

1. Name of plan

This plan is called the Great Lakes Development Control Plan.

Date of Adoption

The Great Lakes Development Control Plan was adopted by Great Lakes Council at the Strategic Committee Meeting on 12 November 2013.

Effective Date

The Great Lakes Development Control Plan was made effective on the date of publication of Great Lakes Local

Environmental Plan 2014 in the New South Wales Legislation website 4 April 2014.

Amendments

- 29 April 2015 - General amendments
- 15 May 2015- Addition of site specific controls for Briton Court Road, Stroud
- 23 October 2015- Flood Planning Area amendments
- 16 March 2016- Coastal Planning amendments
- 27 July 2016- Tree and Vegetation Preservation amendments
- 17 August 2016 - Dual Occupancy within Rural Zones amendments
- 11 August 2017 - Reserves setback amendments in Forster and Tuncurry
- 11 September 2017 -Water Sensitive Design amendments
- 17 January 2019 - Addition of site specific controls for Hawks Nest Village
- 4 September 2020 - Manufactured Home Estates and Caravan Parks
- 30 September 2021 - Vegetation Management

1.1. Land to which this plan applies

This Development Control Plan applies to all land to which the Great Lakes Local Environmental Plan 2014 (or as amended) applies.

1.2. Relationship of this DCP to other Planning Documents

The Act incorporates provisions relating to State and local planning instruments. State Environmental Planning Policies (SEPPs) may also apply to land within the local government area. Where this is the case, the statutory provisions of the SEPP will prevail over this Development Control Plan.

Local Environmental Plans (LEPs) are local level statutory plans that establish land use zones, objectives and development standards for development and environmental conservation within the local government area.

The provisions of the Development Control Plan are in addition and complementary to the provisions of the Great Lakes Local Environmental Plan 2014 (or as amended). If there is an inconsistency between the two documents, the Great Lakes Local Environmental Plan 2014 (or as amended) shall prevail.

Sourced from original documents

The content of this Plan was sourced from:

- Great Lakes Local Environmental Plan 1996
- DCP 5 - Relocatable Housing Estates
- DCP 6 - Outdoor Advertising
- DCP 11 - Coomba Road Pacific Palms and Darawank

- DCP 13 - Moira Parade, Hawks Nest
- DCP 14 - Glen Ora Old Aerodrome and Minimbah Rds Nabitac
- DCP 15 - Minimbah Creek, Minimbah
- DCP 16 - Markwell Back Road via Bulahdelah
- DCP 17 - Little Street Foreshore, Forster
- DCP 20 - Tipton's Land Failford
- DCP 22 - Myall Quays Estate, Tea Gardens
- DCP 25 - Markwell Back Road, Bulahdelah
- DCP 27 - Minimbah Road, Nabitac
- DCP 28 - Exempt and Complying Development
- DCP 29 - Tea Gardens Foreshore
- DCP 30 - Residential Urban Areas
- DCP 31 - Subdivision
- DCP 32 - Wharf Street, Forster
- DCP 35 - Memorial Services Club, Forster
- DCP 36 - PT6177 DP 1099599 South Forster
- DCP 37 - Bellevue Hotel Manning Street, Tuncurry
- DCP 39 - Pacific Palms (Elizabeth Beach, Blueys Beach & Boomerang Beach)
- DCP 40 - Seven Mile Beach, The Lakes Way Forster
- DCP 41 - Macwood Road, Smiths Lake
- DCP 45 - Seal Rocks Coastal Hamlet
- DCP 46 - Single Dwelling House and Dual Occupancy
- DCP 47 - Tea Gardens (Low Density Residential)
- DCP 48 - Hawks Nest (Low Density Residential)
- DCP 51 - Forster Tuncurry Town Centres
- DCP 52 - Tea Gardens Hawks Nest Town Centres
- DCP 53 - Failford and Simmsville Rd Stroud.pdf
- DCP 54 - Water Sensitive Design
- DCP 55 - North Tuncurry
- DCP 56 - Stroud District and Heritage
- DCP 59 - Lot 15 DP 713933 Carmona Drive, South Forster
- DCP 59 - Figure 1 & Figure 2 (Concept Development Plan)
- DCP 63 - Failford West and Aquatic Road, South Forster
- DCP 66 - North Shearwater Release Area
- DCP 67 - Waste Not
- Industrial Code
- Car Parking Policy

This Plan rescinds in their entirety, all development control plans and codes identified above.

1.3. Development not needing Council consent (Exempt Development)

Exempt development can be undertaken under State Environmental Planning Policy (Exempt and Complying Development) 2008 without development consent.

To see if your development can be considered as exempt, go to the Electronic Housing Code website www.onegov.nsw.gov.au/new/agencies/ehc.

By providing your property address and identifying the development you want to undertake, the website will provide you with an Exempt Development Report. The Report will outline

Planning Rules

the rules that you must satisfy for the development to be exempt. If you cannot comply with these rules, a development application must be lodged with Council.

Exempt development may include minor works around the home such as:

Access ramps; Aerials, antennae and communication dishes; Air-conditioning units; Animal shelters; Aviaries; Awnings, blinds and canopies; Balconies, decks, patios, terraces; Barbeques and other outdoor cooking structures; Cabanas, cubby houses, garden sheds, greenhouses; Carports; Clothes hoists and clothes lines; Driveways and hard stand spaced; Fences; Flagpoles; Fowl and poultry houses; Garbage bin storage enclosure; Home businesses; Home-based child care; Hot water systems; Landscaping structures; Letterboxes; Minor building alterations (external- non-structural; internal- no change of room configuration); Pathways and paving; Playground equipment; Privacy screens; Rainwater tanks (above ground); Roller shutter doors adjoining lanes; Screen enclosures (of balconies, decks); Sculptures; Skylights, roof windows and ventilators; Swimming pools (portable and spas and child-resistant barriers; and Water features and ponds.

2 Introduction

This section provides general information about the Development Control Plan and includes details of the requirements that may be needed to support a development application.

2.1 The purpose of this development control plan

This Development Control Plan (DCP) has been prepared in accordance with Division 6 of the *Environmental Planning and Assessment Act 1979* (the Act) and with Part 3 of the *Environmental Planning and Assessment Regulation 2000 (EP&A Regulation)*. The DCP provides more detailed provisions than the Great Lakes Local Environmental Plan 2014 (LEP) for development in the Great Lakes local government area (LGA).

Division 6 of Part 3 of the Act introduced under the Environmental Planning and Assessment Act (Infrastructure and Other Planning Reform) 2005 commenced on 30 September 2005. This Division introduced new requirements for DCPs.

As a result of these changes to the Act, Council has consolidated its DCPs that apply within the Great Lakes LGA into one plan. It repeals all DCPs that previously applied in the Great Lakes.

On commencement of this plan, all of the DCPs which previously applied within the Great Lakes will cease to have effect. Instead, the provisions within those DCPs will now be contained within this plan. It follows that this plan will be the only DCP that applies to all land within the Great Lakes LGA. Any amendments to this DCP since commencement are listed at the front of this part.

Under s79(c) of the Act, the consent authority is required to take into consideration the relevant provisions of this DCP in determining applications for development in the Great Lakes.

2.2 Variations to DCP Provisions

This Plan aims to ensure good quality, sustainable development outcomes by encouraging applicants to achieve specific development objectives and minimum design controls.

Proposed development must meet the objectives of the Plan.

Strict compliance with the design controls of the Development Control Plan does not guarantee development consent if the objectives have not been satisfied.

The Plan is a guideline document and Council aims to allow flexibility where strict compliance with a control is unreasonable or unnecessary and the development objective can still be achieved.

This Plan applies to new development, additions and alterations to existing buildings and applications to modify existing development approvals.

Variation to controls may be permitted by Council if a detailed site analysis is provided with the application and the applicant can demonstrate and outline in a Statement of Environmental Effects:

- the proposal is consistent with the LEP zone objectives; and
- the proposal is consistent with the LEP development standards; and
- the proposal is consistent with all relevant clauses of the LEP; and
- the proposal achieves all relevant objectives of this DCP; and
- the development control/s subject of the variation are identified; and
- the objectives of that control are identified and achieved; and
- why the control should not apply to the proposed development; and
- why and how the development will not have a greater adverse impact on existing or approved adjoining

- development than if compliance was achieved; and
- why and how compliance with the development control/s is inappropriate or unreasonable in the particular circumstances of the case.

2.3 The Aims of this Plan

The overriding aim of this DCP is to create and maintain a high level of development and environmental quality throughout the Great Lakes.

The objectives and controls within this Plan therefore aim to:

- ensure development responds to the characteristics of the site and the qualities of the surrounding neighbourhood.
- ensure new development creates a unified landscape and contributes to the streetscape.
- ensure development reinforces the importance of pedestrian areas and creates an attractive design outcome.
- inspire design innovation for residential, commercial and industrial development.
- provide a high level of access to and within development.
- protect environmentally sensitive areas from over-development or visually intrusive development so that scenic qualities, as well as the biological and ecological values of those areas, are maintained.
- achieve environmentally, economically and socially sustainable development for the community of the Great Lakes.

2.4 Parts of the DCP

This Plan is divided into introductory information, general development controls and locality-based controls. Applicants will need to comply with the requirements of all relevant sections of the Plan.

The local environmental plan contains the legislative provisions that will need to be satisfied by any proposed development. and this development control plan adds detail through objectives, controls and design guidelines,

The “objectives” represent desirable development outcomes and describe the primary purpose and intent of the development controls.

The “controls” provide additional information and guidance on how a development should be designed to fit into the wider environment, to address subjective issues such as views, solar access, privacy and amenity.

2.5 Development Applications

2.5.1 Requirements for All Applications

Council’s Development Application Form available from Council’s Customer Service Centres and [Council’s website](#), details the number of plans required to be submitted and the type of information which is required to be included with a development application. Some of these documents include:

Site plan

A site plan prepared at a scale of 1:100 or 1:200 must identify:

- The north point;
- Site dimensions;
- Location of easements (type), right of ways;
- Location of buildings on adjacent lots;
- Spot levels and contours related to AHD (existing, proposed);
- Location of driveways, vehicle parking/manoeuvring areas, vehicle crossing, footpaths, substations, emergency equipment, bicycle parking areas and waste storage areas (existing and proposed) with finished levels to AHD;
- Adjoining road, kerb and footpath levels relates to AHD

- Location of existing trees (height, canopy, species);
- Location of fences (existing, proposed);
- Location of drainage facilities/services (existing, proposed);
- Structures/trees to be removed;
- Setback dimensions;
- Proposed cut/fill (area, type, level to AHD).

Building plans

Dimensioned plans at a scale of 1:100 for floor plans, elevations and sections; and a scale of 1:100 or 1:200 for site plans. The plans must include floor plans, all elevations and sections. Plans must be prepared by a registered architect or qualified designer.

Elevations as viewed from the street for multi-dwelling housing and mixed use development must also indicate existing buildings located on either side of the proposal. The same requirements shall apply to business/retail development without a residential component.

Residential development containing 3 or more storeys and containing more than 4 units are subject to the provisions of State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Development, which requires such developments to be designed by a registered architect.

Statement of environmental effects

A Statement of Environmental Effects is a report which details the potential environmental effects of the proposed development and the steps which will be taken to minimise such impacts. The Statement must detail the manner in which the proposal complies with objectives and relevant controls and requirements of both the LEP and the DCP.

Where variation to the controls contained in this DCP is sought, the Statement of Environmental Effects must provide justification to support this variation as previously detailed in this plan.

2.5.2 Site and Context Analysis

A Site and Context Analysis must accompany development applications for new single dwellings, dual occupancies, multi-unit dwellings, commercial and industrial development. The Site and Context Analysis must comprise an annotated plan and can be accompanied by written information.

Note: Applications for minor additions (less than 25% GFA) are not generally required to submit a Site Analysis Plan. Council has discretion in the requirement for a site survey where a development is considered to have a potential impact on neighbours or the environment.

A Site and Context Analysis prior to designing the development proposal is necessary to ensure that the development is not considered in isolation but is sensitive to its environment and positively contributes to its context.

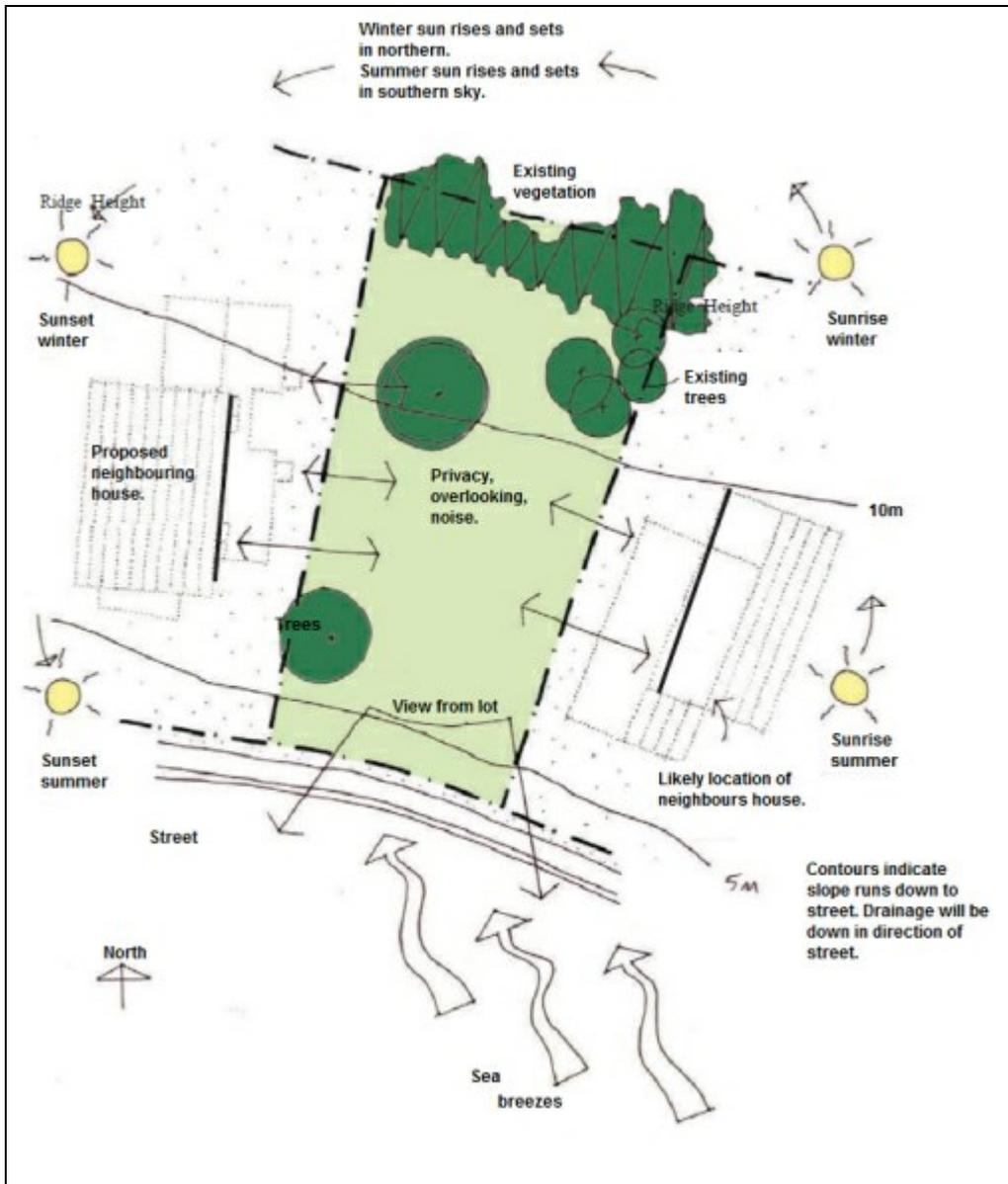
A thorough Site and Context Analysis will ensure that site layout and building design addresses existing and possible future opportunities and constraints of both the development site and its surrounds. It must also ensure that the proposal is a good neighbour by respecting and responding to the prevailing character of the street in which it is located.

An analysis of the site and context is a critical stage of the design process and should support many key decisions relating to the proposal. Site and Context Analysis enables the applicant, neighbours and Council to appreciate the site's features and identify the relationship of the site to adjacent properties. It therefore will inform the design of the building and will also assist in the community consultation process.

The Site and Context Analysis may assist in reinforcing neighbourhood character and minimising issues relating to noise, overshadowing, community safety, access, views, privacy and energy efficiency. The Site and Context

Analysis will provide the basis upon which to demonstrate that the proposed development:

- will integrate within the streetscape when considering scale, proportion and massing;
- relates to both the overall size of the building and also its individual components, such that the building's scale and massing is well proportioned relative to the site and nearby buildings.



Site analysis diagram (click here to view [original image](#))

2.5.2.1 Minimum Requirements for Site and Context Analysis

Site Related Information

- (1) Contours and levels to Australian Height Datum.
- (2) Land description including lot dimensions, north point and scale.
- (3) The footprint, height and use of existing and proposed buildings on the site, and surrounding development.
- (4) Significant vegetation and any other existing trees on the site or in close vicinity of the boundaries with adjoining sites.
- (5) Site characteristics such as orientation and lot dimensions and climatic features such as prevailing wind direction.
- (6) Site constraints including flood affected land, overland flow paths, unstable land, contaminated land, areas of

fill, heritage and archaeological features of the site.

- (7) Services and utilities including location of drainage and sewer infrastructure and connection for utility services. Natural drainage and concept drainage plan.
- (8) Easements, fences, boundaries and access to the site.
- (9) Views to and from the site and the existence of any significant nearby view corridors from public spaces.
- (10) Any other notable features or characteristics of the site.

Context Related Information

- (1) A survey plan indicating the footprint, height and use of buildings on a minimum of;
 - (a) two lots either side of the development site;
 - (b) those sites directly across any road adjacent to the site; and
 - (c) any allotments which abut the rear boundary of the development site;
 - (d) including their setback distances, location of private open space areas and windows overlooking the site.
- (2) If the site is bounded by a road, the survey plan must include the adjacent site across the road and must reflect accurate contours of the subject land and adjoining sites and include ridge heights of adjoining buildings to AHD.
- (3) Streetscape features including established building setbacks, utility services poles, trees, kerb crossovers, services, bus stops, post boxes and heritage features.
- (4) Direction and distance to local facilities including shops, schools, public transport and recreation and community facilities.
- (5) Location of significant environmental features adjacent to the site including trees, watercourses, pollution sources and environmentally sensitive land.
- (6) Pedestrian movement linkages including local streets and pedestrian pathways.
- (7) The location of any heritage item located on the site or on adjoining land and any Heritage Conservation Area.

Subdivision Applications

Applications which involve the subdivision of land and/or buildings must also include a plan which shows:

- Lot boundary dimensions;
- Lot areas and lot numbers;
- Location and area of common property;
- North point;
- Existing easements and restrictions;
- Proposed easements and restrictions;
- The location of any electricity substation and emergency services equipment required to be provided to the site.

2.5.3 Additional Information

Other reports and/or information may be required to accompany the development application dependent upon the particular site constraints (e.g. flood, ground water management for basement car parks, cut and fill, bushfire or coastal hazard) and the nature of the approval which is being sought.

2.5.3.1 Landscape Plan

The submission of a dimensioned landscape plan is generally required for development greater than a single dwelling. The plan should be at a scale of 1:100 or 1:200 and prepared by a Landscape Architect or designer with appropriate qualifications and experience may be required to indicate:

- Existing site information, north point, site boundaries and dimensions;
- Proposed buildings/structures, underground/overhead services, easements, rights-of-way, roadways, car parks,

footpaths;

- Location of external building structures i.e. retaining walls, fences, materials, heights and finishes;
- Basic design levels to AHD of both hard and soft landscape areas including existing and proposed contours, spot heights, areas of cut and fill and finished levels;
- Proposed surface treatment of all landscape areas and adjoining hard surface areas (eg. courtyards, driveways, pools and surrounds, communal facilities);
- Each plant identified and catalogued in a plant schedule describing mature height and spread, quantity, proposed container size and staking. The plant schedule should be divided into trees, shrubs and ground covers;
- Construction or detail drawings, sections and elevations for outdoor structures, garden beds and planting, paving, edging, tree protection and retaining walls;
- Design details for special situations eg. erosion control, creek bank stabilisation;
- Irrigation layout, tap locations and details of sprinkler system to be used for reticulation system. Provide taps on an irrigation system to ensure that all landscape works are adequately watered, the location of which is to be indicated on the landscape plan;
- Location and details of lighting;
- Location of proposed drainage (both surface and sub-surface). The landscape and drainage plans must be compatible;
- Specification notes for soil preparation, plant material, tree protection etc;
- Details of a minimum 6 months maintenance schedule.

2.5.3.2 Shadow Diagram

Shadow diagrams are required for all residential, mixed use and commercial developments of two or more storeys. Shadow diagrams will also be requested where Council determines that the development may have a significant overshadowing impact on an adjacent residential building/open space area or an adjacent public space.

Shadow diagrams shall indicate the extent of overshadowing at 9am, 12 noon and 3pm on the equinox and the summer and winter solstice.

Note: Should flood lighting be proposed, a light spill diagram shall also be required.

2.5.3.3 Heritage Impact Statement

Any new development must ensure that the significance and integrity of heritage items is retained or enhanced. Attention shall also be afforded to the curtilage of such heritage items and their relationship with surrounding developments and street/laneway systems.

A Heritage Impact Statement assesses the impact a proposal will have on the heritage significance of a place.

A Heritage Impact Statement is required for any development application:

- within a Heritage Conservation Area
- affecting a heritage item; and
- for a property in the vicinity of a heritage item (by reference to two lots in any direction)

An Heritage Impact Statement must be based on an understanding of the history and significance of the place. The assessment should include:

- the history of the place and why it is significant;
- aspects of the proposal that will enhance or diminish the significance of the place;
- alternative approaches that were considered but discounted and the reasons why; and
- recommendations as to how the proposal could be amended to be more sympathetic and/or minimise its impact on the heritage significance of the place.

