities to encourage use.
- Prominently displayed signs should be provided that make it easy to identify Park and Ride locations and facilities, including facilities for the disabled.
- Develop a Park and Ride Ticket that can be used on local buses, regional express buses and trains, making transfers easy and providing a smooth connection with other services.

Recommendation 2 – Bike Racks on Buses

With bike racks on every bus, cyclists may ride part way to work and "park" their bike on the bus, then finish their trip aboard a bus, or take the bus one way. Use of the racks is free of charge with a paid bus fare.

It is recommended that:

The bike rack facilities are installed on Red Bus Service local routes, and to be free of charge to bus users.

- A rebate on travel fare could be given to the passengers joining the Rack n' Ride Program.

2. Improve the Public Transport Network

Recommendation 1 – Express Buses

Express bus services will use arterial roads to offer service between Wyong and Tuggerah rail stations and the proposed Long Jetty Retail Centre, The Entrance Town Centre and The Entrance North Village Centre. It can play a more prominent role in feeding passengers to the train line.

More study of this concept would be required to determine feasibility.

Recommendation 2 – Local Circulator Bus Services

Since The Entrance is a tourist area, it is likely to benefit from an internal circulator bus that connects attractions to park and ride facilities that could be located at various points throughout the Entrance. This service would be operated seasonally to reduce the amount of internal trips within The Entrance, thus reducing traffic volumes.

The map on page 116 shows a suggested route. This route would need further testing for feasibility but the concept is that it would run in a continuous loop with a frequency of service to be determined. A bike rack on the front of the bus should also be a feature of the service. The bus should have distinctive painting and a logo consistent with the branding of The Entrance. An alternative clean fuel vehicle would add to the environmental benefits.

The route could stop at the following points:

- Tuggerah Lake Foreshore Area
- Picnic Point
- Long Jetty Residential Area (Various Parts)
- The Entrance North Village Centre
- Dunleith Point (at The Entrance North)
- Toowoan Bay Village Centre
- Beach access points at
 - Toowoan Bay,
 - Blue Bay
 - Shelly Beach
- Ocean Baths
- Marine Parade Coastal Walk and Surf Club
- Memorial Park
- Long Jetty Centre
- Saltwater Creek Reserve Park
- The Entrance Town Centre
- Karagi Reserve (at The Entrance North)
- Karagi Point (at The Entrance)
- Swadling Park Reserve
- Tuggerah Lakes Golf Course
- The Entrance North Foreshore Reserve

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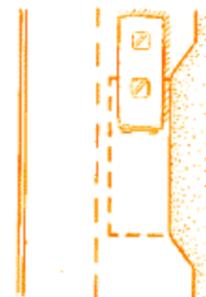
Detailed Strategies

7.6 Public Transport Management Action Plan



Bus Advance Areas

Bus advance areas enable buses to go to the front of the queue at traffic lights. An extra set of traffic lights with a special bus signal, is installed about 50 metres before the intersection to hold other traffic back while buses go to the front.



Bus Border

Bus borders are the reverse of bus bays. They intrude onto a traffic lane making it easier for buses to stop and to move back into the traffic flow.



Bus Lanes

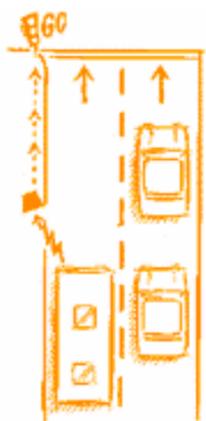
Bus lanes separate buses from other traffic, enabling them to avoid traffic congestion. Bus lanes are clearly marked kerbside lanes, which generally operate city bound during the morning traffic peak and outbound during the afternoon traffic peak.



Bus Bypasses

Bypasses are special lanes at intersections that enable buses to travel around traffic stopped at intersections.

At some intersections buses will be allowed to travel straight through from a left-turn-only lane, helping them to bypass the queues in other lanes.



Signal Pre-emption

Signal pre-emption detects when a bus is coming and turns or keeps traffic lights green to let the bus through an intersection. The system consists of detectors in the roads, which are linked to traffic lights. When a bus passes over a detector, a message is sent ahead that a bus is on its way. If the lights are about to turn red, they are instructed to stay green until the bus passes through. If the lights are red, then the green phase is brought forward

We would also suggest a resident circulator bus that would operate year round and would connect the main retail activity centres of The Entrance Town Centre, Long Jetty with residential areas and The Entrance North. The map on page 116 indicates a suggested route.

These circulator routes would need further study to confirm feasibility, fares and costs.

Recommendation 3 - Restoration of Ferry Service

Historically, there were ferries that went from Wyong to The Entrance and docked at Long Jetty. This service ended in the 1920's when the road system improved. In order to encourage tourists to visit The Entrance without a car, ferry service could be reinstated on a seasonal basis to provide a connection to Tuggerah or Wyong Train Stations as in the past. In this way, tourists could experience arriving to The Entrance by water and enjoy a unique experience. A feasibility study would be needed.

3. Improve Reliability of Public Transport

In order to ensure a high quality level of bus service in terms of reliability and time accuracy, it is necessary to provide bus priority measures to give buses the operational priority particularly during the peak hours or in congested traffic and improve bus-running time.

Some solutions include exclusive bus lanes, priority traffic signals and bus bays. Concepts that could be considered are illustrated in the left column. More detailed study would be needed. The Entrance Road corridor would benefit from these improvements to better manage traffic flows.

4. Integrate Transport Access and Land Use Planning

The provision of adequate transit services to new development is important in order to promote mobility alternatives. It is recommended that all non-residential DA's and residential DA's over 50 units include a transport impact assessment and that the local bus provider be advised of all new development. This will help to make sure that the level of transit services keeps pace with changes in land use.

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7.7 DCP80/64 Compliance with SEPP65

SEPP65 was implemented in 2002 aimed to raise the design quality of residential flat development across the state through the application of ten design quality principles. The Residential Flat Design Pattern Book supports good design by presenting a range of built and virtual examples of well designed residential flat buildings and by describing the positive contribution each makes to its urban context. The Residential Flat Design Code sets broad parameters within which good design of residential flat buildings can occur by illustrating the use of development controls and consistent guidelines. It will be an important resource for council planners responsible for creating new plans relating to residential flats and for assessing residential flat development under SEPP 65. With the SEPP, it provides the 'how to' of designing better built outcomes.