For listed heritage items the assessment should be prepared by an appropriately qualified and experienced person, such as a heritage consultant.

Guidelines for preparing Heritage Impact Statements are available on the Department of Planning, Heritage Branch website: www.heritage.nsw.gov.au

2.5.3.4 Aboriginal Cultural Heritage

Where land is determined by Council to have archaeological potential or cultural significance and the development involves disturbance to substantially unmodified ground surfaces, an Aboriginal Heritage Assessment shall be undertaken in accordance with the requirements of the Office of Environment and Heritage.

2.5.3.5 Drainage and Reticulation Plan

The Drainage and Reticulation Concept Plan prepared at a scale of 1:100 or 1:200 must show:

- the method of stormwater drainage and water reticulation; and
- identify the proposed location and approximate volume of any stormwater infiltration and detention areas.

The plan should include details of overflow pipeline and a legal surcharge path for storms greater than the design ARI. Note: A pipeline and surcharge path may require the creation of a legal private stormwater drainage easement over the downstream property.

2.5.3.6 Buildings with three or more storeys

A three dimensional model may be required to be prepared for multi-unit or mixed use developments containing three (3) or more storeys and for commercial development containing four (4) or more storeys.

A photomontage is required for all developments containing three (3) or more storeys. The photomontage must provide a visual representation of the manner in which the building will relate to the streetscape and also the manner in which a pedestrian will view the building from the adjoining public domain. It must include buildings on either side of the proposed development.

A schedule of materials, finishes and colours (including a sample board) must accompany a development application for all developments containing three (3) or more storeys and/or four (4) or more residential units.

An assessment under *State Environmental Planning Policy No. 65 - Design Quality of Residential Flat Development* (SEPP 65) is required to be submitted for residential flat buildings/ multi-dwelling housing and mixed use developments containing three (3) or more storeys and four (4) or more residential units.

SEPP 65 applications must be accompanied by a Design Verification Statement from a qualified designer, being a statement in which the qualified designer verifies:

- that he or she designed, or directed the design of the residential flat development, and
- that the design quality principles set out in Part 2 of SEPP No. 65 are achieved.

2.5.3.7 Traffic Report

A Traffic Report must be submitted for significant residential, mixed use, commercial or industrial developments which are likely to significantly impact on surrounding traffic flows. Council can provide further advice in this regard.

The Traffic Report must be prepared by an appropriately qualified professional and shall detail:

- The existing traffic movement;
- The estimated number of traffic movements generated by the development;
- The ability of the surrounding road system to accommodate the increased movements;
- Sight distance and other safety issues;
- The adequacy of the proposed level of car parking and access driveway;
- Design in accordance with AS2890.1.

For certain developments a referral to Roads and Maritime Services in accordance with the requirements of *State Environmental Planning Policy (Infrastructure) 2007* may be necessary.

2.5.3.8 Riparian Corridor Revegetation Plan

Where the site contains a watercourse or is immediately adjacent to a watercourse, a riparian buffer zone may be required to be incorporated into the site layout and a Riparian Corridor Revegetation Plan must be prepared.

The buffer zone must be rehabilitated and vegetated in accordance with the requirements of the NSW Office of Water. The width of the required buffer zone must be determined in conjunction with Council and the NSW Office of Water, prior to lodgement of the development application, dependent upon the category of the watercourse.

2.5.3.9 Demolition

Where the development application seeks approval for the demolition of an existing structure as part of development application, a Demolition Work Plan is to be submitted.

The plan and application form must contain the following information:

- A description of any structures to be demolished, including photographs and identification on a site plan;
- The amount and type of waste to be generated;
- Details of waste management, disposal and recycling and of the intended waste contractor;
- Details of any hazardous material and method of removal, storage and disposal.

All demolition work must comply with the current version of Australian Standard AS2601- Demolition of Structures.

2.5.3.10 Geotechnical Report for Cut and Fill

The submission of a Geotechnical Report where the development involves cut and/or fill over 500mm or there is evidence that the subject site has previously been subject to filling.

3 Character Statements

This section provides general information on the character of the various towns, villages and zones within the Great Lakes local government area. Character statements exist for the coastal town centres and the village centres. Zone based statements apply to all areas outside of these centres.

The Great Lakes local government area (LGA) is a diverse area with both coastal and hinterland settlements which can be grouped into four general settings:

- (1) Coastal towns centres of Forster, Tuncurry, Tea Gardens and Hawks Nest;
- (2) Coastal and inland villages;
- (3) Areas of residential settlements with a bushland, rural or coastal setting; and
- (4) Rural and environmentally sensitive areas.

In general, new development must:

- Contribute to the existing and desired future character of the locality;
- Help differentiate between different precincts / villages / neighbourhoods;
- Respect existing development scale and setbacks;
- Protect and enhance the natural environment; and
- Encourage passive surveillance and security.

When determining the appropriateness of design for the particular location, consideration must be given to the following matters:

- Siting of new buildings in relation to adjacent structures, site features and vegetation;
- Street address of buildings, both street frontages are to be addressed on corner allotments;
- The building mass and bulk and how this relates to the site and surrounding development;
- The importance of roof form and pitch within the streetscape, natural environment and view sharing;
- The visual affect of materials and colours, particularly wall and roof materials;
- The proportions of openings to the building, including doors and windows; and
- The impacts of windows and verandahs on the privacy of adjoining residents.

3.1 Coastal Town Centres

3.1.1 Forster and Tuncurry Additional Character Statements

Forster Tuncurry has the classic elements of the coastal town idyll. It has excellent surf beaches; picturesque headlands; a large lake; forest and dune systems; and an abundant marine ecosystem. The towns exist in the popular imagination and memory of the people of NSW as a place of sun, saltwater and fun.

The town vision illustrated in the Town Centre Concept Diagrams have been developed in the consultation with the community and stakeholders and built upon a large body of work that has preceded it, including: Forster Tuncurry Conservation and Development Strategy (2003); Forster Tuncurry Housing Strategy (2006); NSW Coastal Design Guidelines; SEPP 65: Design quality of residential flat development.

VISION

“To retain and enhance the unique natural environmental character and relaxed coastal lifestyle offered by Forster Tuncurry, whilst embracing high quality development promoting the area as a popular location for residential living, tourism and business”.

The following objectives have been established for the town centres:

- *Achieving sustainable town centres*
New development will incorporate the principles of sustainability. Environmental, social and economic sustainability tests will be applied to new projects. This means that the built environment and public spaces will minimise the consumption of energy and water, and promote social interaction and activity, and a diversity of uses will be encouraged to generate year-round economic activity.
- *A unique identity*
Strong growth of Forster Tuncurry is part of a pattern of change along the East Coast. Forster and Tuncurry will maintain a distinct character by building upon patterns in the towns, including: compact and recognisable town centres; good connections to the waterfront; easy walking access to many major attractions, a visible 'working waterfront'; and reclaim its status as a significant event location. Changes will occur while remaining welcoming to locals and visitors alike: "(the town) must still feel like a pair of old jeans".
- *Creating compact and attractive town centres*
Planning and development will focus on street activation, a high quality public realm and promotion of pedestrian friendly environments. New development will be of a high quality and contribute to a visually attractive built form. A diverse range of land uses will be present in the town centres. The form of the town centres will have a strong sense of place with buildings relating to streets and public areas.
- *Facilitating access and mobility around and between the towns*
The precincts in the towns will be integrated and linked by clearly defined movement networks for a wide range of modes including: pedestrian, car, cycle, skating, gophers etc. Cycleways will provide easy and safe connections between the town centres and the surrounding residential areas. Public transport access to the towns will be improved and car parking will be specifically managed to meet the needs of different user groups. Visitors should be able to "throw the car keys in the corner" for the duration of their stay. Pedestrian movement will have priority against car traffic.
- *Creating liveable towns*
The range of public domain amenities and services will attract people of all ages and from diverse communities to live in Foster Tuncurry. The streets will be safe, and easy to move around. Street life and activity will increase with a greater mix of uses serving residents, workers and visitors. The town centres will be a more desirable place to live and visit. They will offer greater housing mix and cater for greater residential diversity. The Business Zones in the Town Centres will be enlarged, diversified and consolidated to generate more employment opportunities.
- *Re-connecting the towns to the foreshore*
The towns will "turn around and look at the water". The character of Forster and Tuncurry will be strengthened by the improvement of pedestrian access to the foreshore and landscape design of the lake and beach fronts. The foreshore precincts will become a recreation leisure and entertainment destination for locals and visitors. The towns' working waterfronts will be recognised as enriching elements. The focus will be on the different and special qualities of North Street, Memorial Drive, Little Street, Pilot Hill Peninsula, Cape Hawke Harbour, Oxley Park and the Point Road Peninsula.
- *Improving the quality of the public domain*
The public domain will be well designed and give pedestrians a feeling of importance. A network of public spaces, laneways and parks will be provided. The quality of footpath paving, street trees, signage and lighting will be improved. The landscape design concept for the towns will ensure that each tree planted or paving laid is part of an integrated vision for the public domain.
- *Improving the quality of new buildings*
The town centres will be distinguished by high quality new architecture and design. A SEPP 65 Design Review Panel (made up of respected professionals who do not have a private interest in the area) and Architectural competitions will ensure well-designed buildings for special precincts and multi-dwelling housing.

The controls within this Plan are designed to deliver a city-wide residential development strategy which preserves the character and amenity of existing neighbourhoods, whilst allowing opportunities for infill development in appropriate locations. The focus for infill residential development remains in town centres and the high density residential zones within Forster Tuncurry.

- *Improved Neighbourhood Amenity*

This Plan aims to ensure that new development respects, enhances and integrates with neighbourhood character. Development should contribute to the quality of the natural and built environment and the public domain.

- *Diversity and Availability of Housing types*

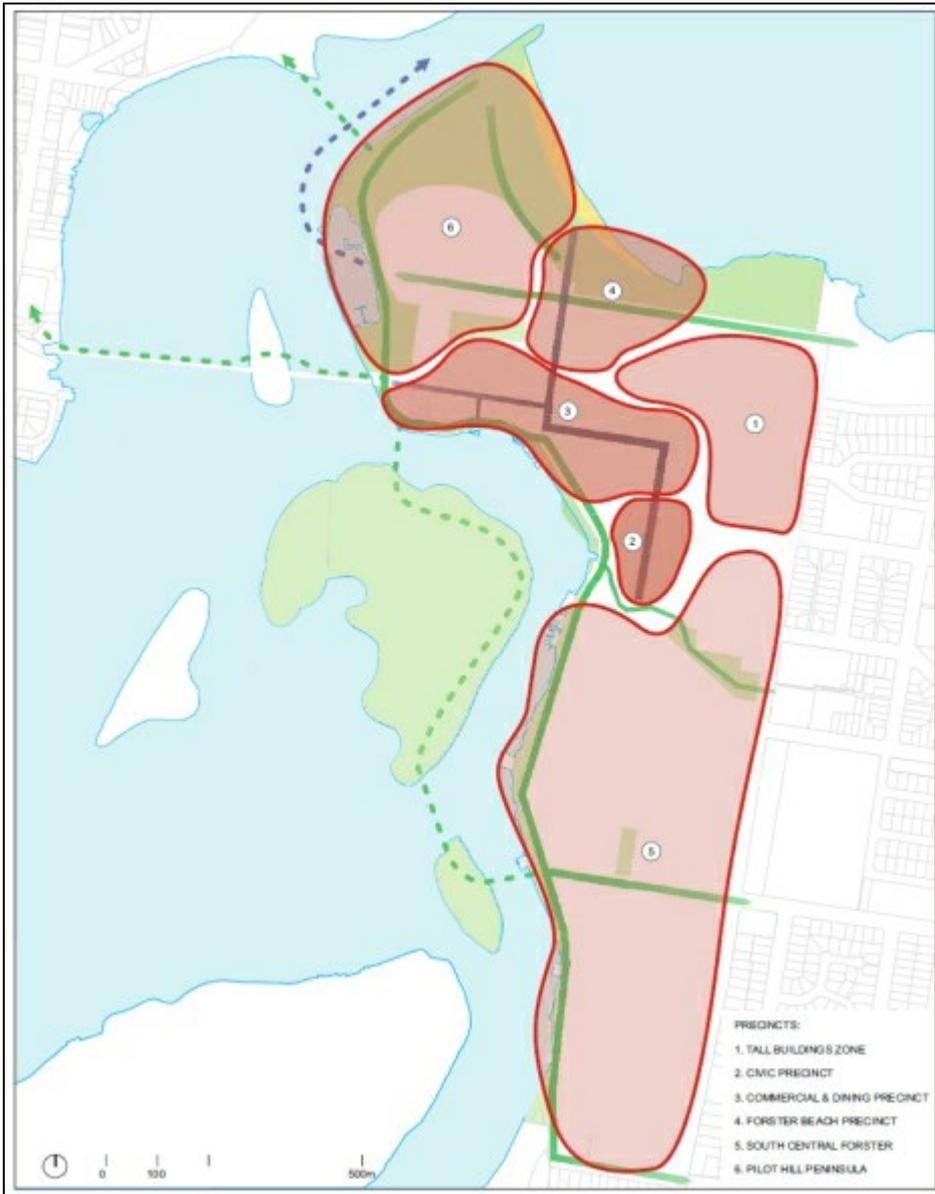
The Plan encourages the provision of a wide range of housing types that reflect the needs and aspirations of the diverse backgrounds and lifestyles of residents and provides for increased housing choice and availability that contribute to a sustainable living community. To achieve this, the Plan seeks to reinforce the hierarchy of Great Lakes' residential zones, by encouraging increased densities within the town centre areas, which have a higher level of accessibility to the broader range of services and facilities offered by the twin towns.

The Plan also seeks to support increased densities within the surrounding medium density residential zones, particularly in those areas which are located in close proximity to town centres, thereby encouraging urban consolidation principles. Increasing densities in such locations will reduce development pressure on the low density residential areas, thereby encouraging the retention of the detached suburban character, which residents currently enjoy.

- *Environmental Accountability*

This Plan aims to ensure that new high and medium density residential development is ecologically, economically and socially responsible. New development should provide a broad range of housing choices with a high standard of design, ecological sustainability and energy efficiency. Development should enhance neighbourhood amenities and add to both the natural and built environment.

3.1.1.1 Forster Town Centre



Town Centre Precincts (Click here to view [original image](#))

Tall Building Precinct - Area 1

The vision for this area is for active pedestrian oriented streets that will suit permanent residents as well as visitors to the area.

Development adopts similar heights to the existing but reinforces the street-orientation of the buildings. Reduced side setbacks permit buildings to give the streets a more formal urban character. Ground level apartments will generally be accessed through a courtyard with a fence and gate to the street. Larger rear setbacks with substantial deep soil zones and a requirement for planting trees that grow to substantial size will create a complete 'green zone' in the mid-block. These will effectively screen buildings facing one another across the rear lane.

All vehicular access onto the sites is via the rear lane. Gone are the long access ramps that mar many of the recent developments in the zone. These are either unnecessary because the car parking is wholly below grade, ramps are integrated within the building lobby or ramps are located at the side of the building.

Civic Precinct - Area 2

This area occupies an important threshold in Forster. At the southern edge of the existing town centre and at the place where Penenton Creek line meets the Breckenridge Channel. It incorporates the Police Station, court house, public service buildings and bus stop. It is bounded to its south by parkland that provides a clear demarcation between the commercial centre and the medium density zone to the south. The curve of Little Street and the Westward slope of the site create a natural amphitheatre with its focus upon the foreshore.

The future use of the area is the subject of separate masterplan investigation. The site holds development potential for mixed commercial use that reinforces the role of the area as the civic heart of the Forster. It has been considered for functions such as library, café, market ground and office space.

Commercial and Dining Precinct - Area 3

The vision for this area is for an active pedestrian-oriented precinct where hospitality and entertainment activities are focused. The well-landscaped character of Wharf Street is extended to Wallis and Lake Street. Improved pedestrian crossings with roadway narrowing and shared zones permit easy movement. Car parking is provided in the large capacity of the streets together with possible multi-level council car parks in the area.

It is essential that retail serving local day-to-day needs make this a viable town centre that remains vital out of tourist season. Importantly, this area retains a number of banks, other functions are also supported such as green grocer, baker, supermarket, pharmacy.

The potential noise-generating entertainment activities suggest care will be taken in the location and detailed design of residential apartments in the area to minimise conflict, this may include design strategies to minimise noise transmission. Growth of office use in the area would be compatible with the evening noise.

The built form in the area is characterised by the lower-rise buildings in the area west of Beach Street and southward along the foreshore and taller buildings emerging from the area east of Beach street and further from the shoreline.

Memorial Drive, Little Street and the foreshore provide one of the most memorable and unique places on the coast. The planned extension of the boardwalk will boost the use of the area providing a long and interesting foreshore walk and cycle way.

Forster Beach Precinct - Area 4

Forster Beach represents the only formal urban beach interface on this part of the coast. Tall buildings provide a strong contrast to the horizontal open space of the beach. Topography of Pilot Hill to the east and the forested Second Head reserve to the west give a natural setting to the urban character of the area.

The natural attractions of the beach and tidal pool have been augmented with the recent addition of a restaurant at the corner of North and West Streets, (The Dorsal) which has brought activity to the south side of North Street.

The vision for this area will see a re-activation of the Surf Club together with an active frontage on North Street. The esplanade is to be upgraded with many more places to sit, shade structures, landscaping and a well-formed promenade.

South Central Precinct - Area 5

This area will be an important living area with a predominance of permanent residents, including a significant proportion of elderly people. The range of facilities creates the potential for ageing in place. People may remain in a familiar area within a community while their needs may change with regards to size of dwelling, household, or level of care.

The area offers more active space along the foreshore in the "front row". The street away from Little Street and Macintosh Street are quieter and leafy in character. Close proximity to the foreshore with an improved boardwalk and its generally flat topography make this an excellent walking precinct. The increasing residential density in the area will

likely see the re-establishment of neighbourhood shops on Little Street as well as growing facilities on the waterfront.

Pilot Hill Precinct - Area 6

This area is bounded by the town centre, surf beach, harbour breakwater and lake shore. The peninsula includes the caravan park and marina facilities. Significant potential exists to improve access and permeability in the area.

This area is well suited to tourism and recreation activities with a focus toward the water-based attractions. Synergy with the existing town centre will be important in any change of land use; differentiation of the commercial “offer” from the existing town centre is likely to stem from the identity of the marina, its varied shoreline and hilltop parkland. Presently the area provides a significant volume of low cost tourist accommodation in close proximity to the town centre.

North Street Precinct - Area 7

3.1.1.2 Tuncurry Town Centre



Tuncurry Town Centre Precincts (Click here to view [original image](#))

Tuncurry Active Street & Fishing Fleet Precinct - Area 1

This area represents possibly the greatest potential for improvement in the either town. The vision for the area is for a well-landscaped street environment with shade trees, calmed traffic, pedestrian shared zones, active frontages with restaurants and retail spilling onto footpaths. This is an environment suitable for strolling, looking in shops having lunch in a street café. Envisaged land use is generally commercial at ground level with apartment accommodation above.

The potential exists for a positive relationship between the fishing industry and the recreational uses in the area. More visitors will boost the co-op sales, while the boats, nets and the catch of the fleet provide interesting and authentic attraction for visitors. A reconfigured co-op would permit better catch-handling improve foreshore pedestrian access and visibility of the processes of a working fishing fleet.

Tuncurry CBD Precinct - Area 2

Manning Street is to be reconfigured with public domain improvements including footpath widening at intersections, avenue tree planting and consolidation of its built form. It will remain the primary traffic link from the north. Land uses include commercial at lower levels and residential and commercial at upper levels. Street level businesses will tend to be those who benefit from a high level of exposure to passing traffic and are not compromised by traffic noise.

Building heights in the area will permit upper level water views south and west to Wallis Lake and east to Cape Hawke Harbour and the Pacific Ocean. It is hoped the CBD will include one or two “anchor” retailers such as supermarkets.

The requirements for side setbacks for residential units will mean that few buildings will reach the full permitted height & buildings will vary in height according to the site size; however the unifying element of the three-storey podium will establish a height datum along Manning Street that will visually calm the environment. This unifying height will give the street a formal and regular character although individual buildings will differ in width, material and expression.

Careful consideration will be given to the design of the rear lane address of buildings in the centre. The lanes have an important service function, providing for car park access, deliveries and garbage collection. The vision for Tuncurry as a living centre requires that the lanes remain comfortable and interesting places to walk. Building setbacks and greening will help to improve this environment and establishing some commercial activity on the lane will make these interesting spaces in the town.

There is no strong architectural precedent currently in the town for mixed use and town centre buildings of the form that will develop. The appropriate architecture of the centre will be contemporary coastal buildings. The selection of materials and construction detail will be of high quality and robust. Care will be taken to use high quality and well-detailed materials and construction, especially in the parts of the buildings that are the closest to the public domain.

The type of buildings and their architecture will reflect the rising status of Tuncurry as a prosperous and growing coastal town.

Bent and Peel Street Precinct - Area 3

This precinct includes both medium density and mixed use areas. It is anticipated the mixed use area on Peel Street between Kent and South Streets will include commercial office space adjoining the CBD.

Bent Street will retain its residential character, as well as its role as the alternative north-south vehicle connection. With avenue tree planting and a more consolidated and uniform built edge and frequent front gates, the street space will be better contained and passive surveillance improved.

The street edge of buildings on Bent Street will have to consider the possibility of growing vehicle traffic over time. Careful fence and garden wall design that helps reduce noise without disconnecting the residence with the street (passive surveillance) will be a feature of the locale.

Large trees and substantial vegetation in the rear part of sites in this precinct will help to screen properties across lanes and back fences and help to establish an visual environment of ‘shared landscape’. Special consideration will be

given in this regard to locations where commercial and residential buildings are adjacent. Developers of commercial buildings will share responsibility for establishing screening vegetation with their residential neighbours.

John Wright Park Precinct - Area 4

The character of this area will not change significantly. Upgrades to the park will see an improvement in the area. It remains an appropriate setting for the fun fair and a place of passive recreation through the year.

This remains one of the few areas where taller buildings are permitted adjacent to parkland and the waterfront.

Tuncurry North Central Precinct - Area 5

This area is predominantly medium density residential. The area has good proximity to the waterfront and CBD so it provides an excellent area for people to live and work within a walking distance. It also provides a good setting for ageing in place. It is a short level walk to the retail of the CBD, the waterfront recreation areas and the bowling club.

The western part of the precinct meets Manning Street in the zone between the residential area to the north and the commercial area to the south. This represents an important transition for people moving along Manning Street. Buildings will tend to have broken down form (rather than monolithic) and they have gates and front courtyards to ground level apartments.

Tuncurry Boat Ramp Precinct - Area 6

This area represents an important waterfront activity zone. Its function may be significantly expanded with mixed use activities in the block east of Point Road. This block has excellent potential with its close relationship to Memorial Park and the foreshore.

The area along the foreshore may expand its boating and recreational role. This includes boat hire, restaurants and chandlery. It is considered public boardwalks, piers and other structures would add another dimension to this area allowing people to walk beyond the shore line. The old cinema and skate-park give a civic dimension to this precinct.

There is relatively limited land with development potential, it lies mostly within the block bounded by Coral Avenue and Palm Street. It is anticipated there will be relatively concentrated activity in this block including accommodation and tourism or recreational commercial activity. The block is presently occupied by a group of small-footprint art deco and mid-20th Century flat buildings.

Appropriate building form will follow the pattern of discreet (separated) building mass; distinctive and memorable character buildings would be appropriate this location.

Buildings on the water side of Point Road have an important role to make a good street-edge on Point Road and Palm Street while taking advantage of their location and views in the opposite direction; toward the lake. Watson Bay Wharf with its fish shop and Doyle's restaurant is a precedent in this regard. Another precedent is the area around Manly Wharf, for example the Manly Wharf Hotel displays the characteristic of having a clear and welcoming entry on the street and visual connections from the interior space to the street while also having a strong connection to the harbour.

This area has the potential to become an interesting part of the longer Tuncurry Waterfront promenade. Care must be taken to ensure the path for walkers through the precinct is open and clear.

The principle challenge and opportunity in this area is to create an active waterfront precinct with a relatively buildable area.

Point Road Peninsula Master Plan Precinct - Area 7

The future land use for this area is to be the subject of the master plan. It may be principally residential or it may include a special purpose activity such as a conference facility. The site is particularly significant because it is a large

consolidated land holding with close proximity to the town centre and foreshore.

Key objectives for this area are to achieve a well-integrated street pattern with clear connections across and along the peninsula, linking Ohmas Bay to the Point Road foreshore and to optimise land use for this strategic site. Flooding represents a significant constraint for the whole Peninsula. It is anticipated that any further development will integrate design measures to constructively deal with this constraint. This may include floodway that serves as parkland.

The built form in the area will depend up on the land use, however it is considered well-designed contemporary coastal architecture will be appropriate. Good address to public domain including parkland and streets will be a feature of any approval. A good walking environment with many alternate routes to the foreshore will serve the residential population of the peninsula and the growing number of visitors in this desirable part of Tuncurry.

Point Road Peninsula - Area 8

This precinct is characterised by public access along much of the foreshore. It includes the oyster farming operations. The potential exists to improve public interface with this interesting activity with its racks, punts, oyster cleaning. It may also include direct-to-public sales of Wallis Lake's excellent oysters in the same way wineries have a 'cellar door'.

The precinct includes bush land at the western end. The potential exists to make a pedestrian / cycle bridge connection across the mouth of the shallow Ohmas Bay as part of an integrated foreshore recreation network. The structure may incorporate space for recreational fishing.

The street pattern in the future should be better integrated. Close proximity to the foreshore and parkland make this area attractive for both permanent residents and visitors. Flooding represents a specific challenge for this area.

3.1.2 Tea Gardens and Hawks Nest Additional Character Statements

Background

Tea Gardens and Hawks Nest are at a significant turning point in their history. The rapid growth of apartment development has been the result of a combination of expanded medium density zoning and recent improvements in the profitability of such projects. The historic context of Tea Gardens is characterised by single storey Victorian and Federation era houses and cottages, however there is not a strong local architectural language for multi-unit buildings.

The significant challenge in these towns is to establish a building type that has a good 'fit' with the place; a building that relates to its context of human and natural history and to its purpose. This quality of fit is what a competent architect with an appropriate brief will bring.

The involvement of a SEPP 65 panel will play an important role in this: Unsympathetic designs will not be supported by the panel. Developers will learn to only engage architects capable of designing buildings which fit their context. New buildings will not make token copies of the architectural elements of the old buildings. The apartment buildings should not appear as overgrown federation houses; rather they will consider materials, climate, social environment and lifestyle of the towns.

Diversity and Availability of Housing types

The objectives and development controls encourage the provision of a wide range of housing types that reflects the needs and aspirations of the diverse backgrounds and lifestyles of residents. Future residential development should provide for increased housing choice and availability that contributes to a sustainable living community. To achieve this, the planning controls seek to reinforce the hierarchy of Great Lakes' urban development within Tea Gardens and Hawks Nest. By encouraging increased densities within the village centre areas, residents will have a higher level of accessibility to the broad range of services and facilities offered within the centres.

The planning controls also seek to support increasing densities within Medium Density Residential zones, particularly

those areas which are located in close proximity to town centres, thereby encouraging urban consolidation principles. Increasing densities in such locations will minimise further pressure on the Low Density Residential zone, thereby encouraging the retention of the detached suburban character, which residents currently enjoy.

The town vision has been developed in the consultation with the community and stakeholders and built upon a large body of work that has preceded it, including: Tea Gardens/Hawks Nest (TG/HN) Development and Conservation Strategy 2003; TG/HN Housing Strategy 2006; TG/HN Community Plan May 2006; NSW Coastal Design Guidelines and; SEPP 65: Design quality of residential flat development; TG/HN Stakeholders workshop, 25 Oct. 2006; and TG/HN Community Workshop, 14 Nov. 2006.

Environmental Accountability

The planning controls aim to ensure that new residential development is ecologically, economically and socially responsible. New development should provide a broad range of housing choices with a high standard of design, ecological sustainability and energy efficiency. Development should enhance neighbourhood amenities and add to both the natural and built environment.

Improved Neighbourhood Amenity

The aim of the development objectives and controls is to ensure that new development respects, enhances and integrates with existing neighbourhood character. Development should contribute to the quality of the natural and built environment and the public domain.

Community Vision

NATURE

- Preserve the natural environment

ECONOMY

- Development to occur for economic expansion and associated employment
- Diverse local economy

URBAN FORM

- Preserve "small village" identity

POPULATION

- Achieve a demographic mix by attracting families with children and young people.
- Vibrant community

3.1.2.1 Tea Gardens

The following objectives have been established for the Tea Gardens Town Centre.

Nature

- Promote Ecological Sustainable Development (ESD) and reduce traffic
- Retain and enrich local vegetation both in the public and private domain
- Retain and enrich historical vegetation along the foreshore

Economy

- Improve zoning for business diversification
- Provide pedestrian network connecting business and residential zones

Urban Form

- Maintain heritage buildings and heritage character
- Limit building mass and improve design
- Achieve pedestrian and cycle friendly public domain
- Improve waterfront access and waterfront promenade

Population

- Maintain residential character
- Attract young people and families



Tea Gardens Town Centre Precincts (Click here to view [original image](#))

Town Core - Area 1

This represents a vital precinct and presents a 'postcard view' of Tea Gardens. The ferry wharf and the pub are central identifying elements for the town. Mixed use buildings including traditional shop-top form provide accommodation at the town core. The Tea Gardens Hotel boosts the visitor population at the centre. The town core also represents a desirable location for office space, close to the water front and good coffee.

The high quality public domain links the foreshore to the north and south. The moderately scaled buildings up to 3 storeys reflect the fine-grain of the street and the building materials reflect a river town with a timber port history.

The key to developing the Tea Gardens "style" has been some high quality and sensitive design by capable and appropriate architects.

Locally focused retails such as groceries, pharmacy, hardware are concentrated on Myall Street and benefit from passing trade.

South Central - Area 2

This area represents a good environment for medium density living close to the activity of the town centre and waterfront. Care must be taken that as each parcel is developed a clear picture of how the whole block will function in its developed state. This may include consolidated vehicle access and servicing (possibly in the form of a rear lane).

The extension of Charles Street along the south eastern boundary is desirable to maintain the integrity of the town street grid and to provide public access (street) at the town edge.

Marine Drive Foreshore Precinct - Area 3

Building form development controls establish small forms: lower height and narrower forms at the front of the site (see Built Form examples for multi-unit buildings and mixed use buildings). The bulk is shifted to the centre of the site. Topmost level is 60% of the area below. Good street address provide for passive surveillance. Buildings in this area will serve holiday accommodation and residents.

The architectural expression in this location should reflect its river-front setting and maritime history. This may include timber cladding, deep balconies with views to the river, solid and void in the river-facing elevation (not only balconies). Buildings may include taller solid elements that read as corner towers. Variation in height on this street front will have the effect of breaking down building mass creating interest. Unusual or surprising architecture may be appropriate in this area if skilfully handled.

North Central Precinct - Area 4

This is a medium density zone that is suitable for aging in place. It is located less than 1km from the town centre and it is level and pleasant walk to the ferry wharf. It is close to the foreshore and country club.

Development controls give consideration to:

- context of heritage buildings;
- lower scale toward street;
- two storey height adjacent to existing houses;
- landscape character reinforced with tree planting; and
- all buildings are within the tree canopy height.

3.1.2.2 Hawks Nest

Objectives

The following objectives have been established for the Hawks Nest Town Centre.

Nature

- Promote Ecologically Sustainable Development (ESD) and reduce traffic
- Retain and enrich local vegetation both in the public and private domain
- Protect and enhance koala habitat and movement corridors

Economy

- Revitalize the village centre

- Connect town centre to the waterfront

Urban Form

- Maintain "bushland" character and limit building heights to "below the canopy"
- Limit building mass and improve design
- Achieve pedestrian and cycle friendly public domain
- Improve waterfront access and waterfront promenade

Population

- Attract permanent residents
- Attract young people and families



Hawks Nest Town Centre Precincts (Click here to view [original image](#))

Hawks Nest Town Centre Precinct - Area 1

Mixed use core and the adjacent medium density area have potential for growth, particularly along Booner Street. Retail will employ strategies to deal with the seasonal nature of demand. This may mean open and closing with demand. Flexible use space for living, working and retail such as an artist's studio/gallery may be appropriate.

The intersection of Booner Street and Tuloa Avenue should be distinguished with built form, landscape or public art to

strengthen the sense of arrival at this point. Future streetscape work will give high status to Yamba and Langi Streets in recognition of their waterfront-linking role.

Hawks Nest Water Front - Area 2

The future for this precinct will build upon its waterfront character. The opportunity exists to expand the facilities on the foreshore possibly including a pier, boardwalk, swimming structures or structures for recreational fishing. The foreshore reserve may also accommodate a seasonal kiosk or café.

Building placement of the 'front row' will consider preservation of water views for buildings to their east.

The northern part of the precinct forms an important threshold in the town. The bush at the landing of the Singing Bridge provides an appropriate and forested setting for this arrival point.

Hawks Nest North Central Precinct - Area 3

This residential area has close proximity to the town centre and waterfront in a leafy koala-friendly context. It represents a good environment for permanent living or holiday accommodation.

3.2 Village Centres

Desired future character

The overall desired future character for the villages is to ensure new development responds to the nature of the settlement type in which it is to be located.

In general, new development must:

- Contribute to the existing and desired future character of the locality;
- Help differentiate between different precincts / villages / neighbourhoods;
- Respect existing development scale and setbacks;
- Protect and enhance the natural environment; and
- Encourage passive surveillance and security.

3.2.1 Coastal Villages Additional Character Statements

Characteristics

Coastal Villages are generally characterised by their relatively isolated nature and single village zoning. Within the Great Lakes there are also distinctions between those villages with reticulated water and sewer, and those without.

Water and Sewer available:

- Charlotte Bay
- Smiths Lake
- Green Point
- Tarbuck Bay
- Karuah
- Pacific Palms – Elizabeth Beach, Bluey's Beach and Boomerang Beach

Water and Sewer NOT available:

- Bundabah
- Nerong
- Bungwahl
- North Arm Cove
- Carrington
- Pindimar
- Coomba Park

- Seal Rocks

Desired Future Character

The desired future character of Coastal Villages is derived from existing development patterns, reflecting the infrastructure, topographic and environmental limitations of each location. Existing development within these areas is usually characterised by:

- Development that is secondary to the landscape and natural environment;
- Development that does not dominate views and vistas;
- Buildings which avoid overshadowing and are in scale with existing development;
- Small scale detached buildings addressing the street; generally single storey;
- Development which follows the contour of the land on sloping and steep sites;
- Commonly gable and hipped roofs up to 22 degree pitch, but sometimes low, mono pitch (skillion) roofs with cantilevered eaves;
- Common use of fibre cement sheet and weatherboard for wall cladding with less common use of painted brick;
- Common use of corrugated roof sheeting;
- Mixture of small vertically proportioned windows in some cases, and larger expanses of glass to the view;
- The retention of natural tree cover throughout residential lots and public space.

Designs which are not in character with these locations include:

- Large bulky buildings
- Gun-barrel site layouts - rectangular buildings which cover the full length of an allotment;
- Large or elongated roof forms
- Buildings constructed of unpainted brick especially textured or mottled bricks
- Roofs with angled fascias
- Concrete roof tiles;
- Highly ornate buildings and buildings in imitation "styles" such as federation or Mediterranean styles;
- Designs incorporating mock detail such as shutters, cast iron lace and columns; and
- Highly formalised planting or landscape design

3.2.1.1 Seal Rocks

Desired Future Character

Seal Rocks is a small coastal hamlet dominated by its surrounding ecological systems; individual buildings and the settlement as a whole are dominated by the natural landscape setting. Large scale residential, tourist, retail and commercial developments are inappropriate in the Hamlet.

Protection of the existing natural assets and biodiversity and the creation of a safe environment for people and assets from bushfire hazard is at the forefront of the desired future character.

The overall built form of the locality is limited to single dwellings of up to two storeys to retain the low key, relaxed natural setting of the hamlet. Buildings sit within a natural amphitheatre which defines the settlement and provides outstanding vistas of the coast.

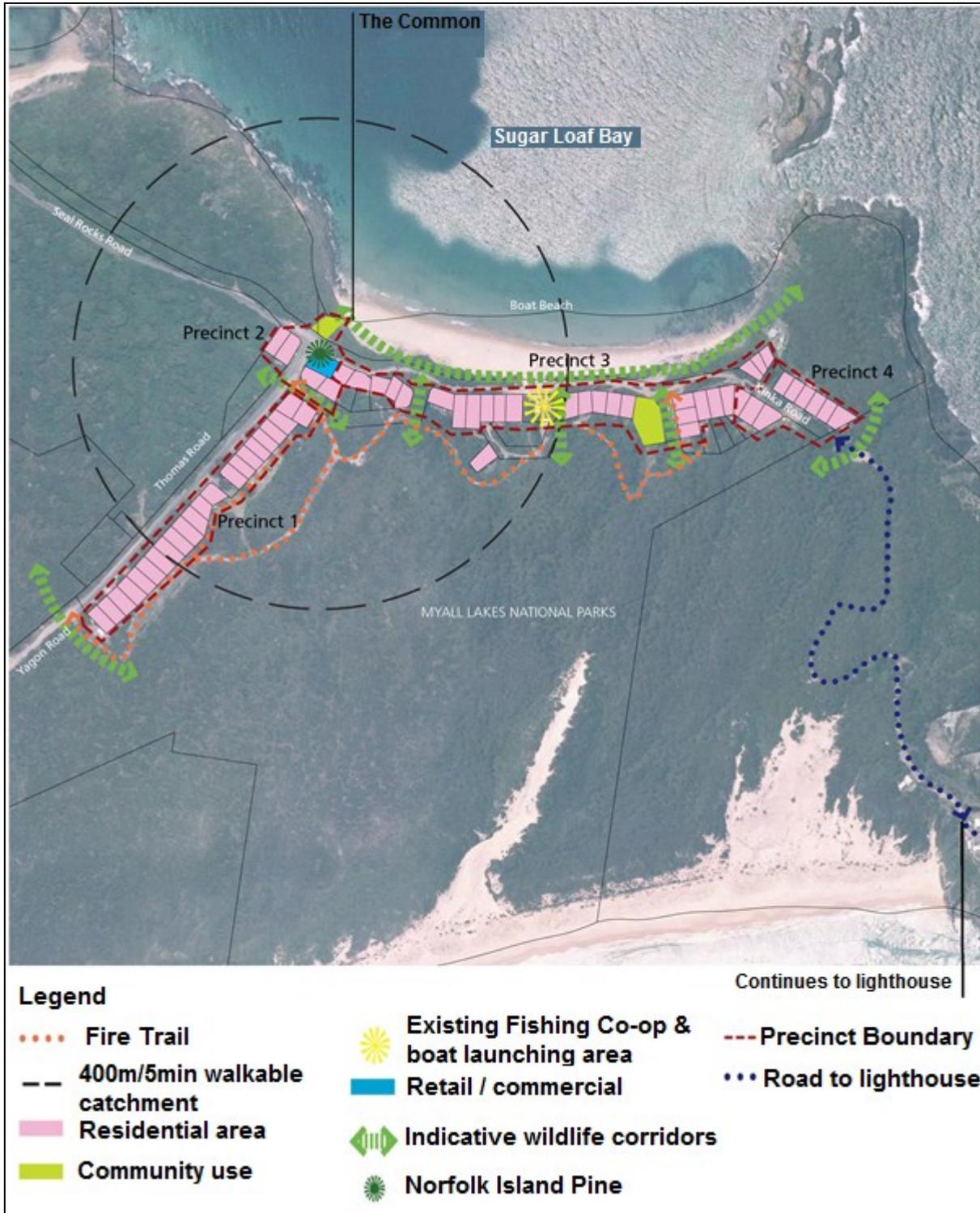
Vision

The vision for future development within Seal Rocks is to enable sustainable development that enhances the traditional fishing village character and protects the natural setting of the Seal Rocks coastal hamlet.

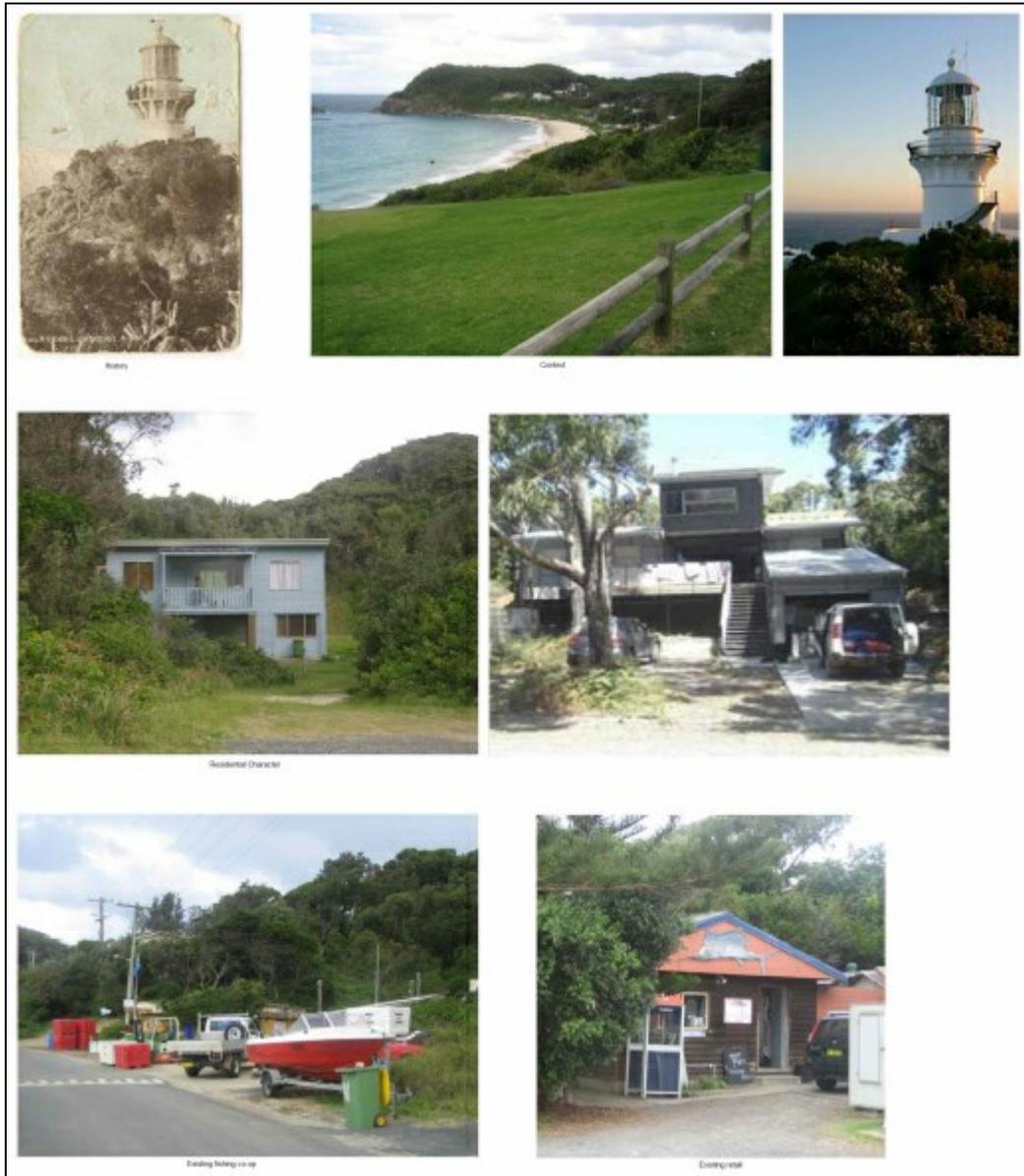
Objectives

To maintain the distinct character of each of the 4 key precincts:

- (1) Thomas Road;
- (2) Shop / Community Gateway;
- (3) Kinka Road Escarpment and
- (4) Kinka Road Valley.