In order to improve the overall design quality of residential flat buildings in The Entrance area, the Council planning policies should be consistent with The Residential Flat Design Code. This section is aimed to investigate the general consistencies between DCP60, DCP64 and RFDC under the following criteria:

- Sunlight Access
- Natural Ventilation
- Building Line, Front, Side and Rear Setback
- Communal Open Space
- Private Open Space
- Site Coverage and Landscape Area Provision
- Deep Soil Planting
- Lack of storey definition
- Use of Site Analysis
- Maritime Theme
- Ground Level Apartment
- Garbage Enclosure
- Balcony Design

General Policies Objectives

DCP64

DCP64 applies to multiple dwelling residential developments in Wyong Shire, including residential flat development and dwellings associated with commercial premises. The plan aims to protect and enhance the amenity of new and existing residential areas by:

- Encouraging the provision of a variety of dwelling types and allowing for innovation in individual design.
- Promoting standards of design which achieve functional and aesthetic quality in development.
- Encouraging designs of high architectural quality.
- Encouraging residential development appropriate to the local area context.
- Promoting sustainable development which is energy and water efficient.

DCP60

DCP60 is aimed to encourage and facilitate the development of The Entrance as a major tourist destination and residential neighbourhood by providing development criteria which focus on achieving desirable built forms and quality urban design solutions that complement the natural features of the area.

Residential Flat Design Code (RFDC)

This Residential Flat Design Code is a resource to improve the design of residential flat development. It is based on the principle that good quality buildings help improve the quality of life. It deals with the location, size and scale, appearance and amenity of the buildings in which many people live.

This Design Code applies to residential flat development. It uses the definition of residential flat building in SEPP 65 that such a building comprises:

- (a) three or more storeys (not including levels below ground level provided for car parking or storage, or both, that do not protrude more than 1.2 metres above ground level)
- (b) four or more self-contained dwellings, but does not include a Class 1a building or a Class 1b building under the Building Code of Australia.

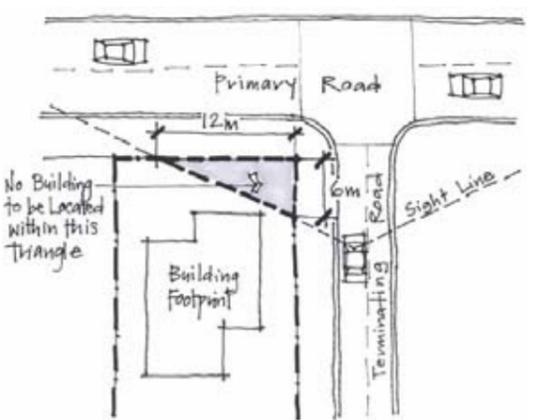
However many of its recommendations may be relevant to other types of residential development.

Comparison Table

The following tables will review the existing DCP 60 and DCP 64 respectively against the Residential Flat Design Code.