Seal Rocks precinct structure plan (click here to view [original image](#))



Seal Rocks Character (Click here to view [original image](#))

Precinct 1 - Thomas Rd

- The Thomas Road Precinct is characterised by single storey and split level pavilion style dwellings without views of the foreshore and is thus less visually sensitive than other precincts.
- Contemporary design that steps with the slope where applicable
- Upper storey set back 2 metres behind front building line.
- No more than one garage to be visible building facade
- Generally an exterior finish palette of light and muted colours (greys, greens, and browns)



Precinct 1: Thomas Road (Click here to view [original image](#))

Precinct 2 - Shop/Community Gateway

- The Shop/Community Gateway Precinct is defined by the shop, the “common” and the dominant Norfolk Island Pine. The character of this area is of a community hub “nestled” within the existing vegetation.
- Traditional character.
- Retail parking to be accommodated in Thomas Road and beside the existing ‘Common’.
- Retain existing Norfolk Island Pine
- Generally an exterior finish palette of light and bright colours



Precinct 2: Shop / Community Gateway (Click here to view [original image](#))

Precinct 3 - Kinka Rd Escarpment

- The Kinka Road Escarpment Precinct is characterised by steep housing sites with limited access from Kinka Road within a highly visually sensitive amphitheatre.
- It is the location of the original existing fishing co-op and boat launch area.
- Buildings step with the slope with only one storey visible from Kinka Road.
- Shared pedestrian access (wooden steps) to properties from Kinka Road that blend with the topography
- Shared vehicle access to comply with Shared Road Access provisions of this Development Control Plan
- Generally an exterior finish palette of light and bright colours



Precinct 3: Kinka Road Escarpment (Click here to view [original image](#))

Precinct 4 - Kinka Rd Valley

- The Kinka Road Valley Precinct is characterised by the steep slope of Kinka Road up to the Seal Rocks Lighthouse in the National Park. Properties to the north are on steep land and have more pronounced front

setbacks. The precinct is less visually sensitive than the Kinka Road Escarpment Precinct.

- Buildings step with the slope with ideally only one storey visible from Kinka Road.
- Shared pedestrian access (wooden steps) to properties from Kinka Road that blend with the topography
- Generally an exterior finish of light colours with darker colours used to trim roof overhang.



Precinct 4: Kinka Road (Click here to view [original image](#))

3.2.1.2 Pacific Palms

Vision

Future development within Pacific Palms is to enable sustainable development that enhances the village character and protects the natural setting.

Desired Future Character

The desired future character of the Pacific Palms locality is derived from its inherent natural attributes associated with the National Park, Wallis Lake and proximity to the expansive Pacific Ocean and Marine Park. The beachside villages will continue to be defined and contained by the existing green spaces associated with Booti Booti National Park, Wallis Lake and the Pacific Ocean.

Hand in hand with protection of the existing natural assets and vegetation will be the creation of a safe environment for people and assets from bushfire hazard.

The overall built form of the locality is to be of a high quality design with an architecture suited to a sensitive coastal location. A low scale 'bushy' coastal setting is to be maintained by small scale sympathetic infill development in the low density residential areas and sensitive low scale development in the low density greenfield areas.

Areas zoned for open space purposes and environmental protection purposes are to be maintained as natural assets for the locality.

The Blueys Beach Neighbourhood Centre is to function as the main village service centre; it will serve the daily retail and service needs of the locality with a predominance of small specialised business.



Pacific Palms (Click here to view [original image](#))

3.2.2 Inland Villages Additional Character Statements

Characteristics

Inland Villages are typically located on main roads, railways or rivers which historically provided transport links between regional centres. They comprise the following areas within Great Lakes:

- Allworth
- Booral
- Bulahdelah
- Bunyah
- Coolongolook
- Limeburner's Creek
- Markwell
- Nabiac
- Newells Creek
- Stroud
- Stroud Road
- Wards River
- Wootton

Desired Future Character

The desired future character is derived from the existing development. Existing development within these areas is usually characterised by:

- Detached buildings, usually small in size, and with simple traditional (square or rectangular) footprints;
- Usually address the street, often with a simple verandah;
- Generally single storey;
- Commonly gable and hipped roof forms with skillion additions;
- Roof pitches up to 30 degrees, but commonly 15 degrees or 22 degrees;
- Common use of weatherboard, and less common use of brick;
- Common use of corrugated iron and in some cases shingle roofing;
- Usually small window openings of vertical proportion;
- Often painted in earthy colour schemes including light stone, brown and beige colours; and
- Landscaping which commonly includes remnant bush, vegetation within streets, reserves and private land.
- Designs which are not in character with these locations include:
 - Large bulky buildings;
 - Gun-barrel site layouts- rectangular buildings which cover the full length of an allotment;
 - Large or elongated roof forms;
 - Buildings in textured or mottled bricks roofs with angled fascias or flat roofs;
 - Highly ornate buildings and buildings in imitation “styles”;
 - Designs incorporating mock detail such as shutters, cast iron lace and columns; and
 - Highly formalised planting.

3.2.2.1 Stroud

Vision

Future development within Stroud is to encourage development that makes a positive contribution to the historic character of Stroud.

History

Stroud is historically significant from both an Aboriginal and non Aboriginal cultural perspective. The Stroud-Gloucester Valley supported high Aboriginal populations and was home to the Worimi and Wonarooa people in the southern parts of the valley and the Biripi people in the northern parts. The valley was a rich source of food and their land management techniques helped create the areas of grassy open forest that were eagerly sought by the Australian Agricultural Company.

The Australian Agricultural Company was the first large agricultural company formed in Australia and its Port Stephens Estate, which included the Stroud-Gloucester Valley, was intended to produce fine wool for the English wool mills.

Stroud became the headquarters of the Company from about 1834 to 1856 and today contains important early colonial buildings remaining from this first period of occupation. The township was surveyed in 1855, thus providing Stroud with its present street layout and character.

Stroud is historically significant because of this early association with the Australian Agricultural Company and the subsequent development of the township in the period from the 1850s to about 1960.

These qualities have been relatively undisturbed by later development and have given Stroud a rich legacy of early colonial buildings, later commercial and civic buildings and a broad range of weatherboard dwellings and styles. Stroud is set scenically in the Mammy Johnson’s – Karuah River Valley, regarded since its initial exploration as a

place of great beauty and adding richly to Stroud's heritage significance.

Stroud's heritage significance was formally identified by the National Trust in 1976 and given further emphasis in 1978 when it commissioned a conservation study of Stroud and its environs.

The overall built form of the locality reflects an historic early 19th century township. This built form consists of predominantly single storey, detached dwellings with an open curtilage and traditional fences or no fences within the residential areas of Stroud.

Commercial buildings have a domestic scale with simple parapets; hipped or gabled roof forms, traditional shop fronts and footpath awnings to help create a pedestrian friendly environment.

Rural areas retain their landscape setting with buildings well set back from each other and located so that they do not intrude upon prominent ridges and hill lines.

Desired future character

The desired future character of Stroud as expressed by the community is for the existing ambience and settlement pattern of the historic village to be maintained.

To achieve this, new development is to 'fit in' with the historic character and is to follow the historic design cues embodied in the village and environs. These cues relate to the low scale building form, open grid street pattern and open landscape setting of Stroud.

Protection of the existing historic buildings, places and landscape is of fundamental importance in the growth and development of Stroud.

The protection of historic buildings and places is particularly important within the 'bridge to bridge' precinct which incorporates the Stroud Heritage Conservation Area.



Example of residential house character (Click here to view [original image](#))



Example of Stroud main street character (Click here to view [original image](#))



Edge of town character - landscape framing the visual catchment of the village (click here to view [original image](#))



Stroud edge of town character - landscape framing the visual catchment of the village (click here to view [original image](#))



Character - Stroud Post Office (click here to view [original image](#))



Example of character - Stroud showgrounds (click here to view [original image](#))

3.3 Residential Development

3.3.1 Low Density Residential

These character statements apply to areas of low density residential and may include land zoned;

- R2 Low Density Residential

Existing low density residential development is generally influenced by natural landform and vegetation. The following characteristics contribute to their uniqueness and character and provide the foundations for the desired future character of the low density residential setting:

- Interaction between natural coastal vegetation and built form;
- Detached buildings of varying size;
- Few bulky buildings;
- High standard of individual designs sometimes emphasised by topography and usually oriented towards the view;
- Variety of roof forms;
- Wide range of materials often contrasting with the natural landscape; often buildings elevated above the site; and
- Strong attention to detail, with use of articulation, contrasting materials and colour to enhance their appearance.

Designs which are not in character with these locations include:

- Large bulky buildings
- Gun-barrel site layouts - rectangular buildings which cover the full length of an allotment;
- Highly ornate buildings and buildings in imitation "styles" such as federation or Mediterranean styles.

3.3.1.1 Tea Gardens Additional Low Density Residential Character Statement

The desired future character of the low density residential areas of the Tea Gardens locality is derived from its maritime history, estuarine setting and tourism appeal.

Tea Gardens is located within a sensitive estuarine environment; maintaining water quality and the riverscape are key

elements in the future desired character of this area.

Protection of the area from natural hazards including flooding, sea level rise and reflecting its history will influence the future urban form.

The overall built form of the locality is to be of a low key, relaxed design suited to a sensitive estuarine location.

3.3.1.2 Hawks Nest Additional Low Density Residential Character Statement

The desired future character for the low density residential areas of Hawks Nest is derived from its coastal setting and habitat values; particularly for koalas.

Development at Winda Woppa is to be limited to low scale and low density housing developments designed to fit within this scenic area and to be protected from natural hazards.

A low scale 'bushy' coastal setting is to be maintained in Hawks Nest by small scale sympathetic infill developments set within the natural vegetation.

The Hawks Nest business centre is to function as the main town centre; it will service the daily retail and service needs of the locality. Supporting this centre will be the recreation and service facilities associated with the surf club, caravan park, golf club and waterway reserves.

3.3.2 Large Lot Residential, Rural and Environmental Land

These character statements apply to areas of large lot residential, rural or environmental which may include land zoned;

- R5 Large Lot Residential
- RU2 Rural Landscape
- E2 Environmental Conservation
- E3 Environmental Management
- E4 Environmental Living

The desired future character of residential development in these areas is for small scale low impact dwellings and ancillary structures which respond to topographic and environmental site constraints.

Existing development patterns within these areas may be characterised as:

- Development being secondary to the natural environment;
- Development does not dominate views and vistas;
- Detached buildings generally single storey;
- The retention of natural tree cover with consideration of both bush fire hazard and environmental protection.

New development within these areas will be guided by the following principle objectives:

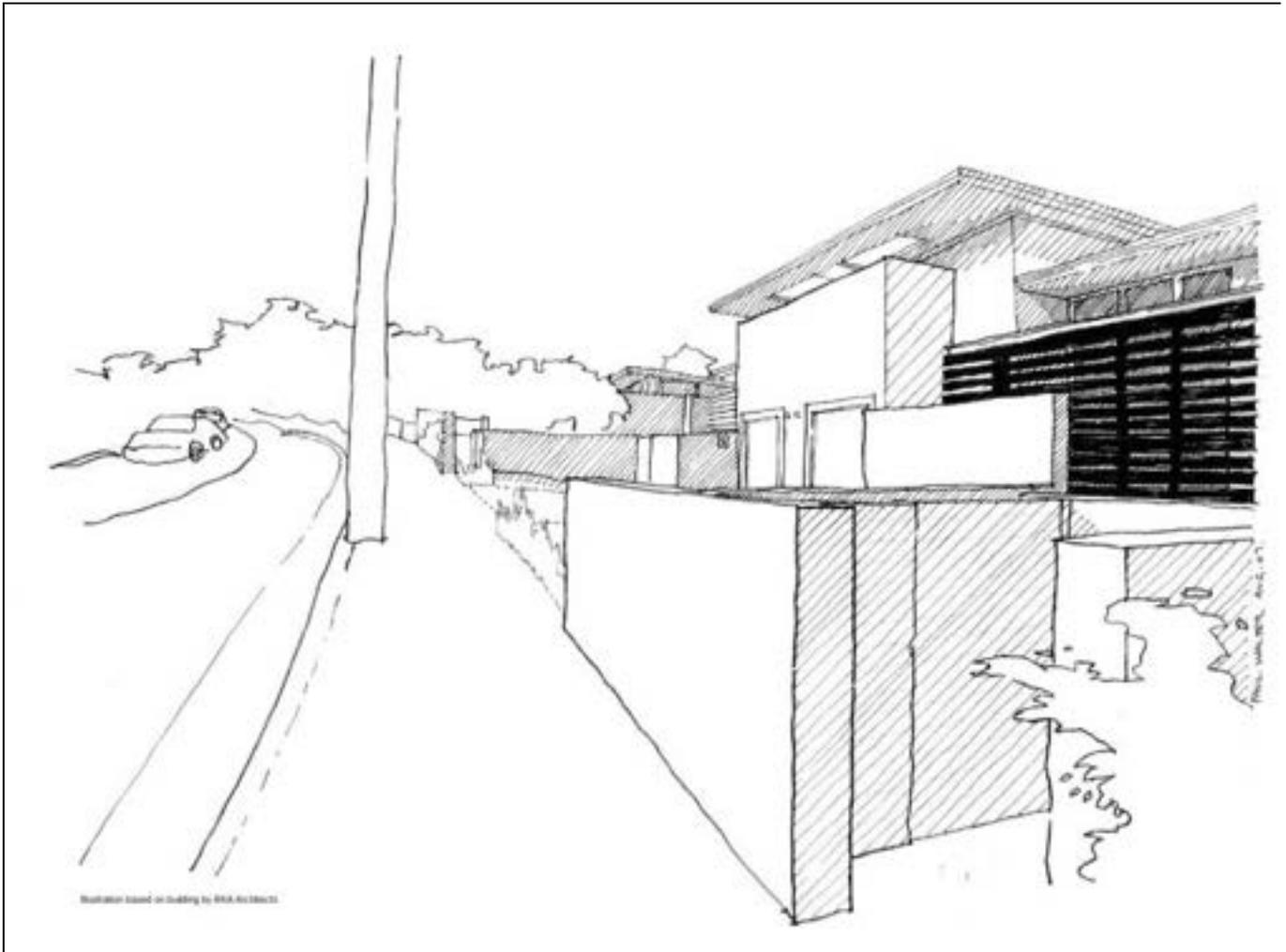
- To promote development that is sympathetic to the existing character of the locality, as well as the specific landform, vegetation, soils and geology of the site;
- To protect and enhance sensitive environs and waterways;
- To ensure the preservation of rural land activities and agriculture and prevent fragmentation of rural lands;
- To minimise potential conflicts between land uses, especially primary production enterprises and rural small holdings;
- To prevent the siting and orientation of any new building upon any prominent ridgeline or hilltop;

3.3.3 Medium Density Residential Development

These character statements apply to areas of medium density residential and may include land zoned;

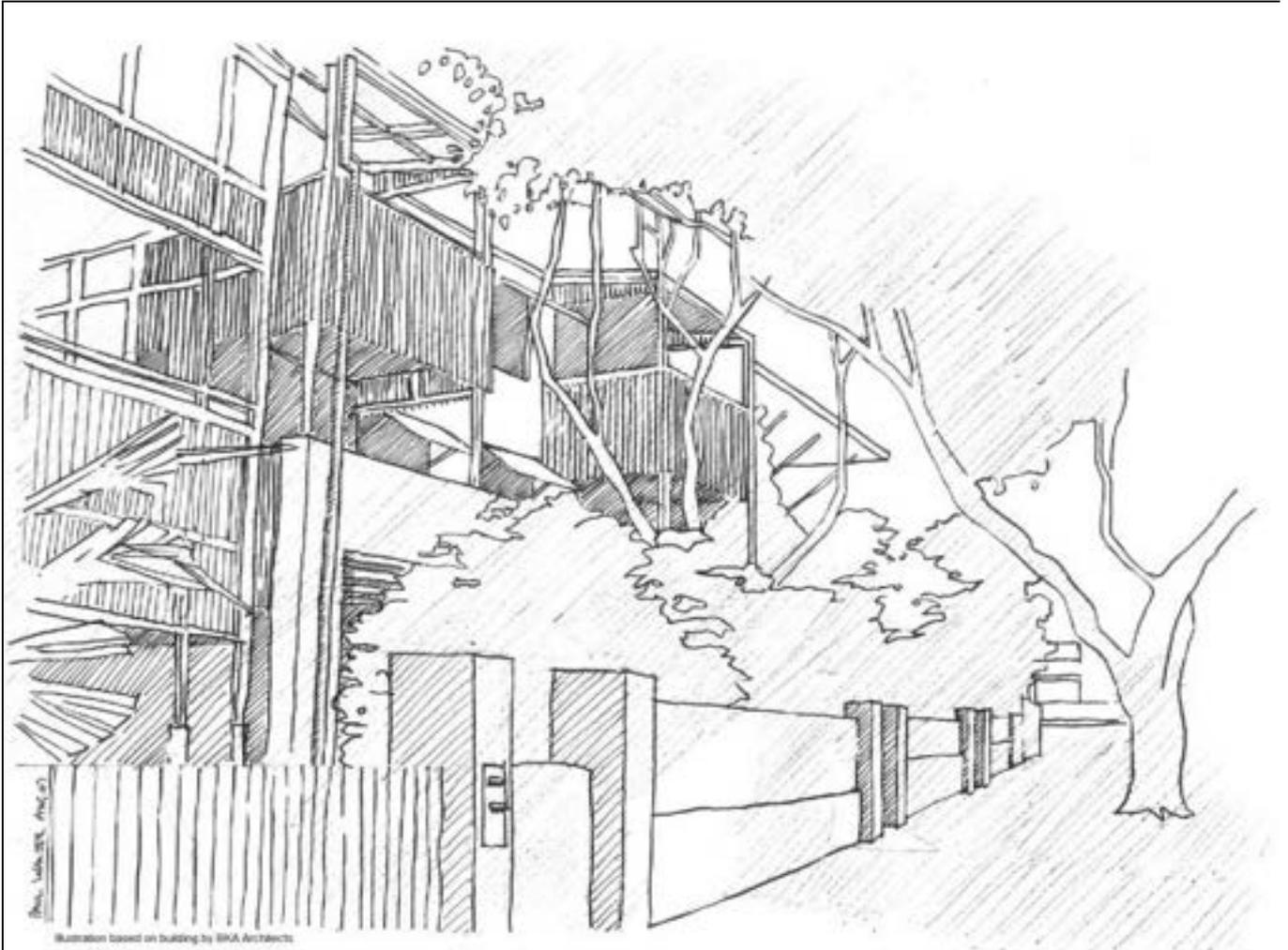
- R3 Medium Density Residential

Examples of the building characteristics for medium density residential areas are described below.



Medium density residential building character (click here to view [original image](#))

- Building mass is composed as a group of separate elements. It is neither monolithic nor has it monotonous repetition.
- Broad eaves shade windows and protect wall surfaces
- Batten screens mediate privacy between busy public road and interior.
- Garbage storage area is discreetly integrated into design in a convenient location.
- Project deals with a busy road edge with masonry walls however passive surveillance is permitted and walling does not form a continuous barrier.



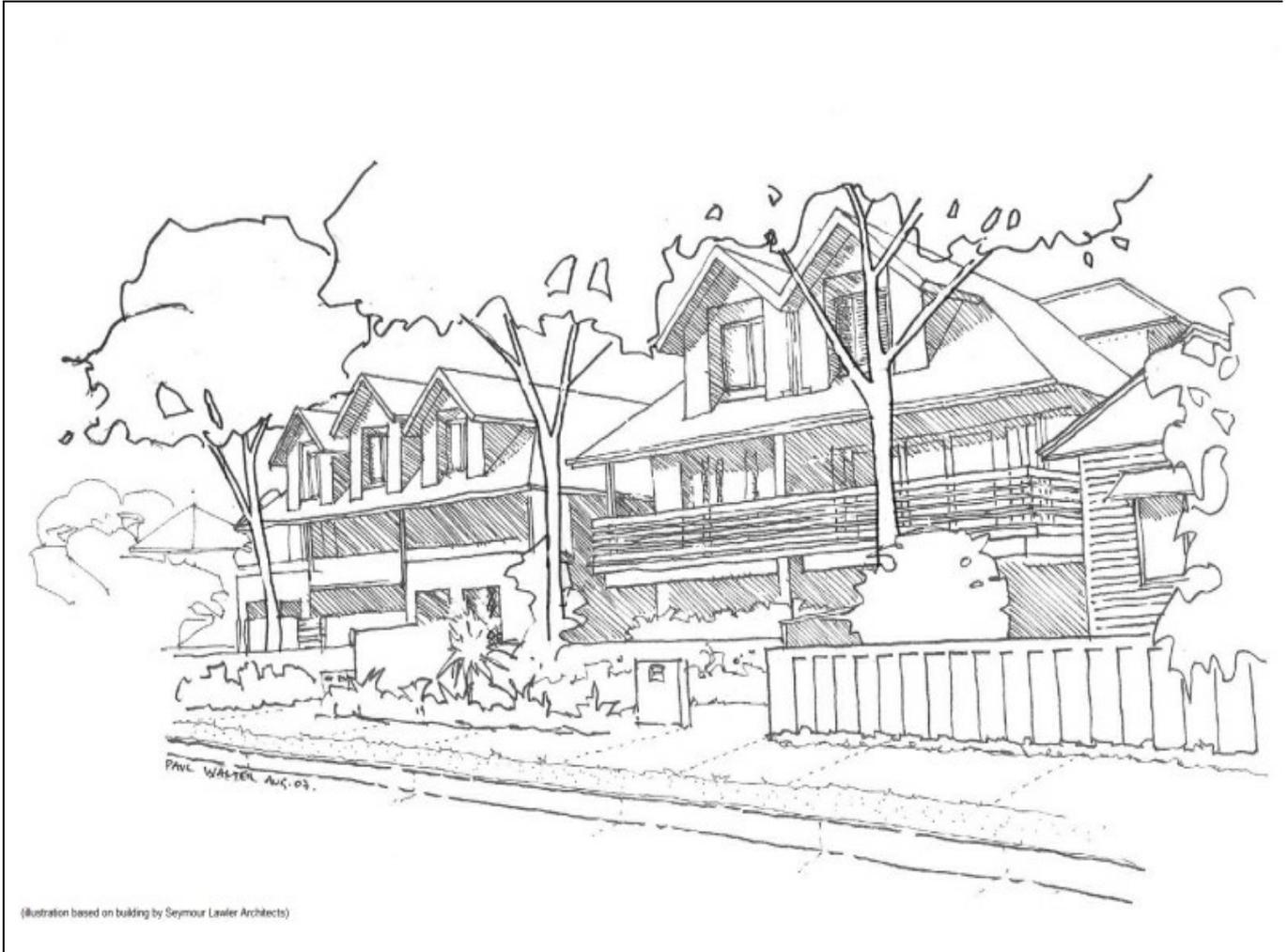
Medium density residential building character (click here to view [original image](#))

- Dense vegetation screens ground level living space.
- Passive surveillance of the street is provided from upper level windows and balconies.
- Well-shaded windows protect from heavy rain and summer heat.
- Broad eaves and balcony roofs protect interior.
- Timber structure and battens refer to traditional warm-climate Australian residential architecture.
- Individual 'front gate' entries are clearly identifiable.



Medium density residential building character (click here to view [original image](#))

- Vertical walls establish a clear rhythm in the elevation.
- Building steps in and out to modulate the street elevation: reducing the bulk and creating interest
- Projecting eaves and balconies create a variety of light and shadow on the elevation
- Plantation shutters can be operated to shelter balconies depending upon needs or the weather
- Placement of shades and operable shutters animates the elevation
- Vegetation screens ground level living spaces.
- Building overlooks the street providing good passive surveillance.
- Informal building character appropriate to a coastal holiday town.
- Building incorporates elements of traditional Australian warm-climate architecture including timber screens, shutters and shades.



Medium density residential building character (click here to view [original image](#))

Desired building character in the medium density residential zone, particularly in heritage conservation area or in proximity of heritage items, illustrating:

- Development is broken into discreet buildings that respond to the existing rhythm of single house lots.
- Taller building elements at the rear of the site
- The design uses hipped roof and gable forms to reduce bulk of upper level
- Shady balconies have a good view to the street
- Separate units are legible from the street.
- Street address is not dominated by car parking structures
- Substantial native canopy trees are established in the property.

3.3.4 High Density Development

These character statements apply to areas of high density residential and may include land zoned;

- R4 High Density Residential

Examples of the building characteristics for high density residential areas are described below.



High density residential building character (click here to view [original image](#))

- Strong corner-defining build form.
- Relationship of solid and void emphasizes vertical orientation.
- Vegetation incorporated on podium.
- Tall retail space at corner invites entry.
- Residential commercial mix creates passive surveillance of the street.
- Substantial street trees create pleasant shaded environment on footpath.



High density residential building character (click here to view [original image](#))

- Retail addresses through-site link creating passive surveillance.
- Corner is activated with outdoor dining.
- Contemporary coastal style.
- Deep balconies connected to living spaces.
- Operable shutter screens shelter balcony space and create interest in the elevation.
- Broad eaves protect windows and doors.

3.4 Mixed Use Development

Mixed use developments is encouraged as it provides for a variety of uses and activities, adding vibrancy and life to the streets.

Mixed use development promotes a mix of uses within urban areas and challenges conventional planning practices which segregated land into individual uses. Mixed use developments integrate uses either horizontally with different uses adjacent to each other or vertically with different uses stacked within the same building.

These character statements apply to areas of mixed use development and may include land zoned;

- B1 Neighbourhood Centre
- B2 Local Centre
- B4 Mixed Use
- R4 High Density Residential



Mixed use building character (click here to view [original image](#))

- Carefully detailed timber construction refers to traditional 'timber town'.
- Face timber weatherboards is allowed to weather and 'silver' over time creating natural colour tones.
- Individual residential entries add to street activation and provide clear address.
- Broken form modulates street elevation and creates rhythm.
- Louvered windows permit cross ventilation maintaining security and weather protection.
- Contemporary architectural expression
- Masonry blade walls provide fire separation between timber residences

4 Environmental Considerations

This section provides information on environmental matters that may need to be addressed in the design of a development. Some of these matters will determine the suitability of a site for a particular development.

4.1 Ecological Impacts

Objectives

- To ensure that development is designed in a manner that avoids, mitigates or offsets negative impacts on biodiversity and the quality and function of the natural environment and responds to relevant ecological constraints and opportunities.

Controls

In considering whether to grant consent to a development, Council will consider biodiversity and ecological matters relevant to the development and the land which is affected by that development. In this regard, Council will consider matters that include, but are not limited to, the following:

- (1) the avoidance (where possible) or minimisation of loss and harm to remnant native vegetation and trees and the habitat of wildlife populations, and
- (2) the protection of natural biodiversity, including native vegetation and wildlife, their habitats and biological processes and functions, and
- (3) the protection of all ecological values of the natural landscape including scenic, recreational, aesthetic and cultural heritage values, and
- (4) the design and siting of the development (including the footprints of all built structures, access, services, bushfire asset protection zones, water management structures, and other ancillary features of that development) in the area of the land that is of least ecological or biodiversity constraint and where the siting of that development results in the least possible ecological or biodiversity-related impact, and
- (5) the appropriate siting and design of a development (including lot boundaries) with regards to the protection of agricultural sustainability, ecological integrity, topography, landform, native vegetation, wildlife habitat, wetlands and watercourses, and
- (6) the adoption of suitable and effective protective safeguards that avoids, minimises or compensates for the clearing of habitat and native vegetation within any development, and
- (7) the capability of the land to accommodate the development without impairment or harm to important ecosystem services functions and the condition, ecological value and significance of fauna and flora, and
- (8) the avoidance of fragmentation or disturbance of wildlife habitats and the protection, maintenance and (where possible) enhancement of ecological linkages and wildlife corridors in a local, sub-regional and regional context, and
- (9) the avoidance (where possible) and minimisation of negative impacts on natural landscapes that provide key ecological services provisions, including but not limited to, rainforests, wetlands, riparian zones, vegetated steep lands, rare, regionally significant or poorly conserved ecological communities, threatened species habitats, endangered ecological communities and protected land, and
- (10) the identification and active protection of natural landscapes that provide key ecological services provisions, including but not limited to, rainforests, wetlands, riparian zones, vegetated steep lands, rare, regionally significant or poorly conserved ecological communities, threatened species habitats, endangered ecological communities and protected land, including the need to adopt buffers of adequate width and configuration to such areas to protect them from the overt direct or indirect effects of that development, and
- (11) the compensating or offsetting of unavoidable impacts of a development such that the natural environment and native biodiversity is maintained or improved. The provision of any offsets should be located on the development

site or as close as possible to the area of impact, and not beyond the bounds of the Great Lakes Local Government Area, and

- (12) where primary koala food tree species occur, the means with which the development would avoid such trees and where, if impacts on such trees are unavoidable, the means with which there would be a long-term net gain in the representation of primary koala food tree species as a consequence of that development, and
- (13) where hollow-bearing trees (comprising trees with cavities, hollows, splits or decorticated bark capable of providing roosting, denning or refuge sites for native vertebrate fauna) occur, the means with which the development would avoid such trees and where, if impacts on such trees are unavoidable, the means with which there would be a long-term net gain in the representation of denning opportunities for hollow-dependent native wildlife as a consequence of that development, and
- (14) the adequate, effective and active conservation management of areas of high biodiversity conservation value of the land of a development site and/ or a restoration or an offset area through a permanent, executed legal mechanism and the preparation, funding and implementation of a habitat or restoration management plan, and
- (15) the management of risks associated with bush fire in a manner that does not unreasonably compromise and minimises or avoids impacts on native vegetation, wildlife and wildlife habitats, and
- (16) the containment, within a single lot, of the area of a holding that comprises land that is zoned E2 Environmental Conservation, and
- (17) the encouragement of conservation and recovery of populations of threatened biodiversity within a development and/ or any offset areas, and
- (18) the adoption of suitable and effective protective safeguards that avoids impacts to areas of high conservation value native vegetation and native wildlife populations and their habitats from any harm or impact associated with the introduction or encouragement of domestic pets, invasive exotic plants and animals and grazing animals, and
- (19) the means with which priority invasive environmental weeds would be effectively and actively controlled and suppressed on the development site for the life of the development, and
- (20) consideration of the location and style of fencing on the land on the development site to enclose and/ or protect areas of high conservation value native vegetation and native wildlife populations and their habitats.

4.2 Flooding

Objectives

- The risk of impacts from flooding on people and assets are avoided or otherwise minimised.
- Development is located in response to the identified flood hazard and designed to accommodate flood conveyance and storage.
- Environmental impacts of development on flood prone land are avoided or otherwise minimised.
- Development on flood prone land does not adversely impact neighbouring properties or visual amenity.
- The potential for financial loss or cost to the community as a result of development on flood prone land is limited.

Flood Planning Area explanatory diagram incorporating freeboard and sea level rise

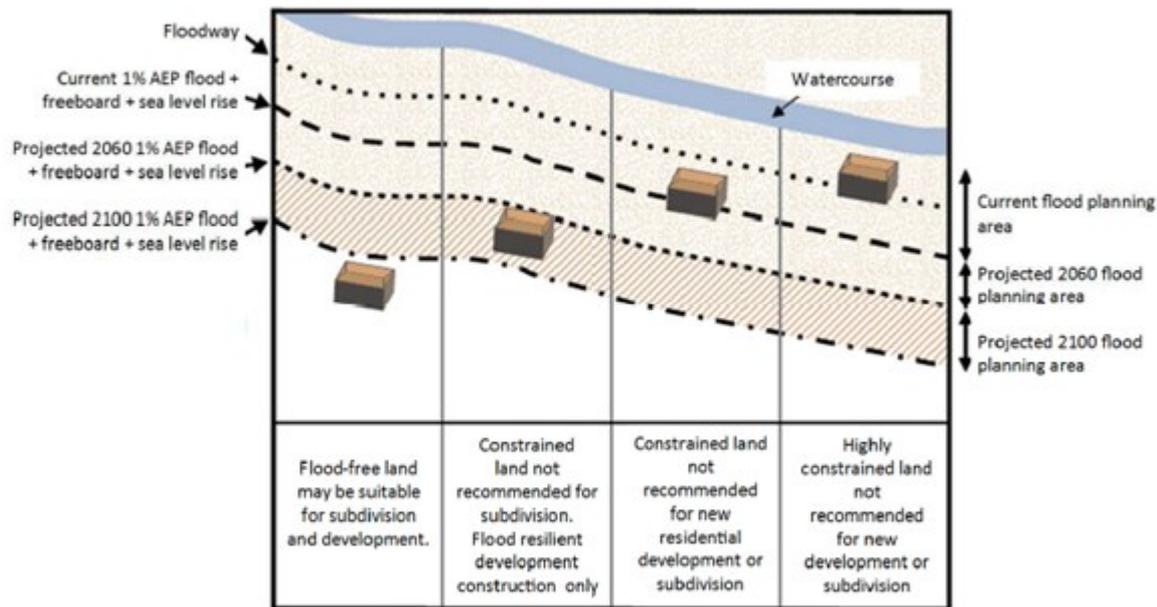


Diagram adapted from NSW Planning *NSW Coastal Planning Guideline: Adapting to Sea Level Rise* (2010)

Flood Studies

Applications to subdivide or develop within the Great Lakes LEP 2014 Flood Planning Area may be required to submit a flood study to establish:

- site specific flood planning levels including allowances for sea level rise;
- how any alterations in flood behaviour caused by the development may impact on surrounding properties;
- appropriate habitable floor levels for development; and
- the impact of the development on flood conveyance and storage.

Subdivision Controls

- (1) New allotments are to be designed to ensure that all proposed building envelopes are located outside the 2100 flood planning area.
- (2) In circumstances where the location of a building envelope beyond the 2100 flood planning area is not possible a variation may be sought. If supported by Council, building envelopes are to be located at or above the 2100 1% AEP flood level.
- (3) All lots are to have a continuous and rising vehicle evacuation route.
- (4) The filling of land is to limit the impact on adjoining properties and the visual amenity of the location.
- (5) Landscaping and vegetated buffers located in flood prone areas must be designed and located to reduce the impacts of flood waters on soil stability and adjoining buildings and structures.
- (6) Subdivisions in non-urban zones e.g. large lot residential, rural and environmental zones that create an additional dwelling entitlement, are to provide:
 - (a) storage of vehicles, machinery and the installation of septic tanks within the building envelope; and
 - (b) an on-site sewage disposal area above the 2100 5% AEP flood level.

Building Controls

Any building partly or wholly constructed below the 2100 flood planning level, must be certified by a structural engineer to demonstrate that the building and associated structures have been designed to withstand flood forces exerted by the 2100 1% AEP flood.

New Buildings

- (1) New buildings are to be designed and located entirely outside of the 2100 flood planning area wherever possible.
- (2) New buildings are to be designed with habitable floor levels above the 2100 1% AEP flood planning level.
- (3) In circumstances where construction of a new building at the 2100 1% flood planning level is likely to have an adverse impact on the adjoining property or the visual amenity of the location, a variation may be sought. If supported by Council, the new building may be designed with habitable floor levels above the 2060 1% AEP flood planning level.
- (4) Vehicle access to new buildings is to be designed to so that ingress and egress from the site is provided above the 2100 1% AEP flood planning level.

Alterations and Additions

- (1) Additions and alterations having a gross floor area of 30sqm or less may be constructed at the existing floor level of the building.
- (2) Additions and alterations having a gross floor area greater than 30sqm are to be designed and located so that any new habitable areas have floor levels located above the 2060 1% AEP flood planning level.
Note: Any replacement or refurbishment of existing floor areas where structural changes are proposed will be considered as part of the 30sqm addition or alteration gross floor area calculation.
- (3) In circumstances where construction of new habitable areas at the 2060 1% AEP flood planning level is likely to have an adverse impact on adjoining properties or the visual amenity of the location, a variation may be sought. If supported by Council, the habitable areas may be located 500mm below the 2060 1% AEP flood planning level.

Note: Habitable areas generally include any of the following: bedrooms, living room, lounge room, music room, television room, kitchen, dining room, sewing room, study, playroom, family room, home theatre and sunrooms. Please refer to the Building Code of Australia for more information.

Fencing

- (1) Fences within a floodway are to be of an open-style design to minimise impacts on flood conveyance.

Additional Resources

[State Emergency Services Subdivision Guidelines](#)

[State Emergency Services Building Guidelines](#)

[Office of Environment & Heritage Floodplain Development Manual](#)

4.3 Coastal Planning Areas

This section of the DCP applies to land identified as being within a Coastal Risk Planning Area on the Coastal Risk Planning Maps of Great Lakes Local Environmental Plan (LEP) 2014, where the provisions of Clause 7.4 Coastal Risk Planning of the LEP also apply. This section also provides guidance on how to meet the requirements of clause 7.4 of Great Lakes LEP 2014. Within this development control plan this is referred to as the 'coastal planning area'.

Note: For the purposes of assessment, the design life of any building or structure is taken to be 50 years, in accordance with the Building Code of Australia and Australian Standard 2870-2011.

Objectives

- To ensure that development is designed and located in response to potential coastal hazards and does not adversely impact neighbouring properties or public land.
- To ensure that development, where possible, avoids the need for physical structures to protect the development from potential damage caused by coastal hazards.

Within this development control plan certain applications for development within the coastal planning area must be accompanied by a report from a coastal engineer certifying the structure. A 'coastal engineer' is a suitably qualified and registered engineer with specialist experience in geotechnical and/or coastal marine processes.

A report from a coastal engineer is a Coastal Risk Management Report that addresses the Coastal Risk Management Guide - Incorporating sea level rise benchmarks in coastal risk assessments (2010), produced by the Office of Environment and Heritage and available at:

www.environment.nsw.gov.au/resources/water/coasts/10760CoastRiskManGde.pdf

Subdivision Controls

1. All proposed allotments are to include a nominated building envelope that is located outside of the coastal planning area.
2. Public services and infrastructure including sewer, water, drainage, electricity and roads are to be located outside of the coastal planning area and landward of any building envelope.

New Buildings

Checklist - what do I need to address in the Coastal Risk Management Report for my new building?

Key Question:	No	Yes
Is the new building proposed in the coastal planning area	A report is not required for the new building - see item 1 below	A report certifying the building is required - see item 2 below
Is the primary road access located in the coastal planning area	A report is not required for the road access	A report may be required on the road access - see item 3 below
Are the service connection points located in the coastal planning area	A report is not required for the service connection points	A report may be required on the service connections - see item 4 below

New buildings are to be located entirely outside of the coastal planning area wherever possible. If this can be achieved, a report by a coastal engineer certifying the structure is not required.

2. New buildings within the coastal planning area (in whole or part) must be accompanied by a report from a coastal engineer to certify that:
 - a) the foundations and footings of the building are designed to achieve safe bearing into the stable foundation zone; and
 - b) the building has been designed with a minimum habitable floor level that provides adequate protection from inundation by ocean wave run-up.
3. New buildings on properties where the primary road access is located within the coastal planning area (in whole or part) are to be designed so that that driveway access to the building:
 - a) is provided outside of the coastal planning area wherever possible;
 - b) access is not located between the building and the coastal planning area if an alternative location is available;
 - c) is provided from the secondary road frontage on a corner allotment;

Where access cannot be designed to meet one of these requirements, evidence is to be submitted that the occupants of the dwelling can evacuate the property if the road access or driveway is damaged as a result of a coastal hazard.

4. New buildings are to be designed so that new connections to public services and infrastructure such as sewer, water, drainage and electricity:
 - a) are located outside of the coastal planning area wherever possible;
 - b) not located between the building and the coastal planning area if an alternative connection point is available.

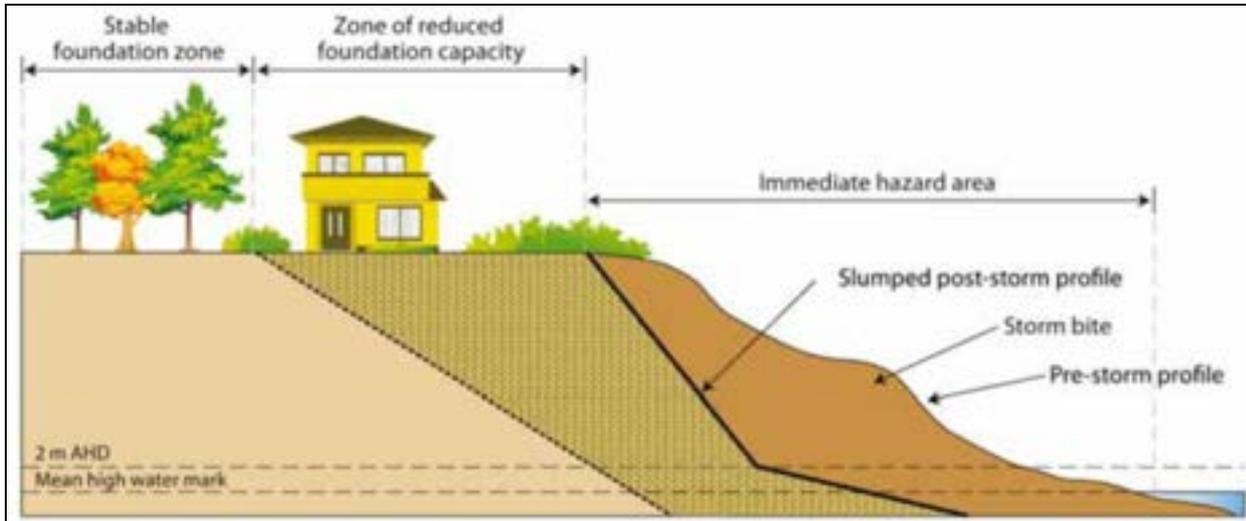


Diagram from the NSW Office of Environment & Heritage *Coastal Risk Management Guide* (2010)

Click [here](#) for original image.

Note: For the purposes of this DCP the stable foundation zone is to be regarded as natural dune material occurring landward and/or below the zone of reduced foundation capacity as defined in the Coastal Risk Management Guide. A copy of the Guide is available at: www.environment.nsw.gov.au/resources/water/coasts/10760CoastRiskManGde.pdf

Additions and Alterations

Checklist - do I need to provide a Coastal Risk Management Report with my additions and alterations?

Key Question	No	Yes
Is my addition within the coastal planning area	A report is not required - see item 1 below	A report is required - see item 2 below
Are my building alterations within the coastal planning area?	A report is not required - see item 1 below	A report is required - see item 3 below

1. Additions and alterations are to be located entirely outside of the coastal planning area wherever possible. If this can be achieved, a report by a coastal engineer certifying the structure is not required.
2. Additions that are proposed within the coastal planning area (in whole or part), are to be accompanied by a report from a coastal engineer to certify that the foundations are designed to ensure safe bearing into the stable foundation zone.
3. Alterations to an existing building within the coastal planning area (in whole or part), other than those permitted as exempt development, are to be accompanied by a report from a coastal engineer to certify that:
 - a) the alterations do not place any additional load on the existing footings of the building; or
 - b) the existing foundations are capable of carrying the additional load and provide safe bearing into the stable foundation zone; or
 - c) additional foundations have been designed to carry the additional load and will ensure safe bearing into the stable foundation zone.

Ancillary Structures

Checklist - do I need to provide a Coastal Risk Management Report with my ancillary structures?