Category	DCP64		DCP60		RFDC (SEPP65)		Consistent With RFDC?	DR Comment																													
	Clause	Control	Clause	Control	Clause	Control																															
Site Analysis		<p>c The Site Analysis Plan identifies existing conditions relating to the development site and existing design constraints on adjacent sites, which are likely to influence design choices. The design should demonstrate that these issues have been taken into account. The site analysis plan shall be submitted in A3 size. The detail of the plan should be tailored to the size and complexity of the proposed development.</p> <p>d. A Site Analysis Plan shall be submitted with any Development Application. The following is an indicative checklist of issues to be addressed by the Site Analysis Plan:</p> <table border="1"> <tr> <td>Orientation</td> <td>North point and aspect. Consider the movement of the sun, Particularly at winter solstice.</td> </tr> <tr> <td>Topography</td> <td>Slope of the land at 0.2m intervals where cut and fill or benching of the site is proposed, (otherwise 1.0m intervals) and direction of fall.</td> </tr> <tr> <td>Streetscape</td> <td>Setback patterns, position and form of existing houses and developments on adjacent and opposite lands; overall height and shadows from adjacent buildings.</td> </tr> <tr> <td>Context</td> <td>Location of the site in relation to transport, nearby schools, community facilities or shops. (Special consideration for prominent sites including elevated or rural land, corner sites, heritage and cultural issues).</td> </tr> <tr> <td>Vegetation</td> <td>Existing trees and vegetation on the land, on adjoining land and in the street / locality and their true canopy spread within or onto the site.</td> </tr> <tr> <td>Privacy</td> <td>Any windows or private areas of neighbouring developments facing the land.</td> </tr> <tr> <td>Noise & light</td> <td>Location and extent of nearby sources of noise or light impacts (e.g. major roads, intersections, sports fields or commercial areas).</td> </tr> <tr> <td>Views</td> <td>Consideration of view corridors to and from the site and neighbours' views.</td> </tr> <tr> <td>Prevailing Winds</td> <td>These can vary for a particular site, eg. coastal areas. Orientation to take advantage of prevailing breezes for natural ventilation can add greatly to comfort levels within the dwelling.</td> </tr> <tr> <td>Services</td> <td>Location of utility services (including stormwater drainage lines, electricity poles and kerb crossings).</td> </tr> <tr> <td>Vehicle Access</td> <td>Best position for a driveway.</td> </tr> <tr> <td>Survey Constraints</td> <td>Surveyed location of any easements, rights of way or other relevant restrictions.</td> </tr> <tr> <td>Security</td> <td>Any natural surveillance opportunities to and from the site.</td> </tr> <tr> <td>Existing Structures</td> <td>Including details of existing fences, retaining walls and buildings on site.</td> </tr> </table> <p>e. The Site Analysis Plan needs only to address those points that are relevant to the locality and development proposed.</p>	Orientation	North point and aspect. Consider the movement of the sun, Particularly at winter solstice.	Topography	Slope of the land at 0.2m intervals where cut and fill or benching of the site is proposed, (otherwise 1.0m intervals) and direction of fall.	Streetscape	Setback patterns, position and form of existing houses and developments on adjacent and opposite lands; overall height and shadows from adjacent buildings.	Context	Location of the site in relation to transport, nearby schools, community facilities or shops. (Special consideration for prominent sites including elevated or rural land, corner sites, heritage and cultural issues).	Vegetation	Existing trees and vegetation on the land, on adjoining land and in the street / locality and their true canopy spread within or onto the site.	Privacy	Any windows or private areas of neighbouring developments facing the land.	Noise & light	Location and extent of nearby sources of noise or light impacts (e.g. major roads, intersections, sports fields or commercial areas).	Views	Consideration of view corridors to and from the site and neighbours' views.	Prevailing Winds	These can vary for a particular site, eg. coastal areas. Orientation to take advantage of prevailing breezes for natural ventilation can add greatly to comfort levels within the dwelling.	Services	Location of utility services (including stormwater drainage lines, electricity poles and kerb crossings).	Vehicle Access	Best position for a driveway.	Survey Constraints	Surveyed location of any easements, rights of way or other relevant restrictions.	Security	Any natural surveillance opportunities to and from the site.	Existing Structures	Including details of existing fences, retaining walls and buildings on site.							
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			N/A	No Specific Control	P.39	<p>Site analysis should include plan and section drawings of the existing features of the site, at the same scale as the site and landscape plan, together with appropriate written material. Information may include but is not limited to: (see Table A: Pre-Development Application Requirements for additional information on local context requirements)</p> <ul style="list-style-type: none"> - site dimensions, site areas, north point - location of site in relation to shops, community facilities and transport - form and character of adjacent and opposite buildings in the streetscape, including both sides of any street that the development fronts - location and use of any existing buildings or built features on the site - location and important characteristics of adjacent public, communal and private opens spaces - location, use, overall height (storeys, metres) and important parapet/datum lines of adjacent buildings - location and height of existing windows and balconies on adjacent properties facing the site - location, height and characteristics of adjacent walls and fences - location of major trees on site, on adjacent properties and street trees, identified by size and botanical or common names - topography, showing spot levels and contours 0.5 metre intervals for the site, adjoining streets and land adjoining the site - views to and from the site - prevailing winds - orientation and overshadowing of the site and adjoining properties by neighbouring structures and trees - geotechnical characteristics of the site and suitability of development - pedestrian and vehicular access points (existing and proposed) - location of utility services, including electricity poles, stormwater drainage lines, natural drainage, kerb crossings and easements - location of any infrastructure easements or rights of way - significant noise sources on and in the vicinity of the site, particularly vehicular traffic, train, aircraft and industrial operations noise - assessment of site contamination, proposed remediation strategy and a statement from a recognised expert that the site can be remediated and made suitable for the proposed uses. <p>A written statement explaining how the design of the proposed development has responded to the site analysis must accompany the development application. (see Table B: Development Application Recommendations in the Appendices)</p>	✓	<p>Site analysis is a critical tool in the design and assessment of development applications. Site analysis should clearly identify development opportunities and constraints and should be used to influence the design of a development, to minimise negative impacts on the amenity of adjoining properties and to compliment neighbourhood character.</p> <p>The existing DCP60 and 64 is broadly consistent with the RFDC recommendations.</p>																													

Category	DCP64		DCP60		RFDC (SEPP65)		Consistent With RFDC?	DR Comment
	Clause	Control	Clause	Control	Clause	Control		
Sunlight access	9.3.1	a. At least 75% of each required private and communal open space area, courtyard, balcony, terrace or the like shall receive at least three hours unobstructed sunlight between the hours of 9 am and 3 pm on June 21(winter solstice).	2.11c	For all forms of development, the standard requirement is that at least 75% of the required open space is to have a minimum of three (3) hours of continuous and unobstructed sunlight between 9.00am and 3.00pm on 21st June (winter solstice).	P.85	Living rooms and private open spaces for at least 70 percent of apartments in a development should receive a minimum of three hours direct sunlight between 9 am and 3 pm in mid winter. In dense urban areas a minimum of two hours may be acceptable.	Generally Consistent ✓	The existing DCP60 and 64 controls only cover private and communal open space area, courtyard, balcony and terrace. There is no control in regard to the living room solar access. It is recommended to add in living rooms to existing solar access controls in DCP 60 and 64. Furthermore, Council is recommended to specify a maximum number of single-aspect apartments with a southerly aspect to ensure the consistency with the RFDC recommendations.
		b. New development shall have due regard for maintaining solar access to adjoining properties and not cause overshadowing. At least 75% of required private open space areas on adjoining lands shall receive at least three hours unobstructed sunlight between the hours of 9 am and 3 pm on June 21 (winter solstice).				✘		
		c. Dwellings should be orientated to allow optimum solar access for internal living areas.						
		d. Buildings shall be designed to minimise adverse impact by wind velocities, intensities and directions on the amenity of the development and surrounding areas.						
		e. A weather protected entrance shall be provided to each dwelling.						
Natural Ventilation	Appendix B Ventilation	a. Windows should be placed to take advantage of prevailing breezes in summer with clear paths through the dwelling. Prevailing breeze direction in Wyong Shire during the hot summer months varies depending on distance from the coast and lakes.	N/A	No Specific Control	P.87	Building depths, which support natural ventilation typically range from 10 to 18m.	✘	The existing natural ventilation controls in DCP60 and 64 are too concise. A more specific design control is recommended to achieve better development outcomes. It is recommended to incorporate the RFDC control into DCP 60 and 64.
		b. Louvers placed in internal walls can greatly assist ventilation.				Sixty percent (60%) of residential units should be naturally cross ventilated.		
						Twenty five percent (25%) of kitchens within a development should have access to natural ventilation.		
						Developments, which seek to vary from the minimum standards, must demonstrate how natural ventilation can be satisfactorily achieved, particularly in relation to habitable rooms.		

Category	DCP64		DCP60		RFDC (SEPP65)		Consistent With RFDC?	DR Comment																
	Clause	Control	Clause	Control	Clause	Control																		
Building Line, front, side and rear setbacks	5.3.2 & 5.3.3	<p><i>Low-rise Residential Flat Buildings</i></p> <table border="1"> <thead> <tr> <th>Aspect</th> <th>Minimum Setback Required</th> </tr> </thead> <tbody> <tr> <td>Front setbacks for development up to and including 2 storeys in height.</td> <td>"Category A" roads: 7.5 metres; "Category B" roads: 6.0 metres; "Category C" roads: 4.5 metres. <i>Note: For "Category C" roads where the road reserve is < 12 metres and development is proposed on both sides of the road, the minimum setback is 6.0 metres.</i></td> </tr> <tr> <td>Front setbacks for development over 2 storeys in height</td> <td>7.5 metres applies to all aspects of the development, with the exception of a portico, or structure required for a waste collection area.</td> </tr> <tr> <td>Side setbacks for development up to and including 2 storeys in height.</td> <td>1.5 metres</td> </tr> <tr> <td>Side setbacks for development over 2 storeys in height.</td> <td>First Storey: 1.5 metres Second Storey: 1.5 metres Third Storey: 4.5 metres Fourth Storey: 4.5 metres</td> </tr> <tr> <td>Rear setback</td> <td>4.5 metres</td> </tr> <tr> <td>Garages</td> <td>A minimum setback of 6.0 metres applies to garages where they are accessed directly from the road system, except Category A roads, where 7.5 metres applies.</td> </tr> <tr> <td>Corner Allotments</td> <td>Same as side and rear setbacks, plus comply with the sight preservation lines.</td> </tr> </tbody> </table>	Aspect	Minimum Setback Required	Front setbacks for development up to and including 2 storeys in height.	"Category A" roads: 7.5 metres; "Category B" roads: 6.0 metres; "Category C" roads: 4.5 metres. <i>Note: For "Category C" roads where the road reserve is < 12 metres and development is proposed on both sides of the road, the minimum setback is 6.0 metres.</i>	Front setbacks for development over 2 storeys in height	7.5 metres applies to all aspects of the development, with the exception of a portico, or structure required for a waste collection area.	Side setbacks for development up to and including 2 storeys in height.	1.5 metres	Side setbacks for development over 2 storeys in height.	First Storey: 1.5 metres Second Storey: 1.5 metres Third Storey: 4.5 metres Fourth Storey: 4.5 metres	Rear setback	4.5 metres	Garages	A minimum setback of 6.0 metres applies to garages where they are accessed directly from the road system, except Category A roads, where 7.5 metres applies.	Corner Allotments	Same as side and rear setbacks, plus comply with the sight preservation lines.	2.6a	<p>Details of setback requirements in Residential zones (except 2(g)) are contained in Development Control Plan No. 64 - Multiple Dwelling Residential Development.</p>	P.28 & P.29	<p>Up to four storeys/12 m:</p> <ul style="list-style-type: none"> - 12m between habitable rooms/balconies - 9m between habitable/balconies and non-habitable rooms - 6m between non-habitable rooms <p>Five to eight storeys/up to 25m:</p> <ul style="list-style-type: none"> - 18m between habitable rooms/balconies - 13m between habitable rooms/balconies and non-habitable rooms - 9m between non-habitable rooms <p>Nine storeys and above/ over 25m:</p> <ul style="list-style-type: none"> - 24m between habitable rooms/balconies - 18m between habitable rooms/balconies and non-habitable rooms - 12m between non-habitable rooms 	✓	The existing building separation control in DCP60 and 64 is consistent with the RFDC recommendations.
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5.3	<p><i>High-rise Residential Flat Buildings</i></p> <table border="1"> <thead> <tr> <th>Aspect</th> <th>Minimum Setback Required</th> </tr> </thead> <tbody> <tr> <td>Front setbacks</td> <td>7.5 metres applies to all aspects of the development, with the exception of a portico, or structure required for a waste collection area.</td> </tr> <tr> <td>Side & rear setbacks</td> <td>First Storey: 6.0 metres Second storey: 6.0 metres Third Storey: 6.0 metres Fourth Storey: 6.0 metres Fifth storey: 9.0 metres Sixth storey: 9.0 metres Seventh storey: 9.0 metres Eighth storey: 9.0 metres Ninth storey and above: 12.0 metres <i>Note: No more than 4 consecutive storeys of the building shall be at the same setback.</i></td> </tr> <tr> <td>Garages</td> <td>A minimum setback of 6.0 metres applies to garages where they are accessed directly from the road system, except Category A roads, where 7.5 metres applies.</td> </tr> <tr> <td>Corner Allotments</td> <td>Same as side and rear setbacks, plus comply with the sight preservation lines.</td> </tr> </tbody> </table>	Aspect	Minimum Setback Required	Front setbacks	7.5 metres applies to all aspects of the development, with the exception of a portico, or structure required for a waste collection area.	Side & rear setbacks	First Storey: 6.0 metres Second storey: 6.0 metres Third Storey: 6.0 metres Fourth Storey: 6.0 metres Fifth storey: 9.0 metres Sixth storey: 9.0 metres Seventh storey: 9.0 metres Eighth storey: 9.0 metres Ninth storey and above: 12.0 metres <i>Note: No more than 4 consecutive storeys of the building shall be at the same setback.</i>	Garages	A minimum setback of 6.0 metres applies to garages where they are accessed directly from the road system, except Category A roads, where 7.5 metres applies.	Corner Allotments	Same as side and rear setbacks, plus comply with the sight preservation lines.	P.30 & P.31	<p>Setbacks typically vary from none in city centres to 10 metres on suburban streets</p> <ul style="list-style-type: none"> • Establish a dimension to match existing development or step back from special buildings or to retain significant trees • Use a 'build to' line in urban areas where a consistent street edge needs to be reinforced. A 'build to' line includes the articulation zone • Use a range where the desired character is for variation within overall consistency; a 5 to 9 m range is typical of suburban areas. • In general, no part of a building or above ground structure may encroach into a setback zone. Exceptions are: <ul style="list-style-type: none"> - underground parking structures no more than 1.2 metres above ground, where this is consistent with the desired streetscape (see Ground Floor Apartments) - awnings - balconies and bay windows. 	Generally Consistent ✓	<p>The building setback is currently controlled under the category of 'low rise residential flat building' and 'high rise residential flat building' in DCP60 and 64.</p> <p>The term 'low rise residential flat building' and 'high rise residential flat building' is improperly defined in DCP64 creating confusion to both the applicants and Council planning officers.</p>									
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	<p>No building is to be erected within the triangle from the intersection of the two street boundary lines formed by a sight line 12m along the primary road frontage and 6m along the terminating road frontage, as illustrated in Figure 10.</p> 	P.33	<ul style="list-style-type: none"> • Design side and rear setbacks in conjunction with building separation, open space and deep soil zone controls. • Where the desired character is for a continuous street frontage, zero side setbacks are appropriate. • Where setbacks are limited by lot size and adjacent buildings, 'step in' the plan on deep building to provide internal courtyards and to the limit the length of walls facing boundaries. • In general, no part of a building or above ground structure may encroach into a setback zone. Exceptions are: <ul style="list-style-type: none"> - underground parking structures no more than 1.2m metres above ground and where the roof of the parking structure is a private or communal open space - balconies and bay windows. 	Generally Consistent ✓	<p>It is recommended to provide a clearer definition for both terms.</p> <p>Furthermore, Council is also recommended to provide specific setback requirements for mixed use development in 3(a) zone.</p>																			