Key Question:	No	Yes
Are ancillary structures proposed in the coastal planning area?	A report is not required - see item 1 below	A report is not required - see item 1 below
Are lightweight structures proposed in the coastal planning area?	A report is not required - see item 2 below	A report is not required - see item 2 below
Are masonry structures proposed in the coastal planning area?	A report is not required - see item 1 below	A report is required - see item 3 below
Are coastal protection works proposed in the coastal planning area?	Not applicable	A report is required - see item 4 below

- (1) Ancillary structures are to be located entirely outside of the coastal planning area wherever possible. If this can be achieved, a report by a coastal engineer certifying the structure is not required.
- (2) Light weight structures such as sheet metal garden sheds and detached timber pergolas do not require a report from a coastal engineer certifying the structure.
- (3) Masonry structures such as swimming pools and retaining walls are permitted within the coastal planning area if they are accompanied by a report from a coastal engineer to certify that the structure is designed:
 - (a) so that it is structurally separate from existing building/s; and
 - (b) to ensure safe bearing into the stable foundation zone.
- (4) Any proposed coastal erosion protection structures must be accompanied by a report from a coastal engineer to certify that the structure is designed and located wholly on private land and must not cause damage to, or otherwise adversely impact, an adjacent, neighbouring or public property.

Additional Information

www.environment.nsw.gov.au/resources/water/coasts/10760CoastRiskManGde.pdf

www.planning.nsw.gov.au/~media/Files/DPE/Plans-and-policies/nsw-coastal-planning-guideline-adapting-to-sea-level-rise-2010-08.ashx

www.environment.gov.au/archive/coasts/publications/nswmanual/index.html

www.legislation.nsw.gov.au/maintop/view/inforce/epi+572+2008+cd+0+N

4.4 Effluent Disposal

Objectives

- To ensure that new developments have adequate facilities for the management of onsite sewage
- To ensure that new development does not result in adverse impacts on the health of the public or the environment from sewage.

Controls

- (1) The development of vacant land for residential use based on an effluent pump out system (tanker removal) will not be permitted. Approval for the installation of an effluent pump-out system (tanker removal) will only be granted where:
 - (a) an existing dwelling/building is operating a system of sewage management with on-site disposal that has been determined by Council to be no longer functioning in a manner considered appropriate due to environmental and/or public health related concerns and has limited area available for a replacement on-

site sewage management system; or

- (b) an existing residential allotment is less than 3000sqm in size and it has been determined by Council that on-site disposal of effluent is not achievable and/or does not meet appropriate standards or guidelines.
- (2) The fundamental design of an On-site Sewage Management System (OSMS) for development where effluent is disposed of by a non-reticulated system and where Council's prescribed buffer distances cannot be achieved, must meet the minimum standards for the relevant On-Site Sewage Management Hazard Class for both the treatment and disposal of the effluent.
- (3) Site specific constraints that have the potential to impact on the environmental or public health must be accounted for in the capability of the treatment system and the design of the land application area. Council may refuse to permit development where it is determined that the environmental impacts and/or public health related risks are considered too great.
- (4) The design of the OSMS (including land application areas or disposal drains) must meet the requirements of:
 - (a) Great Lakes [On-site Sewage Management Strategy and Development Assessment Framework](#) (or as amended) ;
 - (b) *Australian Standard AS 1547:2000- Onsite Domestic Wastewater Management* (or as amended);
 - (c) [Environmental Health Protection Guidelines- On-site Sewage Management for Single Households](#) (or as amended);
 - (d) Any other guideline deemed relevant by Council officers, and/or published by a recognised department/ organisation.
- (5) In accordance with the [Local Government Act 1993](#) (s68C) (or as amended), an application to install, alter or construct a waste treatment device or human waste storage facility must be submitted to Council for determination prior to any works commencing on any part or modification of the on-site sewage management system.
- (6) The On-site Sewage Management System disposal area shall not be contained within or form any part of, the private open space or natural landscape areas of the site.
- (7) The discharge of any untreated grey-water from any source to a waterway, watercourse (whether intermittent or permanent), stormwater drain, drainage channel or ground surface is not permitted. Council approval is required for all grey-water disposal.
- (8) The beneficial reuse of treated effluent within the property confines is encouraged and must be done so in a manner that reflects the objectives of this clause/section.

4.5 Poultry Farms Buffer

Objectives

- To minimise conflict between agricultural uses of land and residential uses of land.

Controls

- (1) Proposed development must not place the occupiers of future premises in locations where they may be unreasonably affected by odour, dust, noise or activities associated with existing intensive agricultural development such as poultry farms.
- (2) In considering these issues, development applications must have due regard for the provisions of Council's [Commercial Poultry and Surrounding Development Policy](#) (or as amended) which may require an Odour Impact Assessment to be undertaken in accordance with the [Environmental Protection Authority \(EPA\) Draft Policy Assessment and Management of Odour from Stationary Sources in NSW \(2001\)](#) (or as amended).

4.6 Contaminated Land

Objectives

- To ensure previous land uses do not impact on the health and well-being of the public.

Controls

- (1) Land that is identified as potentially contaminated land is subject to the provisions of [State Environmental Planning Policy \(SEPP\) No.55 – Remediation of Land](#).

4.7 Bush Fire

Objectives

- To ensure new development is designed with regard to bush fire hazards.

Controls

- (1) All development proposals on land identified as bush fire-prone are to be accompanied by a bush fire hazard assessment report in accordance with the [NSW Rural Fire Service Planning for Bush Fire Protection 2006](#) (or as amended).
- (2) The bush fire hazard assessment report must have regard to the siting of any trees to be retained as recommended within the Arborist's report.
- (3) Any bush fire protection measures (i.e. Asset Protection Zones) must not encroach upon any adjoining land.
- (4) Selection of materials and methods of construction must have regard to [AS 3959-2009 Construction of buildings in bush fire prone areas](#) and [Planning for Bush Fire Protection 2006](#) (or as amended).

5 Single Dwellings, Dual Occupancies, Villas and Townhouses

This section contains site and building controls for single dwelling-houses, attached and detached dual occupancies and multi dwelling housing (villas and townhouses). Definitions of these types of development are contained in Great Lakes Local Environmental Plan 2014.

Some of the land use zones where these types of development may be permitted include:

- RU2 Rural Landscape
- RU5 Village
- R2 Low Density Residential
- R3 Medium Density Residential
- R5 Large Lot Residential
- E2 Environmental Conservation
- E3 Environmental Management
- E4 Environmental Living

5.1 Solar Access and Overshadowing

Objectives

- To ensure solar access to private outdoor areas and minimise the impacts of overshadowing.

Controls

- (1) Buildings should be designed to allow at least two hours of sunshine upon the internal and outdoor living areas of adjacent dwellings and between 9.00 am and 3.00 pm on 21 June.
- (2) Where the possibility of overshadowing may occur, shadow diagrams are to be submitted to illustrate the shadows cast by the proposed building at 9.00 am, 12.00 noon and 3.00 pm on 21 June.

5.2 Views and Privacy

Objectives

- To protect the amenity and privacy of indoor and outdoor living areas of new and existing residential development.

Controls

- (1) In designing buildings the concept of 'view sharing' should be adopted by considering the impact of buildings on the views enjoyed by neighbours.
- (2) Visual privacy for adjoining properties and within development projects can where necessary, be achieved by:
 - (a) Using windows which are narrow, translucent or obscured to bathrooms and toilets;
 - (b) Ensuring that windows do not face directly onto the windows, balconies or courtyards of adjoining dwellings; or
 - (c) Screening windows, balconies and courtyards within 3m of a property boundary.
 - (d) Privacy screens should not impact upon existing view sharing arrangements.
- (3) Where windows or balconies of dwellings are within 9m of windows or balconies of other dwellings, some form of screening or reduction in window areas should be provided to ensure visual privacy.

5.3 Energy Efficiency

Objectives

- To provide thermal comfort and minimise the need for electrical lighting, heating and cooling and greenhouse gas emissions.

Controls

- (1) Residential buildings are to comply with the [SEPP \(Building Sustainability Index BASIX\) 2004](#).
- (2) Council encourages the use of alternative energy sources.

NOTE: The Building Sustainability Index assesses the potential performance of buildings against a range of sustainability indexes including: energy, water and thermal comfort. The assessment can be undertaken on-line and the Building Sustainability Certificate demonstrating compliance with BASIX, must be lodged with applications for residential development.

5.4 General Building Design

Objectives

- To provide a high quality design of new residential development that responds to the environment in which it is located.
- Attached garages and carports are located and designed so that they do not dominate the streetscape or adversely affect the adjoining properties.

Controls

- (1) Built form is to be articulated into a series of linked massing elements. Each massing element is to have an overall maximum wall length of 12m. Note: this control does not apply to a single storey dwelling, except when located on a corner block.
- (2) Buildings are to contribute to an active street by having a window to a living area or bedroom fronting the primary street.
- (3) Attached garages and carports must have a minimum 500mm setback from the front building line of the dwelling for which it is provided.
- (4) Attached garages and carports and open car parking spaces must be setback at least 6m from the front property boundary.
- (5) Door openings of attached garages should be:
 - (a) Maximum total width of 6m; and
 - (b) Maximum 50% of the width of the building.
- (6) On corner lots the building design should provide an address to both streets.
- (7) Building entries/front doors should be directly visible from the street and preferably part of dwelling frontage.
- (8) To aid the environmental performance of buildings and for visual amenity of new buildings, eaves with a minimum width of 600mm to the north, east and west of the external perimeter or 70% of external walls should be considered.
- (9) Building designs are to be stepped to follow the contours of the site rather than requiring extensive cut and fill to enable 'slab on ground' construction.
- (10) Colour and materials are to be sympathetic to the existing character of the street and natural setting of the locality. Highly reflective materials should be avoided. On sloping sites in built up areas, reflective, white and other light coloured roof materials should be avoided to reduce glare impacts to adjoining properties.

5.5 Setbacks

5.5.1 Objectives

- To ensure residential buildings have sufficient separation to provide privacy, solar access, landscaping opportunities and amenity for occupants.
- A residential building must be setback from its primary road frontage a sufficient distance to ensure safe vehicular access and egress from the site.

Seal Rocks - Additional Site Specific Controls

- (1) In Seal Rocks, buildings are to be constructed predominately of light weight materials such as weatherboards and/or timber and fibre cement for external cladding. The use of materials such as concrete and masonry are to be minimised.

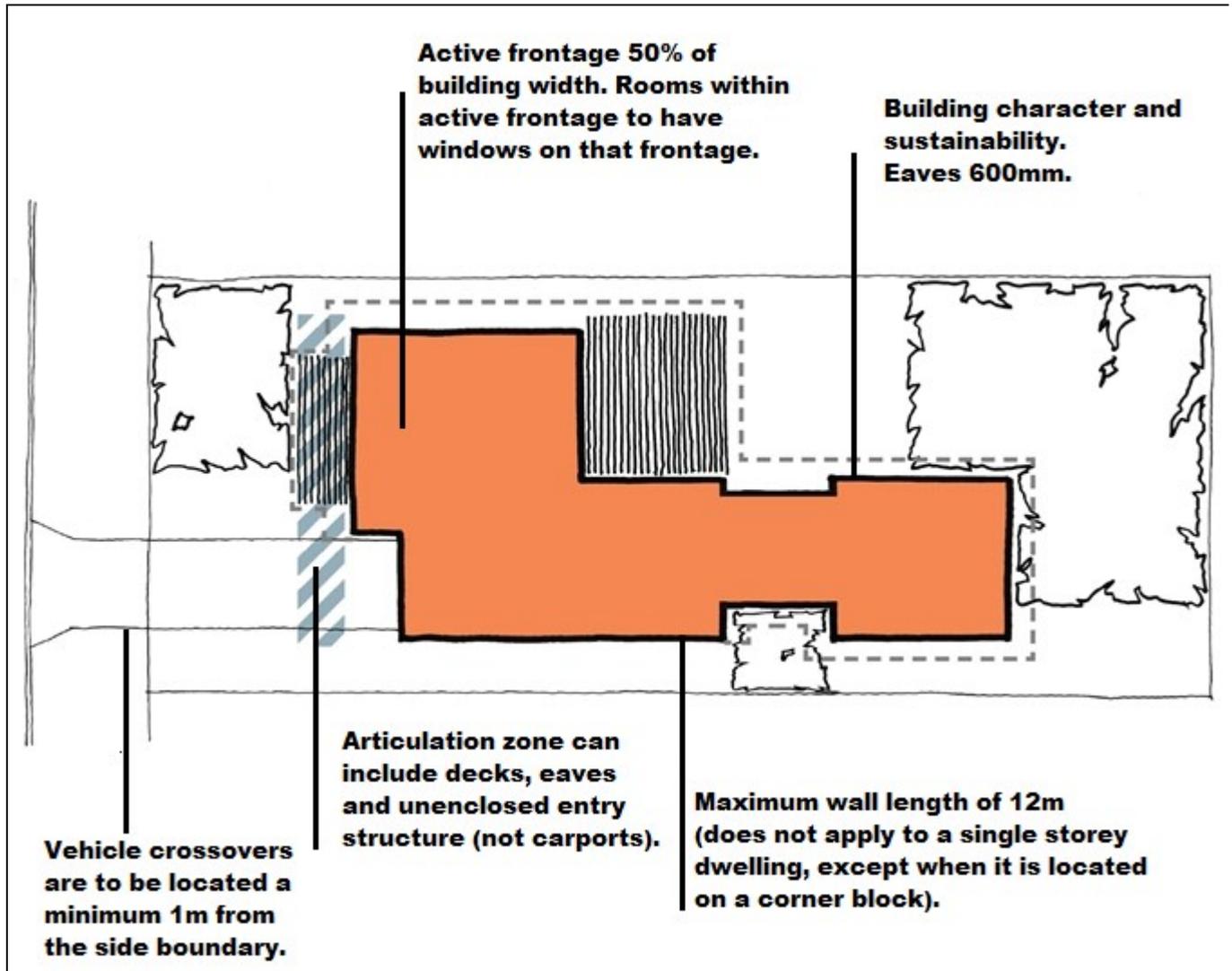
Large Lot Residential - Additional Zone Specific Objectives

- To ensure that the siting of buildings has minimal impact on the natural amenity, views and vistas of the site and locality.

Rural and Environmental Land - Additional Zone Specific Objectives

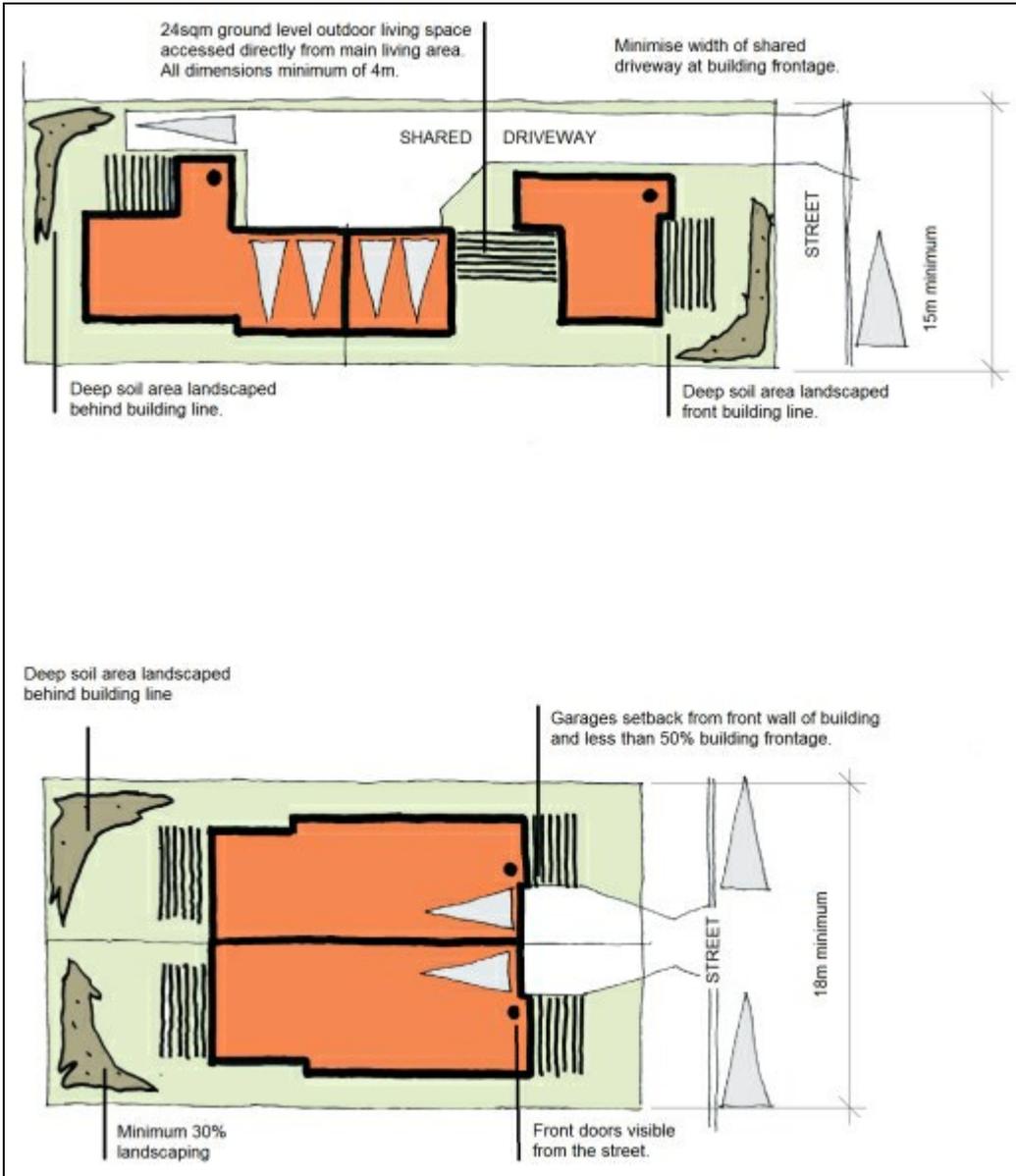
- To ensure that the siting of buildings has minimal impact on the natural amenity, views and vistas of the site and locality;
- To provide sufficient separation distances between dwelling-houses, secondary dwellings and rural land uses, in order to minimise any potential adverse land use conflicts and / or additional pressures on adjoining agricultural activities;
- To preserve and maintain satisfactory native vegetation buffer screen planting along property boundaries;

Single Dwelling Lot Layout Example

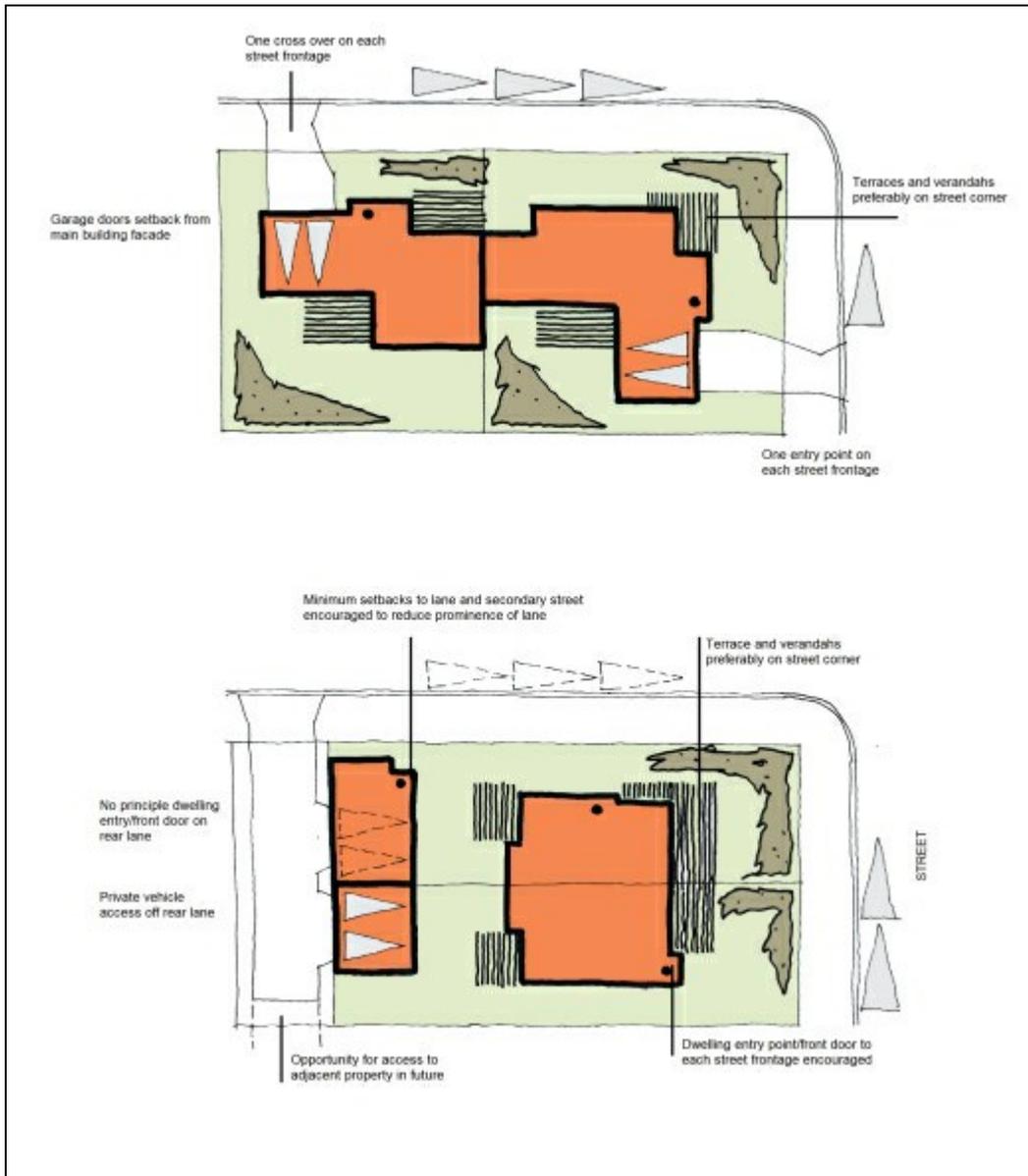


Single dwelling lot layout example ([click here to view original image](#))

Dual Occupancy Lot Layout Example



Dual occupancy lot layout example (click here to view [original image](#))



Dual occupancy lot layout example (click here to view [original image](#))

5.5.2 Residential and Village Zones

5.5.2.1 Primary Road Setback Controls

- (1) Where there are existing neighbouring houses within 40m, the primary road setback should be an average of the setbacks of the nearest two neighbouring houses, with the same primary road frontage.
- (2) Garages, carports and open car parking spaces must be setback at least 6m from the primary road frontage.
- (3) A reduced primary road setback may be considered when the side and rear boundaries of an allotment are located within (in whole or part) the coastal planning area. It must be demonstrated that the reduced setback does not detrimentally impact upon the amenity of adjoining properties, streetscape or vehicular access and egress from the site.