Category	DCP64		DCP60		RFDC (SEPP65)		Consistent With RFDC?	DR Comment
	Clause	Control	Clause	Control	Clause	Control		
Deep soil planting	8.1.2	<p>a. A minimum 50% of the required soft landscaped area of the site at ground level shall be a deep soil zone. This may be achieved by optimising the retention provision of consolidated deep soil zones within a site by:</p> <ul style="list-style-type: none"> - The design of basement and sub-basement car parking, so as not to fully cover the site. - The use of front and side setbacks for deep soil planting. <p>b. Optimise the extent of deep soil zones beyond the site boundaries by locating them contiguous with the deep soil zones of adjoining properties.</p> <p>c. Promote landscape health by supporting a rich variety of vegetation types and sizes.</p> <p>d. Increase the permeability of paved areas by limiting the amount of hardstand surfaces on the site or using pervious materials.</p>	N/A	No Specific Control	P.44	<p>A minimum of 25 percent of the open space area of a site should be a deep soil zone; more is desirable. Exceptions may be made in urban areas where sites are built out and there is no capacity for water infiltration. In these instances, stormwater treatment measures must be integrated with the design of the residential flat building.</p>	Generally Consistent ✓	<p>The existing control is broadly consistent with the RFDC recommendations.</p> <p>Both policies would be improved by providing a more specific control on the placement and configuration for deep soil zone and landscape area in order to ensure that these spaces are usable for outdoor recreational activities.</p>
Communal Open Space	9.2.1	<p>a. Minimum 25% of the site area at ground level shall be soft landscaping.</p> <p>b. Where communal open space is provided, it shall be landscaped and include the provision of facilities such as barbecues, outdoor seating, tennis court, playground equipment or a swimming pool, as appropriate to the scale of the development.</p> <p>c. Consideration should also be given to the provision of a separate locker for the storage of garden tools.</p> <p>d. The required communal open space area shall not be provided within the front building setback area, unless there is a demonstrated need. Front setback areas are generally reserved for landscaping works and plantings.</p> <p>e. Roof-top communal open space may be considered for low rise and high rise residential flat developments only where proposed in addition to the required communal open space at ground level.</p> <p>f. A building for communal use, meetings and consultations should be provided.</p> <p>g. Open space shall be located to increase the potential for residential amenity by designing buildings which:</p> <ul style="list-style-type: none"> - Are sited to allow for landscape design. - Are sited to optimise daylight access in winter and shade in summer. - Have a pleasant outlook. - Have increased visual privacy between apartments. 	2.7	<p>c. All landscaping is to have regard to the streetscape and context within which the development sits. Opportunities to integrate with public open space areas will be encouraged. Developers should consult with Council's Landscape Architect in relation to the requirements of any adopted Landscape Strategy applicable.</p> <p>d. Native plant species, particularly those endemic to the locality, should be used in public streetscapes in preference to exotic species wherever possible.</p> <p>e. The use of canopy trees at street level is encouraged to soften the visual impact of surrounding buildings.</p> <p>f. Footpath pavement materials should be in accordance with Council's preferred surface treatment strategy</p>	P.49	<p>The area of communal open space required should generally be at least between 25 and 30 percent of the site area. Larger sites and brownfield sites may have potential for more than 30 percent.</p> <p>Where developments are unable to achieve the recommended communal open space, such as those in dense urban areas, they must demonstrate that residential amenity is provided in the form of increased private open space and/or in a contribution to public open space.</p>	Generally Consistent ✓	<p>The existing control is generally consistent with the RFDC recommendations.</p> <p>The term 'low rise residential flat building' and 'high rise residential flat building' is improperly defined in DCP64 creating confusion to both the applicants and Council planning officers.</p> <p>Council is recommended to provide a clearer definition for both terms.</p>
	9.2.3	<p><i>High Rise Residential Flat Buildings</i></p> <p>Incorporate communal open space in up to two locations at a minimum rate of 10sqm per dwelling and with a minimum width of 5 metres.</p>						

Category	DCP64		DCP60		RFDC (SEPP65)		Consistent With RFDC?	DR Comment
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Private Open Space	9.1.3	<p><i>Low Rise Residential Flat Buildings</i></p> <p>Option 1: Each dwelling shall have a private balcony, terrace or ground level courtyard comprising at least 10 square metres in area and with a minimum dimension of 2 metres, directly accessible from a living area within the dwelling. Additionally, communal open space is to be incorporated on site in up to two locations at a minimum rate of 20 square metres per dwelling and with a minimum width of 5 metres.</p> <p>Option 2: Alternatively, each dwelling in a low rise residential flat building shall have a private balcony, terrace or ground level courtyard comprising at least 30 square metres in area and with a minimum dimension of 2 metres, directly accessible from a living area within the dwelling. If private open space is provided in this manner, the development will not be required to provide communal open space.</p>	2.7b	Development Control Plan No. 64 sets out Council's requirements in relation to the provision of private open space within courtyards and on patios, decks and balconies	P.49	The minimum recommended area of private open space for each apartment at ground level or similar space on a structure, such as on a podium or car park, is 25sqm; the minimum preferred dimension in one direction is 4 metres. (see Balconies for other private open space requirements)	Generally Consistent ✓	<p>Private open space is controlled under the category of 'low rise residential flat building' and 'high rise residential flat building' in DCP60 and 64.</p> <p>As mentioned earlier, the term 'low rise residential flat building' and 'high rise residential flat building' is improperly defined creating confusion to both the applicants and Council planning officers.</p> <p>It is recommended that each zoning should have its individual private open space requirements.</p>
	9.1.4	<p><i>High Rise Residential Flat Buildings</i></p> <p>Each dwelling in a high rise residential flat building requires a private balcony, terrace or ground level courtyard comprising at least 10 square metres in area and with a minimum dimension of 2 metres, directly accessible from a living area within the dwelling.</p>			P.72	<p>Provide primary balconies for all apartments with a minimum depth of 2 metres. Developments which seek to vary from the minimum standards must demonstrate that negative impacts from the context-noise, wind-can not be satisfactorily mitigated with design solutions.</p> <p>Require scale plans of balcony with furniture layout to confirm adequate, useable space when an alternate balcony depth is proposed.</p>		
	9.1.5	<p><i>Single Dwellings above Shops or Commercial Premises</i></p> <p>Private open space for a single dwelling above commercial premises shall be provided as a private terrace or balcony having minimum area of 30 square metres and a minimum dimension of 4.5 metres, directly accessible from a living area within the dwelling.</p>						
	9.1.6	<p><i>Residential Flat Developments above Shops or Commercial Premises</i></p> <p>Open space shall be provided for each dwelling in a residential flat development above commercial premises in accordance with one of the following options:</p> <p>Option 1: Each dwelling shall have a private balcony, terrace or ground level courtyard comprising at least 10 square metres in area and with a minimum dimension of 2 metres, directly accessible from a living area within the dwelling. Additionally, communal open space is to be incorporated on site in up to two locations at a minimum rate of 20 square metres per dwelling and with a minimum width of 5 metres.</p> <p>Option 2: Alternatively, each dwelling in a low rise residential flat building shall have a private balcony, terrace or ground level courtyard comprising at least 30 square metres in area and with a minimum dimension of 2 metres, directly accessible from a living area within the dwelling. If private open space is provided in this manner, the development will not be required to provide communal open space.</p>						

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Site Coverage and landscape area provision	4.3a	A minimum 25% of site area at ground level shall be 'soft' landscaping, excluding all hardstand areas. Open space areas and setback areas may be included in this calculation only where these do not include hardstand surfaces	N/A	No Specific Control	p.49	<p>The area of communal open space required should generally be at least between 25 and 30 percent of the site area. Larger sites and brownfield sites may have potential for more than 30 percent.</p> <p>Where developments are unable to achieve the recommended communal open space, such as those in dense urban areas, they must demonstrate that residential amenity is provided in the form of increased private open space and/or in a contribution to public open space.</p>	Generally Consistent ✓	<p>The existing control in landscape provision is consistent with the RFDC recommendations.</p> <p>Council is recommended to provide specific control on minimum dimensions for landscape area.</p> <p>Furthermore, Council is also recommended to provide detail control on site coverage and landscape area provision for the mixed use (retail and residential) development in 3(a) zone.</p>
Ground Level Apartment	N/A	No specific Control	N/A	No specific Control	p.49	The minimum recommended area of private open space for each apartment at ground level or similar space on a structure, such as on a podium or car park, is 25sqm; the minimum preferred dimension in one direction is 4 metres. (see Balconies for other private open space requirements)	✗	Council is recommended to incorporate the RFDC recommendations into DCP60 and 64.
					P.77 & 78	<p>Design front gardens or terraces, which contribute to the spatial and visual structure of the street while maintaining adequate privacy for apartment occupants. This can be achieved by: animating the street edge, for example, by promoting individual entries for ground floor apartments. This creates more pedestrian activity along the street and articulates the street edge by:</p> <ul style="list-style-type: none"> - balancing privacy requirements and pedestrian accessibility - providing appropriate fencing, lighting and/ or landscaping to meet privacy and safety requirements of occupants while contributing to a pleasant streetscape (see Fences + Walls, Landscape Design and Safety) - utilising a change in level from the street to the private garden or terrace to minimise site lines from the streets into the apartment for some apartments - increasing street surveillance with doors and windows facing onto the street. <p>Ensure adequate privacy and safety of ground floor units located in urban areas with no street setbacks by:</p> <ul style="list-style-type: none"> - stepping up the ground floor from the level of the footpath a maximum of 1.2 metres (see Fences + Walls for detail considerations) - designing balustrades and establishing window sill heights to minimise site lines into apartments, particularly in areas with no street setback - determining appropriateness of individual entries (see Building Entry, Safety) - ensuring safety bars or screens are integrated into the overall elevation design and detailing. <p>Promote housing choice by:</p> <ul style="list-style-type: none"> - providing private gardens, which are directly accessible from the main living spaces of the apartment and support a variety of activities - maximising the number of accessible and visitable apartments on the ground floor - supporting a change or partial change in use, such as a home office accessible from the street or a corner shop (see Mixed Use, Flexibility and Ceiling Heights). <p>Increase opportunities for solar access in ground floor units, particularly in denser areas by:</p> <ul style="list-style-type: none"> - providing higher ceilings and taller windows (see Ceiling Heights) choosing trees and shrubs which provide solar access in winter and shade in summer (see Landscape Design). 	✗	