Additional Front Setback Controls Excluding Site Specific Controls

- (1) Where there are no neighbouring houses the minimum setback from the primary road frontage will vary:
 - (a) 4.5m minimum setbacks on allotments less than 900m²; and

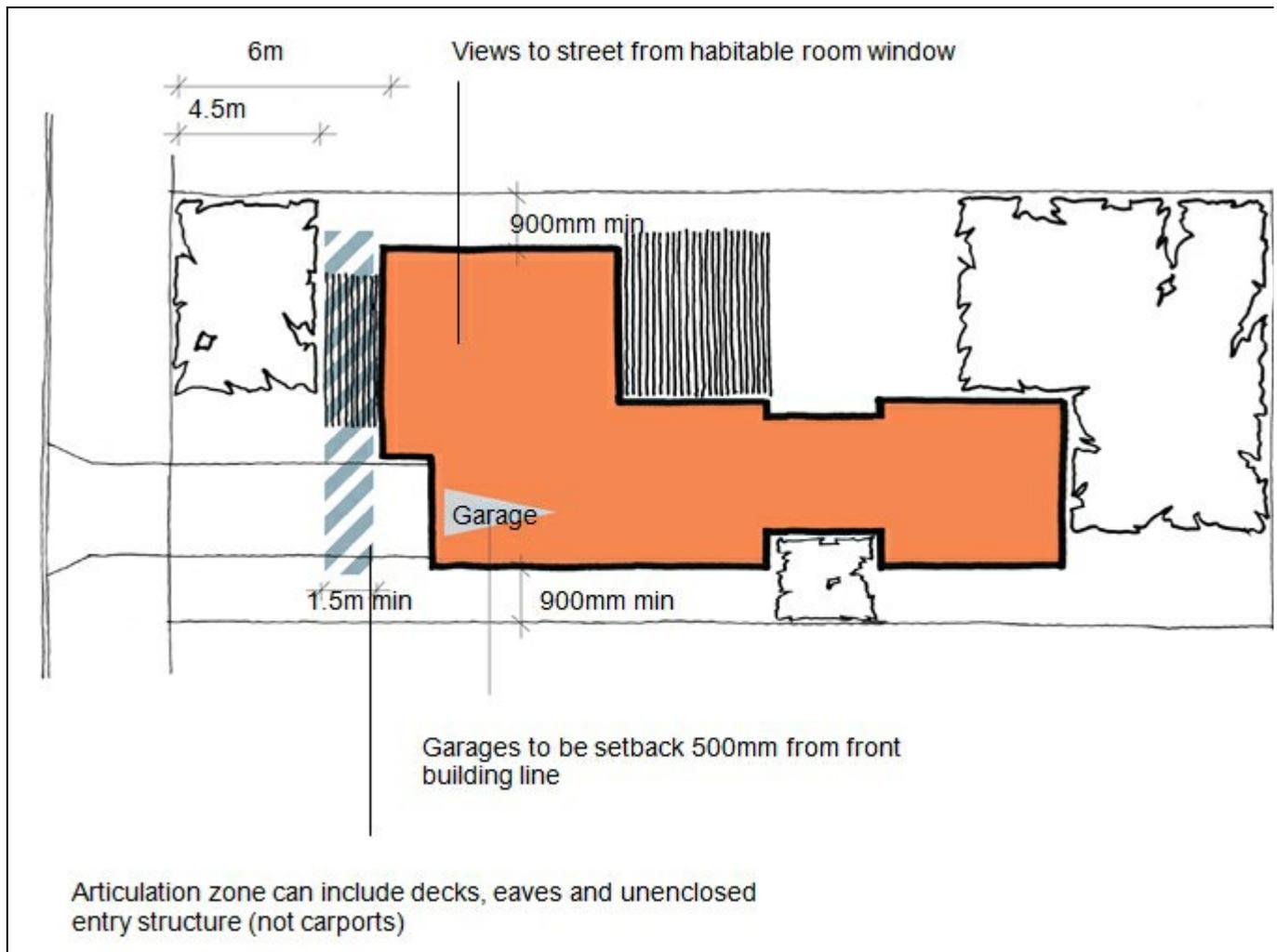
- (b) 6m minimum setbacks on allotments greater than 900m².

Seal Rocks - Additional Site Specific Setback Controls

- (1) In Seal Rocks, a front building line setback of 6m applies to all sites

5.5.2.2 Articulation Zone Setback Controls

- (1) An 'articulation zone' may be incorporated within the front setback. This zone is a notional area projecting 1.5m forward of the front building line (setback) within which additional building elements such as entry features and porticos, balconies, decks, verandahs, and bay windows may be built.
- (2) Inclusion of an articulation zone must give consideration to view sharing, privacy and amenity impacts to adjoining dwellings.
- (3) Up to 50% of the articulation zone, when viewed from above, may include building elements. An awning or other feature over a window and a sun shading feature is not included in the maximum area of the articulation zone.



Dwelling setbacks (click here to view [original image](#))

5.5.2.3 Secondary Setback Controls

- (1) A residential building must be setback from its secondary street frontage:
 - (a) Where there are existing neighbouring buildings within 40m, an average of the secondary street setbacks of the nearest two neighbouring buildings, with the same secondary street frontage.
 - (b) Where there are no neighbouring buildings the minimum secondary street setback must be at least 3m.

5.5.2.4 Corner Setback Controls

- (1) A 3m setback is usually applied to the longest street frontage on a corner block to ensure optimum use of the site for the residence and private outdoor areas.

5.5.2.5 Side and Rear Setback Controls

General Side and Rear Setback Controls

- (1) A residential building must be setback from its side boundaries:
 - (a) A minimum of 900mm for a building with a maximum wall height of 3.8m.
 - (b) Where the wall height is greater than 3.8m the minimum setback shall be: $900\text{mm} + (\text{building height over } 3.8\text{m}/4)$
For example for a building with a wall height of 6.2m:
 $900\text{mm} + (6.2\text{m}-3.8\text{m}/4)$
 $900\text{mm} + (2.4\text{m}/4)$
 $900\text{mm} + 600\text{mm} = 1.5\text{m}$
- (2) A residential building must be setback from its rear boundary:
 - (a) A minimum of 3m for a building with a maximum wall height of 3.8m.
 - (b) Where the wall height is greater than 3.8m the minimum setback shall be: $3\text{m} + (\text{building height over } 3.8\text{m}/4)$
For example for a building with a wall height of 6.2m:
 $3\text{m} + (6.2\text{m}-3.8\text{m}/4)$
 $3\text{m} + (2.4\text{m}/4)$
 $3\text{m} + 600\text{mm} = 3.6\text{m}$
- (3) Windows, balconies, terraces and decks closer than 3m from a side or rear boundary may require privacy screening, to reduce the impact on the privacy of adjoining buildings.
- (4) A two storey residential building could have its ground floor 900mm from the side boundary with the second storey set back further as required by the formula.
- (5) Reduced side and rear setbacks may be considered when the primary road frontage of an allotment is located within the coastal planning area. It must be demonstrated that the reduced setbacks do not detrimentally impact upon the amenity, privacy and solar access to private outdoor areas of adjoining properties.

Pacific Palms and Seal Rocks - Additional Setback Controls

1. In Pacific Palms and Seal Rocks a 6m rear boundary setback generally applies to any part of a residential building or ancillary structure on a site:
 - a) with a slope in excess of 1:6; or
 - b) adjoining a National Park or land zoned for environmental conservation.

5.5.2.6 Reserves Setback Controls

- (1) Generally a minimum setback of 3m applies to any part of a residential building or ancillary structure adjoining a reserve.

Tuncurry Setback Controls

1. Any part of a residential building or ancillary structure adjoining a reserve in Tuncurry, excepting to drainage

reserve land identified as Lot 71 DP 253770 and Lot 106 DP 255703, has a minimum setback of 6m.

Coomba Park, Green Point and Smiths Lake Setback Controls

- (1) Any part of a residential building or ancillary structure adjoining a reserve in Coomba Park, Green Point or Smiths Lake has a minimum setback of 4.5m.

5.5.3 Large Lot Residential Zone

Setback controls

Development within large lot residential areas requires significant consideration of environmental and topographical constraints in comparison to the neighbourhood impact considerations of development within towns and villages as a result:

- (1) A building must be setback a minimum of 18m from the primary road frontage.
- (2) A building must be setback a minimum of 5m from all side and rear property boundaries.
- (3) All structures must be located behind the main dwelling. A minimum setback of 50m shall apply to all structures where there is no dwelling.
- (4) Larger setbacks may be required to meet the guidelines for bushfire protection in fire prone areas.

5.5.4 Rural and Environmental Zones

Setback controls

- (1) A minimum 18m setback applies to the primary road frontage.
- (2) A minimum 10m setback applies to all side and rear property boundaries.
- (3) All structures must be located behind the main dwelling. A minimum setback of 50m shall apply to all structures where there is no dwelling.
- (4) Larger setbacks may be required to meet the guidelines for bushfire protection in fire prone areas.
- (5) Any variation to the front, side or rear building line setback requirements will only be considered where:
 - (a) It can be demonstrated that the proposal will maintain or improve the amenity and privacy levels for adjoining properties;
 - (b) The building has been sited to address all site constraints; and
 - (c) The proposal maintains the rural character and scenic environmental quality of the locality.

5.5.5 Waterways

Setback controls

- (1) A setback of 40m is generally recommended to any permanent or intermittent waterway. To determine if the waterway on or near your property is classified as permanent or intermittent in nature, you must refer to the topographical maps held at Council.

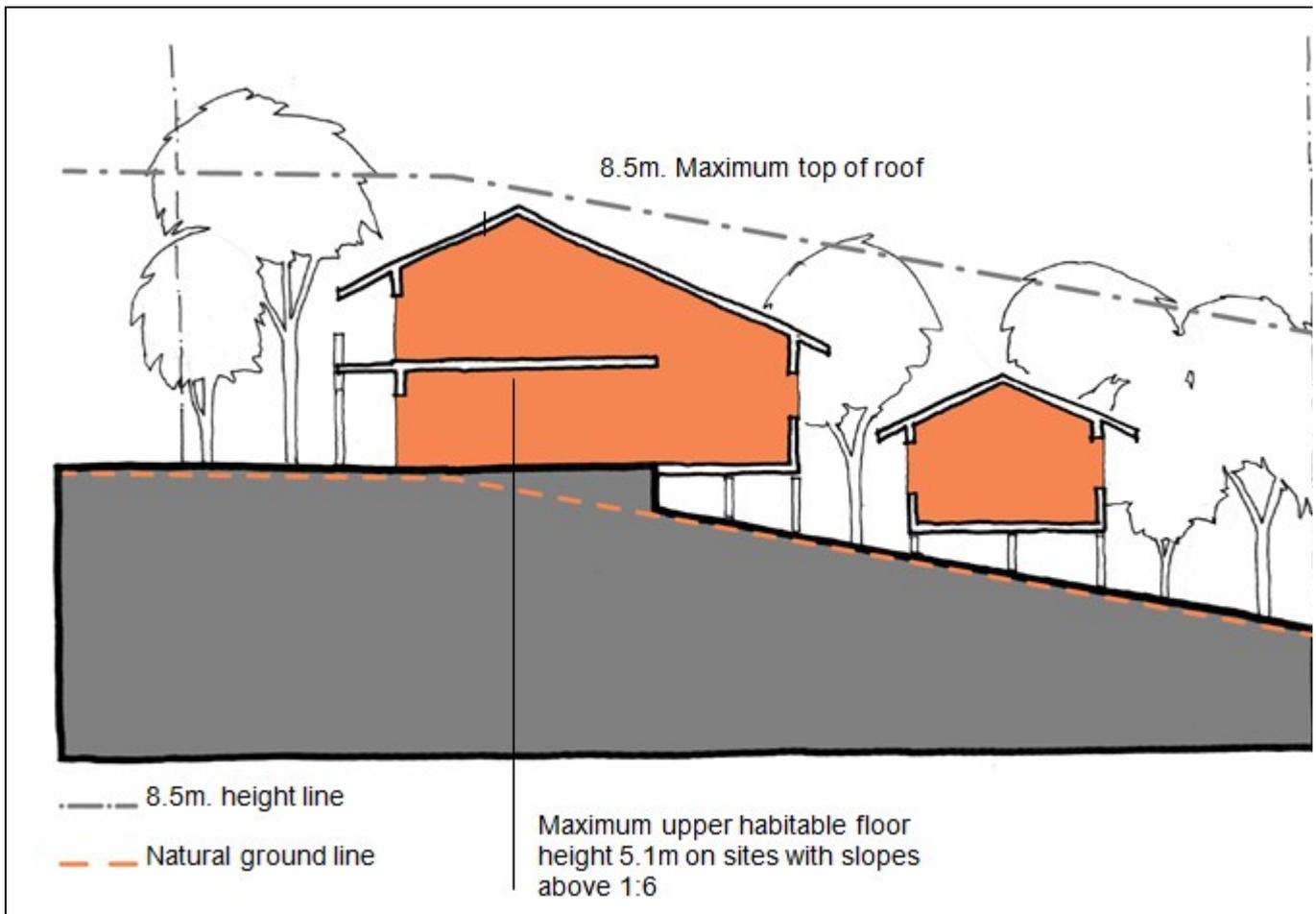
5.6 Building Heights

Objectives

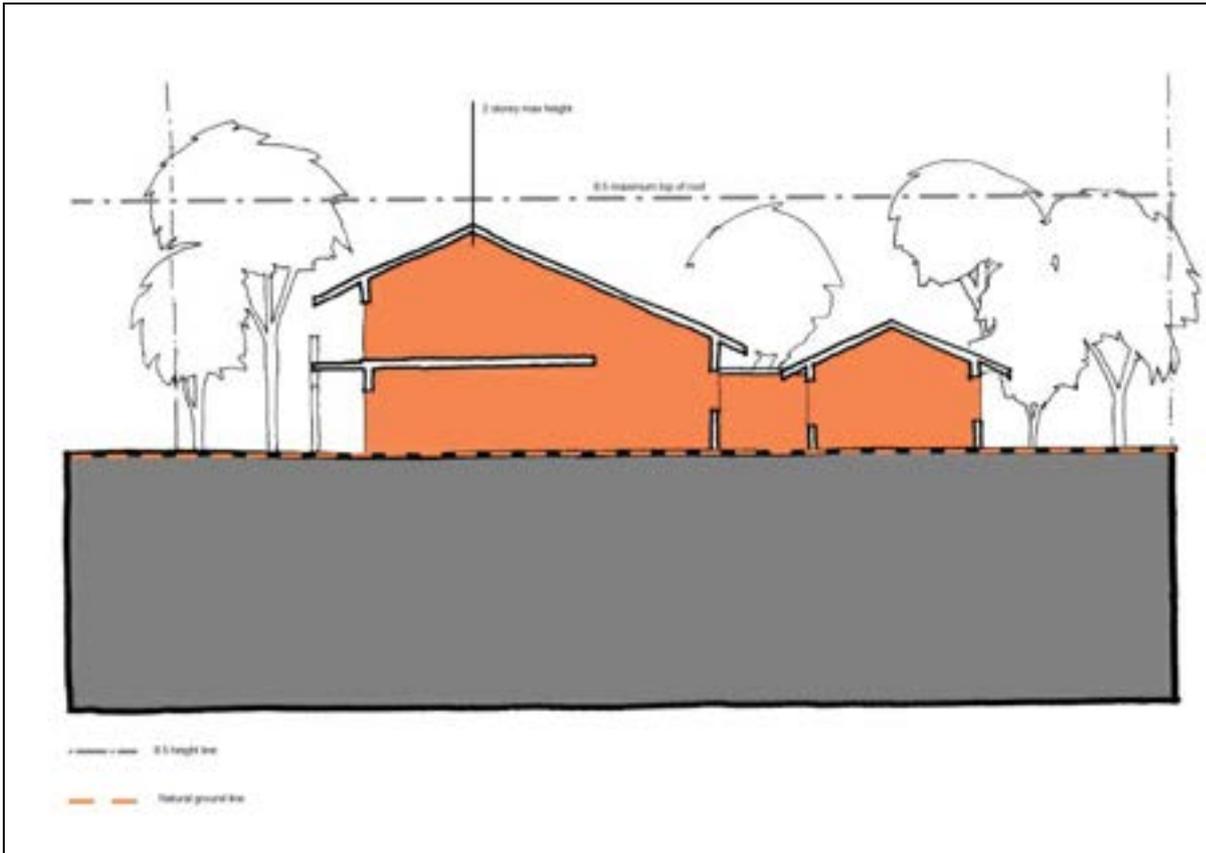
- To provide additional guidance in applying the maximum height of buildings as shown in the Great Lakes LEP Height of Buildings Maps.
- To maintain a low scale building form which responds to the topography of the site to avoid buildings dominating the streetscape or landscape setting.

Height controls

- (1) The maximum height permitted may not be achievable in all instances due to site limitations.
- (2) The floor level of the upper most habitable floor, including decks or verandahs, is to be no more than 5.1m above ground level on sites with slopes greater than 1:6.
- (3) The exposed sub-floor of any building should be minimised wherever possible.
- (4) Where a development may impinge upon significant views, solar access, privacy or a streetscape, Council may require height profiles to be erected prior to notification or exhibition.



Low density building height profile (click here to view [original image](#))



Low density building height profile (click to view [original image](#))

5.6.1 Outbuildings

5.6.1.1 Residential and Village Zones

Height controls

- (1) The maximum building height of an outbuilding must not exceed 4.8m above existing ground level.

5.6.1.2 Large Lot Residential

Height controls

- (1) The maximum building height of an outbuilding must not exceed 7m above existing ground level.

5.7 Cut and Fill

Objectives

- To maintain the open character derived from the spaces and landscaping between buildings and the street.

Controls

- (1) Visually exposed retaining walls and terraces shall not exceed 0.6m in height on the street frontage and 1.2m in all other areas.
- (2) Cut and fill involving benched areas for landscaping shall be restricted to a maximum 25m² per dwelling.

Seal Rocks - Additional Site Specific Controls

- (1) The maximum allowable depth of excavation on site is 1.2m and must not extend more than 1.2m beyond the

external wall of the building if retaining walls are being used.

- (2) The maximum allowable fill is 1.2m and must be contained wholly within the external walls of the building.
- (3) The maximum cut and fill cannot occur in the same vertical plane.

5.8 Private Outdoor Areas

Objectives

- To provide residents with functional and accessible private outdoor areas.

Controls

- (1) A ground level outdoor living space is to be provided for each dwelling with direct access from the ground floor main living areas which has a minimum area of 24m² and minimum length and width of 4m.
- (2) Where the main living areas are not provided at ground level, a balcony or deck of a minimum area of 16m² and a minimum dimension of 2m, shall be provided with direct access from the main living areas.
- (3) Private outdoor living areas are not to be located within the front building line setback to either the primary or secondary street frontages.

5.9 Fencing and Walls

Objectives

- To provide residents with functional and accessible private outdoor areas whilst maintaining the open character derived from the spaces and landscaping between buildings and the street.

Controls

- (1) Fences within the front setback area from a primary road are to be a maximum 1.2m high and a minimum 50% open construction for the upper two thirds of the fence.
- (2) Fences behind the building line (front setback) are to be a maximum of 1.8m high.
- (3) Where fences are located on top of retaining walls the maximum height of the combined structure shall not exceed 1.2m within the building setback to any street, and 2.1m elsewhere on the site.
- (4) Any fences to public reserves including drainage reserves, shall be limited to a maximum height of 1.2m and a minimum of 50% open construction.
- (5) Fences are to be constructed so they do not prevent the natural flow of stormwater drainage/runoff.
- (6) Fences on corner lots with two road frontages should be constructed with an open form (e.g. pool type fencing) within 3m of a corner to assist with sight distance requirements for drivers.

Tea Gardens, Hawks Nest and Seal Rocks - Additional Site Specific Controls

- (1) In Hawks Nest and Seal Rocks, fencing is not encouraged.
- (2) Where fencing is needed for privacy or security reasons a gap of 0.3m x 10.0m between the existing ground and the bottom of the fence (except for swimming pool fences) is to be provided for every 10m of fencing, to allow for fauna movement. The fencing should be designed and located so that it does not result in the loss of or damage to trees.
- (3) To permit fauna movement through properties, capped hardwood timber fences are preferred.
- (4) In Hawks Nest and Seal Rocks, Koala climbing poles should be installed adjacent to the fence at 10m intervals.

5.10 Detached Garages, Carports, Sheds and other Outbuildings

Objectives

- Detached garages, carports and other outbuildings are located and designed so that they do not dominate the streetscape or adversely affect the adjoining properties.

Controls

Maximum Floor Area Controls:

1. Maximum floor area for detached garages, carports, sheds and other outbuildings:
 - a) 36m² for lots with an area of up to 300m²,
 - b) 45m² for lots with an area over 300m² but not more than 600m²,
 - c) 60m² for lots with an area over 600m² but not more than 900m²,
 - d) 100m² for lots with an area greater than 900m².