Category	DCP64		DCP60		RFDC (SEPP65)		Consistent With RFDC?	DR Comment																
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Visual Privacy	9.4.1	<p>a. Direct overlooking of internal living areas and private open space to surrounding dwellings shall be minimised by building layout, location and design of windows and balconies and screening devices.</p> <p>b. Where living area windows or balconies of dwellings are proposed within close proximity of living area windows or balconies of adjacent dwellings, they shall be offset by a minimum of 1 metre from the edge of the opposite window and balconies be screened or oriented to ensure visual privacy. Window openings at first floor level and above should be orientated or designed to minimise the potential for overlooking of adjacent properties and this consequent loss of privacy. Windows which are orientated towards adjoining properties and do not adequately restrict overlooking will be required to be opaque finish or located at appropriate heights above floor level to minimise overlooking of adjoining properties.</p> <p>The recommended building separation distances are:</p> <table border="1"> <thead> <tr> <th></th> <th>Between habitable rooms</th> <th>Between habitable room and a non-habitable room</th> <th>Between non-habitable rooms</th> </tr> </thead> <tbody> <tr> <td>Up to 4 storeys</td> <td>12 metres</td> <td>9 metres</td> <td>6 metres</td> </tr> <tr> <td>5 to 8 storeys</td> <td>18 metres</td> <td>13 metres</td> <td>9 metres</td> </tr> <tr> <td>9 storeys +</td> <td>24 metres</td> <td>18 metres</td> <td>12 metres</td> </tr> </tbody> </table>		Between habitable rooms	Between habitable room and a non-habitable room	Between non-habitable rooms	Up to 4 storeys	12 metres	9 metres	6 metres	5 to 8 storeys	18 metres	13 metres	9 metres	9 storeys +	24 metres	18 metres	12 metres	2.15	<p>a. Development is to be designed to avoid overlooking of living spaces within surrounding buildings and onto private open space areas.</p> <p>b. Visual privacy for adjoining properties and within developments can be achieved by:</p> <ul style="list-style-type: none"> - screening with landscaping, walls, fences or feature structures; - staggering the position of windows and balconies either horizontally or vertically; - use of splayed windows and balconies to minimise direct views into adjoining living areas; - use of narrow, translucent or obscured windows. 	P.28 & P.29	<p>Providing adequate building separation:</p> <p>Up to four storeys/12 m:</p> <ul style="list-style-type: none"> - 12m between habitable rooms/balconies - 9m between habitable/balconies and non-habitable rooms - 6m between non-habitable rooms <p>Five to eight storeys/up to 25m:</p> <ul style="list-style-type: none"> - 18m between habitable rooms/balconies - 13m between habitable rooms/balconies and non-habitable rooms - 9m between non-habitable rooms <p>Nine storeys and above/ over 25m:</p> <ul style="list-style-type: none"> - 24m between habitable rooms/balconies - 18m between habitable rooms/balconies and non-habitable rooms - 12m between non-habitable rooms 	✓	The existing building separation control in DCP60 and 64 is consistent with the RFDC recommendations.
			Between habitable rooms	Between habitable room and a non-habitable room	Between non-habitable rooms																			
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				P.58 & P.59	<p>Locate and orient new development to maximise visual privacy between buildings on site and adjacent buildings by:</p> <ul style="list-style-type: none"> - providing adequate building separation (see Building Separation) - employing appropriate rear and site setbacks (see Side and Rear Setbacks) - utilise the site layout to increase building separation by, for example, orienting buildings on narrow sites to the front and rear of the lot, thereby utilising the street width and rear garden depth to increase the separation distance. <p>Design building layouts to minimise direct overlooking of rooms and private open spaces adjacent to apartments by:</p> <ul style="list-style-type: none"> - balconies to screen other balconies and any ground level private open space - separating communal open space, common areas and access routes through the development from the windows of rooms, particularly habitable rooms - changing the level between ground floor apartments with their associated private open space, and the public domain or communal open space. (see Ground Floor Apartments) <p>Use detailed site and building design elements to increase privacy without compromising access to light and air. Design detailing may include:</p> <ul style="list-style-type: none"> - offset windows of apartments in new development and adjacent development windows - recessed balconies and/or vertical fins between adjacent balconies - solid or semi-solid balustrades to balconies louvres or screen panels to windows and/or balconies - fencing (see Fences and Walls) - vegetation as a screen between spaces incorporating planter boxes into walls or balustrades to increase the visual separation between areas - utilise pergolas or shading devices to limit overlooking of lower apartments or private open space. 	✗	Council is recommended to incorporate the RFDC recommendations into DCP60 and 64 to ensure these policies achieve the SEPP65 desired design objectives.																	

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Acoustic Privacy	9.4.2	<p>a. Site layout should separate active recreational areas, parking areas, vehicle accessways and service equipment areas from bedroom areas of dwellings.</p> <p>b. Development adjacent to high levels of uncontrollable external noise shall minimise the entry of that noise through building design and external wall treatment.</p>	N/A	No specific Control	P.83	<ul style="list-style-type: none"> Utilise the site and building layout to maximise the potential for acoustic privacy by providing adequate building separation within the development and from neighbouring buildings. Arrange apartments within a development to minimise noise transition between flats by: <ul style="list-style-type: none"> locating busy, noisy areas next to each other and quieter areas next to other quiet areas, for example, living rooms with living rooms, bedrooms with bedrooms using storage or circulation zones within an apartment to buffer noise from adjacent apartments, mechanical services or corridors and lobby areas minimising the amount of party (shared) walls with other apartments. Design the internal apartment layout to separate noisier spaces from quieter spaces by: <ul style="list-style-type: none"> grouping uses within an apartment-bedrooms with bedrooms and service areas like kitchen, bathroom, laundry together. Resolve conflicts between noise, outlook and views by using design measures including: <ul style="list-style-type: none"> double glazing operable screened balconies continuous walls to ground level courtyards where they do not conflict with streetscape or other amenity requirements. Reduce noise transmission from common corridors or outside the building by providing seals at entry doors. 	✘	The existing controls are too concise. Council is recommended to incorporate the RFDC recommendations into DCP60 and 64 to ensure these policies achieve the SEPP65 desired outcomes.																			
Floor Space Ratio	6.1	<table border="1"> <thead> <tr> <th>Zone</th> <th>Maximum Floor Space Ratio</th> </tr> </thead> <tbody> <tr> <td>2(a)</td> <td>0.5 : 1</td> </tr> <tr> <td>2(b) / 2(e)</td> <td>0.6 : 1</td> </tr> <tr> <td>2(c)</td> <td>0.9 : 1</td> </tr> <tr> <td>2(d)</td> <td>1.5 : 1</td> </tr> </tbody> </table>	Zone	Maximum Floor Space Ratio	2(a)	0.5 : 1	2(b) / 2(e)	0.6 : 1	2(c)	0.9 : 1	2(d)	1.5 : 1	<p>a. Details of the maximum number of dwellings permitted in a Residential 2(a), 2(b) or 2(c) zone are contained in Development Control Plan No. 64 - Multiple Dwelling Residential Development.</p> <p>b. For medium or high-rise buildings within a Residential 2(c) zone, the maximum floor space ratio (FSR) permitted is the same as that applicable to a Residential 2(d) zone in Development Control Plan No. 64</p> <table border="1"> <thead> <tr> <th>ZONE</th> <th>MAXIMUM FLOOR SPACE RATIO</th> </tr> </thead> <tbody> <tr> <td>2(a)</td> <td>0.5 : 1</td> </tr> <tr> <td>2(b)/2(e)</td> <td>0.6 : 1</td> </tr> <tr> <td>2(c)</td> <td>0.9 : 1</td> </tr> <tr> <td>2(d)</td> <td>1.5 : 1</td> </tr> </tbody> </table>	ZONE	MAXIMUM FLOOR SPACE RATIO	2(a)	0.5 : 1	2(b)/2(e)	0.6 : 1	2(c)	0.9 : 1	2(d)	1.5 : 1	P.77	<p>When envelopes are being used, the FSR should not fill them. Determine FSR by calculating it at 80 percent of the building envelope in denser urban areas and at 75 percent in suburban areas.</p> <p>Where there are no site-specific envelopes, ensure that the controls are coordinated so that height, setbacks and FSR are consistent with each other and with the desired built form outcome.</p> <p>Floor space should be measured from the inside face of external walls and 1400mm above the slab. It includes:</p> <ul style="list-style-type: none"> habitable space below ground (auditoria, cinemas, supermarkets) retail space (cafés) associated with main entrance and/or lobby. <p>It excludes:</p> <ul style="list-style-type: none"> main building entrances and associated foyers and lobbies common vertical circulation (stairs and lifts) underground: <ul style="list-style-type: none"> storage vehicular access, loading areas, garbage and services car parking plant rooms and vertical mechanical services and ducting communal recreational areas in residential buildings up to 5% of the total floor area of the building balconies, including those enclosed by operable screening devices the void space above double height spaces. <p>Relate FSR to minimum site frontage or range of site depths in areas with small lots or a variety of lot sizes and shapes. Different sites, for example, corner, midblock and wide shallow sites, have different floor space capacities and blanket controls may result in undesirable built form.</p> <p>Consider varying floor space ratio to provide incentives for housing, sustainability and public benefits including:</p> <ul style="list-style-type: none"> affordable housing street widening open space and parkland dedication colonnades, walkways and arcades public parking. 	✘	<p>Council is recommended to incorporate the RFDC recommendations into DCP60 and 64 to ensure that the SEPP65 objectives are addressed.</p> <p>Council is also recommended to provide additional FSR control for 3(a) zone. Further study will be required.</p>
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Garbage enclosures	7.2	<p>b. Determining the best location for communal bin storage areas can be difficult. Bins should be in a highly accessible location to residents. However, the aesthetics of the development, in particular its appearance from the street, must not be compromised. Design and construction of a bin storage area that integrates with the overall development and landscape plan should avoid this problem. Where bins need to be wheeled from the storage point to the collection point, consideration should be given to manual handling requirements and slope.</p> <p>c. Where waste bins are to be collected from a point within the site, adequate space shall be provided within the site to accommodate a rear-loading collection vehicle. Turning circles must comply with the turning circle for garbage trucks in Wyong Shire. A copy of this turning template is provided in Appendix E. Applicants should include turning circle templates on the plans to demonstrate compliance. Pedestrian and traffic safety must be considered in the design of the storage and collection points for bins. It is essential that bulk bins be stored on a level area, as close to the entry of the development as practical to avoid service trucks having to enter or traverse the site to collect the waste. Wherever possible waste collection vehicle movement should be in a forward direction.</p> <p>d. Separate bin rooms shall be required for mix use developments.</p>	N/A	No Specific Control	P.96	Locate storage areas for rubbish bins away from the front of the development where they have a significant negative impact on the streetscape, on the visual presentation of the building entry and on the amenity of residents, building users and pedestrians.	✘	<p>A more detailed controls is needed to ensure that the location and design of waste collection facilities complement the design of the development and not visually obtrusive in the streetscape and visible from other public places.</p> <p>Council is therefore recommended to incorporate the RFDC recommendations into DCP60 and 64</p>
Definition of Storey	N/A	No Specific Definition	Part 7 P.45	"storey" means the number of storeys, floors or levels which a building contains which may be intersected by the same vertical line, not being a line which passes through any wall of the building, and not including any below ground garage, rooftop lift motor or plant tanks, unenclosed rooftop facilities, terrace or deck or any parapet provided to improve the external appearance of the building (other than a parapet which gives the impression of an additional storey on the building).		A level in a development. This includes attic spaces with habitable rooms. It does not include space used for car parking, laundries or storeroom if the ceiling above the space is not more than 1200mm (measured from the lowest point on the site) above ground level	✘	<p>DCP64 should provide clear definition for the term 'storey'.</p> <p>The definition should consistent with RFDC.</p>
Deletion of maritime theme	N/A	No Specific Control	2.9	<p>a. A maritime theme has been adopted for The Entrance to complement its superb coastal location and existing land use activities. The maritime theme emphasises the holiday atmosphere and seaside image of The Entrance which is clearly evident in the town centre street improvements. It is important that future development on private land further reinforces this theme.</p> <p>b. The Design Guidelines contained in Annexure 1 set out Council's requirements in relation to design features, colour schemes, and construction materials. Development within Precincts 1, 2 and 3 is to be consistent with the adopted Maritime Theme. Council also encourages the adoption of this theme for development outside of these precincts.</p>	N/A	No Specific Control	✘	<p>Council is recommended to provide more design flexibility.</p> <p>Eliminate confusion in the interpretation of what is a "maritime design theme". Creates a theme park appearance rather than designs with contextual fit and form.</p>