Front Setback Controls

1. Detached garages, carports, sheds and other outbuildings must be setback at least 6m from the front property boundary.
2. Detached garages, carports, sheds and other outbuildings must have a minimum 500mm setback from the front building line of the dwelling for which it is provided.

Secondary Setback Controls

1. Detached garages, carports, sheds and other outbuildings must be setback from its secondary street frontage:
 - a) Where there are existing neighbouring buildings within 40m, an average of the secondary street setbacks of the nearest two neighbouring buildings, with the same secondary street frontage.
 - b) Where there are no neighbouring buildings the minimum secondary street setback must be at least 3m.

Side and Rear Setback Controls

1. The minimum side and rear setbacks for detached garages, carports, sheds and other outbuildings vary with building height, so a lower building can be closer to the side boundary than a taller one. On sloping sites the side and rear setbacks are calculated for the maximum wall height at the side of the building.
2. The minimum side and rear setback increases on a sliding scale once a wall height of 2.7m wall is exceeded.
3. Detached garages, carports, sheds, other outbuildings located in a residential area (land zoned R2, R3, R4 and RU5 or equivalent) must be setback from a side or rear boundary:
 - a) A minimum of 0.9m to an external wall, for a building with a maximum wall height of 2.7m.
 - b) Where the wall height is greater than 2.7m, the minimum side setback shall be 0.9m + (wall height over 2.7m / 2)

For example, for a building with a wall height of 3.3m;
= 0.9m + (3.3m - 2.7m)
= 0.9m + (0.6m / 2)
= 0.9m + 0.3m = 1.2m

5.11 Development on Lots Under the Minimum Lot Size

Objectives

- To maintain the amenity and character of low density residential development.

Controls

- (1) Where a dwelling is proposed on an existing lot less than 450m² and/or has a frontage less than 12.6m wide, the applicant should discuss the proposal with Council officers. Consultation is recommended prior to preparing an application in order to discuss how the site constraints may affect development design and to ensure compliance with the objectives of the development control plan.
- (2) Applications for the development of existing lots will be assessed on merit and take into consideration the objectives and controls for residential development.
- (3) Applications for the development of two or more dwellings and creating allotments of less than 450m² and/or with frontages less than 12.6m wide, will only be considered where the proposal takes the form of an integrated housing development.
- (4) An integrated housing development application must include full construction information for each dwelling and details of the proposed or future subdivision.
- (5) Specific matters to be taken into account with applications for integrated housing include:
 - (a) Visual and acoustic privacy;
 - (b) Access and vehicle circulation;
 - (c) Solar access and overshadowing; and
 - (d) Access to services and facilities by the occupants.

5.12 Dual Occupancies Within Large Lot Residential and Environmental Zones

'Attached' dual occupancies are the only form of dual occupancy permitted in the E3 Environmental Management, E4 Environmental Living and R5 Large Lot Residential zones. This control applies to alterations and additions to an existing lawful dwelling-house; or the erection of two attached lawful dwellings.

Objectives

- To ensure that dual occupancy development does not dominate the natural environment, views or vistas.

Controls

- (1) The two dwellings in an attached dual occupancy are to be connected by a common wall, garage or carport. Separation of the dwellings by covered walkways, passageways, voids or the like is not permitted.

5.13 Dual Occupancies within the Rural Zone

5.13.1 Attached Dual Occupancies

This control applies to alterations and additions to an existing lawful dwelling-house to create an attached dual occupancy; or the erection of two attached lawful dwellings.

Objectives

- To ensure that dual occupancy development does not dominate the natural environment, views or vistas.

Controls

- (1) The two dwellings in an attached dual occupancy are to be connected by a common wall, garage or carport. Separation of the dwellings by covered walkways, passageways, voids or the like is not permitted.

5.13.2 Detached Dual Occupancies and Detached Secondary Dwellings

This control applies to the erection of two detached lawful dwellings as either a dual occupancy or a secondary dwelling.

Objectives

- To ensure that detached dual occupancies and detached secondary dwellings in rural and large lot residential areas are located to avoid potential for conflicts with agricultural activities on adjoining land, to avoid adversely affecting the sustainability of the land for agriculture, and to ensure compatibility with the rural character and landscape of the locality.

Controls

- (1) The detached dual occupancy or detached secondary dwelling must be located so that it does not create potential for conflict with adjoining land uses.
- (2) The detached dual occupancy or detached secondary dwelling must be located and retained on the same legal title as the principal dwelling-house on the property, and may not be excised by subdivision.
- (3) A Development Application must be accompanied by information that demonstrates;
 - (a) The existing use of all parts of the site, including existing and proposed infrastructure (buildings, sheds, services, on-site wastewater disposal, etc);
 - (b) potential conflicts, including the distance from the proposed detached dual occupancy or detached secondary dwelling to dwellings on adjoining land and potentially conflicting land uses on adjoining land (eg intensive horticulture, pesticide use, intensive livestock activities, rural industry and the like);
 - (c) access and site details, including a plan showing the location of the principal dwelling and the proposed detached dual occupancy or detached secondary dwelling; and proposed access arrangements from the public road to the principal dwelling and the proposed detached dual occupancy or detached secondary dwelling.

6 Residential Apartment Buildings, Mixed Use Development and Business Premises

This section contains site and building controls for residential apartment buildings (flat buildings), mixed use development (shop top housing) and business (commercial) premises. Definitions of these types of development are contained in Great Lakes LEP.

These controls do not specifically address commercial or retail buildings that do not contain a residential component however they should be considered when designing this type of development. Within the coastal town centres, any commercial or retail development that does not include a residential component will have to be consistent with the associated [Coastal Town Centres Character Statement](#) and satisfy the [Pedestrian Amenity](#) requirements.

Some of the land use zones where these types of development may be permitted include:

- R3 Medium Density Residential
- R4 High Density Residential
- B1 Neighbourhood Centre
- B2 Local Centre
- B4 Mixed Use

The development provisions in this section of the Plan on building form are intended to encourage high quality design for high density residential development and mixed use development incorporating a residential component.

The controls in this section aim to:

- Establish the scale, dimensions, form and separation of buildings appropriate for the setting in the business precincts.
- Provide a strong definition of the public domain.
- Achieve active street frontages where appropriate with good physical and visual connections between buildings and the street.
- Ensure there is consistency in the main street frontages of buildings to provide a common alignment.
- Provide for pedestrian comfort and protection from weather conditions.
- Define the public street to provide spaces that are clear in terms of public accessibility and safety.
- Ensure building depth and bulk is appropriate to the environmental setting and landform by providing for view sharing and good internal building amenity.
- Ensure building separation is adequate to protect amenity, daylight penetration and privacy between adjoining developments.
- Achieve an articulation and finish of building exteriors that contribute to a high quality of design excellence.
- Provide for high quality landscape that contributes to the amenity and sustainability of the urban environment.
- Ensure that new buildings are responsive to the character and setting of the surrounding area.

6.1 General Building Design

Objectives

- Design medium and high density residential development to respond to the streetscape character.
- Complement and enhance the visual character of the street and neighbourhood through appropriate building scale, form and detail.
- Reduce the visual dominance of garages as viewed from the street.
- Promote high quality architectural design that is contemporary and innovative.
- Ensure corner sites are developed as visually significant elements to promote a strong and legible character.
- Provide an identifiable and desirable street address to each building and dwelling.
- Define the street edge by creating a clear transition between private and public spaces along the street

frontage.

- Allow for outlook and surveillance towards the street and the public domain.

Controls

- (1) The design, height and siting of the development must respond to its context, being both the natural and built features of an area. The Site and Context Analysis must be utilised as the process by which the opportunities and constraints of the site are identified and the character of a local area defined.
- (2) The appearance of new development must be complementary to the buildings around it and the character of the street. New development must contain or respond to the essential elements that make up the character of the surrounding urban environment. This character is created by elements such as building height, setbacks, architectural style, window treatment and placement, materials and landscaping.
- (3) The following elements must be incorporated in the building design:
 - (a) Articulate and fragment building walls that address the street and add visual interest. The appearance of blank walls or walls with only utility windows on the front elevation is not permitted.
 - (b) Utilise high quality and durable materials and finishes.
 - (c) Entrances must be visible at eye level from the street and well lit.
 - (d) For those dwellings adjacent to the street frontage, the habitable rooms must face the street.
 - (e) Ensure entrances can accommodate the movement of furniture.
 - (f) Avoid blank or solid walls and the use of dark or obscured glass on street frontages.
 - (g) Air conditioning units must not be visible from the street.
 - (h) Avoid bathroom windows on street frontages.
 - (i) All residential buildings must be designed with building frontages and entries clearly addressing the street frontage. Dwellings adjacent to the street boundary must have individual entries from the street.
 - (j) For multi-dwelling developments on corner sites, each frontage of the development must present as the primary street frontage.
 - (k) Where garages are proposed on the front elevation they must be recessed, unless it can be demonstrated that the garages will not visually dominate the streetscape appearance of the building.

6.2 Pedestrian Amenity

Objectives

Pedestrian amenity incorporates all those elements of individual developments that directly affect the quality and character of the public domain. The pedestrian amenity provisions are intended to achieve a high quality of urban design and pedestrian comfort in public spaces. The pedestrian environment provides people with their primary experience of and interface with the towns and villages of Great Lakes.

This environment needs to be safe, functional and accessible to all and needs to take account of the significant proportion of elderly people residing in Great Lakes and the seasonal tourist influx. It should provide a wide variety of opportunities for social and cultural activities. The pedestrian environment is to be characterised by excellence of design, high quality materials and a standard of finish appropriate to the established character of the area.

The controls in this section aim to increase the vitality, safety, security and amenity of the public domain by:

- Ensuring a high degree of pedestrian permeability throughout the business centres and adjoining areas.
- Encouraging future through block connections at ground level, where appropriate.
- Ensuring active street frontages and positive building address to the street.
- Ensuring provision of awnings along the retail, commercial and tourist areas.
- Mitigating adverse visual impacts on the street arising from excessive driveway crossings and inappropriate selection of building finishes and materials.

- Addressing 'Safer-by-Design' principles for the design of public and private domain, and in all developments (including the NSW Police 'Safer by Design' crime prevention through environmental design (CPTED) principles).
- The design of facilities (including car parking) for persons with a disability must comply with the relevant Australian Standard (AS 1428 Pt 1 and 2, or as amended) and the Disability Discrimination Act 1992 (as amended).

6.2.1 Site Permeability

Ease of pedestrian movement is critical to the efficient functioning of the business / retail centres. Through block connections which provide links between street blocks improve accessibility and thereby improve the relationship between the commercial centres and the surrounding uses.

Objectives

- To improve access by providing additional through block connections where appropriate as redevelopment occurs.
- To retain and enhance existing through block connections where appropriate as redevelopment occurs.
- To encourage active streets fronts and facilitate passive surveillance along the length of through block connections.
- To provide for pedestrian amenity and safety.
- To encourage removal of vehicular entries from primary street frontages.
- To retain and develop lanes as useful and interesting pedestrian connections as well as for service access.

Controls

- (1) Where possible, links are to be open to the air, rather than enclosed or internal.
- (2) Where possible, existing dead-end lanes are to be extended through to the next street as redevelopment occurs.
- (3) New through block connections should provide convenient links to the existing and proposed pedestrian network.
- (4) Existing publicly and privately owned links are to be retained where appropriate.
- (5) Through block connections are to:
 - (a) be a minimum width of 3m clear of all obstructions,
 - (b) have active street frontages, casual surveillance and/or a street address along their length,
 - (c) be clear and direct throughways for pedestrians,
 - (d) be open to the air and publicly accessible at all times,
 - (e) have signage at street entries indicating public accessibility and the street to which the through block connection links,
 - (f) demonstrate the application of 'Safer-by-Design' principles, and
 - (g) provide a direct line of sight along their length.
- (6) Arcades located within buildings should:
 - (a) have a minimum width of 3m and be clear of all obstructions (including columns, stairs, escalators),
 - (b) have active frontages along their length,
 - (c) be clear and direct throughways for pedestrians,
 - (d) provide public access at all business trading times,
 - (e) where practical, have access to natural light, for at least 50% of their length,

- (f) where air conditioned, have clear glazed entry doors comprising at least 50% of the entrance, and
- (g) have signage at street entries indicating public accessibility and the street to which the arcade links, and
- (h) must be suitable for disabled access,
- (i) provide a direct line of sight along their length.

6.2.1.1 Coastal Town Centres Additional Controls

- (1) Through block connections are to be provided as shown in the through block connections plans.

Tuncurry



Tuncurry town centre through block connections plan ([click here to view original image](#))

Forster



Forster town centre through block connections plan (click here to view [original image](#))

Tea Gardens



Hawks Nest town centre through block connections plan (click here to view [original image](#))

6.2.2 Street Address

Commercial and retail buildings with a well designed street address promote an interesting and safe pedestrian environment. Busy pedestrian areas and uses such as shops, studios, offices, cafes, and community facilities provide the most active street fronts.

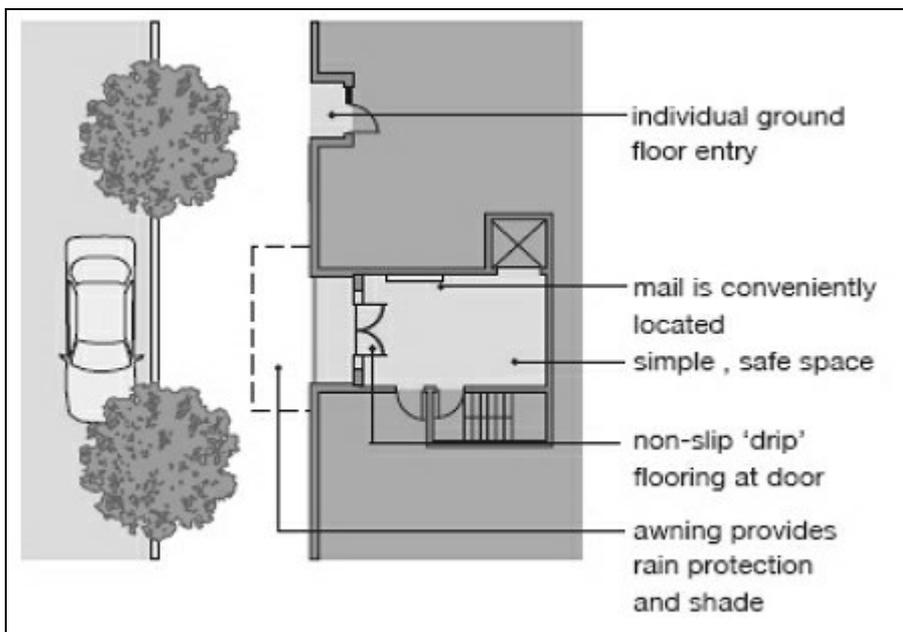
Residential buildings contribute positively to the street by providing a clear street address, direct access from the street for ground floor units and an outlook over the street. Street address for residential buildings is considered appropriate where it includes entries, lobbies, and habitable rooms with clear glazing overlooking the street not more than 1.2m above street level, but excludes car parking areas.

Objectives

- To promote pedestrian activity and safety in the public domain.
- To encourage building design incorporating a well designed street address.

Controls

- (1) Active ground floor uses are to be at the same general level as the footpath and be accessible directly from the street.
- (2) Open grill or transparent security (at least 50% visually transparent) shutters are encouraged to retail frontages.
- (3) Provide multiple entrances for large developments including an entrance on each street frontage.
- (4) Residential developments are to provide a clear street address and direct pedestrian access to the primary street front, and allow for residents to overlook all surrounding streets.
- (5) Provide direct 'front door' access to ground floor residential units.
- (6) Residential buildings are to provide not less than 65% of the lot width as street address.



(Source: RFDC)

Building Entry: Individual ground floor entry provides a more active street frontage (click here to view [original image](#))

6.2.3 Awnings

Awnings increase the useability and amenity of public footpaths by protecting pedestrians from sun and rain. They encourage pedestrian activity along streets and, in conjunction with active street frontages such as retail frontages, support and enhance the vitality of the local area. Awnings, like building entries, provide a public presence and interface within the public domain and contribute to the identity of a development.

Objectives

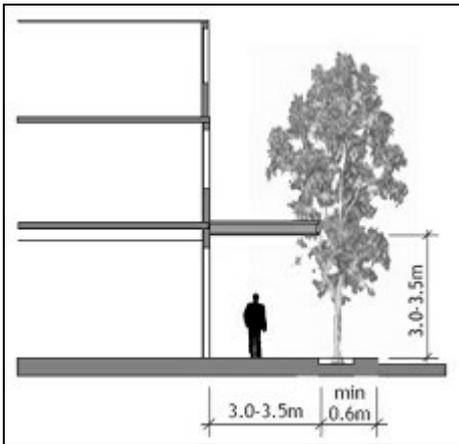
- To provide shelter for public streets where a high level of pedestrian activity occurs.
- To address the streetscape by providing a consistent street front appearance.

Controls

- (1) Awnings are to be a minimum height of 3.0m and a maximum height of 3.5m above the footpath level with provision for street trees.
- (2) Awnings or similar structures are to be located over all building entries to contribute to the legibility of

residential and mixed use buildings and to provide weather protection for residents and visitors.

- (3) Awnings are to be designed so that they are:
- clear of powerlines;
 - allow for the maintenance and protection of street trees; and
 - direct stormwater from the awning to the internal stormwater system associated with the proposed development.



Source: RFDC

Awning design for Commercial buildings (click here to view [original image](#))

6.2.4 Pedestrian Access

Designing for pedestrian access to buildings focuses on delivering high quality, safe and pleasant walking environments. Any new development must be designed to ensure that safe and equitable access is provided to all, including people with a disability and the mobility impaired, so that people who live in and visit the development can enjoy the public domain, and can access apartments and communal use areas in residential developments.

Objectives

- To provide safe and easy access to buildings whilst also contributing to the vitality, vibrancy and safety of the public domain.
- To ensure buildings and places are accessible to people with a disability.
- To create entrances which provide a desirable identity for residential and mixed use developments.
- To contribute positively to the streetscape and building façade design.

Controls

- Main building entry points should be clearly visible and identifiable from primary street frontages. They should be enhanced as appropriate with awnings, building signage or high quality architectural features that improve clarity of building address and contribute to visitor and occupant amenity.
- Achieve clear delineation of the transition between the public street and the building entry.
- Provide separate entries for different uses from the car park (e.g. separate residential and commercial entries in mixed use development).
- Design entries and associated circulation space of an adequate size to allow movement of furniture and other bulky items between public and private spaces.
- Provide and design mailboxes to be convenient for residents and other occupants.

- (6) The design of facilities (including car parking) for persons with a disability must comply with the relevant Australian Standard and the Disability Discrimination Act 1992 (as amended).
- (7) The development must provide at least one main pedestrian entrance with convenient barrier free access to all of the ground floor.
- (8) The development must provide convenient internal access, linking to public streets and building entry points.
- (9) Pedestrian access ways, entry paths and lobbies must use durable materials commensurate with the standard of the adjoining public domain (street) with appropriate slip resistant materials, tactile surfaces and contrasting colours.

6.2.5 Safety and Security

The design of buildings and public spaces has an impact on perceptions of safety and security, as well as actual opportunities for crime. Safe ground level entry and exit during all times of the day will minimise opportunities for crime and will encourage activity, vitality and viability. Design for safety works by enabling casual surveillance, territory reinforcement and controlling access to development.

Objectives

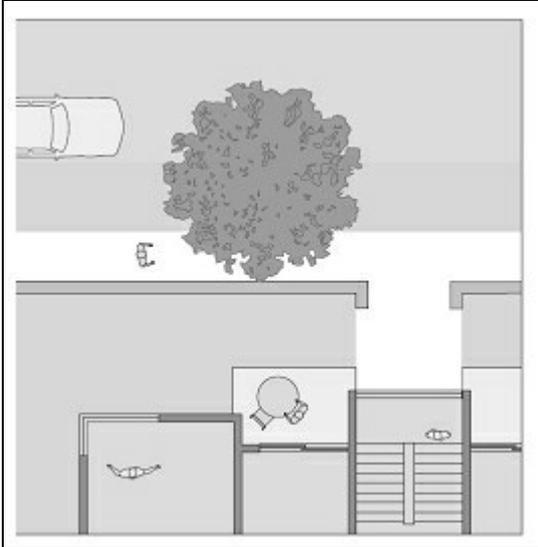
- To promote space management by ensuring that public and private open space is effectively utilised and maintained.
- To ensure residential developments are safe and secure for residents and visitors.
- To ensure that ground floor uses (residential, commercial and retail) provide for casual surveillance and promote pedestrian activity.
- To contribute to the safety of the public domain.
- To encourage a sense of ownership over public and communal open spaces.

Controls

- (1) Address 'Safer-by-Design' principles for the design of public and private domain, and in all developments (including the NSW Police 'Safer by Design' crime prevention through environmental design (CPTED) principles).
- (2) Ensure that the building design allows for casual surveillance of streets, accessways, entries, driveways, open car parks and public areas.
- (3) Avoid creating blind corners in pathways, arcades, stairwells, hallways and car parks.
- (4) Optimise the visibility, functionality of building entrances by:
 - (a) providing clear lines of sight between entrances, foyers and the street.
 - (b) providing direct entry to ground floor units from the street.
 - (c) providing separate and defined entries to residential and non-residential uses.
 - (d) providing controlled access to residential units.
- (5) Where private open space is located within the front building setback any front fencing must be of a design and/or height, which allows for passive surveillance of the street.
- (6) The number of dwellings accessible from a single corridor is limited to a maximum of eight (8) per floor.
- (7) Provide adequate lighting of all pedestrian access ways, parking areas and building entries. Such lighting should be on a timer or movement detector to reduce energy consumption.
- (8) Ensure that commercial/retail/business uses on the ground floor open onto or overlook the street.
- (9) Avoid the creation of obscure or dark alcoves, which might conceal intruders. Provide clear lines of sight and well-lit routes throughout the development.

- (10) Where a pedestrian pathway is provided from the street, allow for casual surveillance of the pathway. Ensure that pathways do not provide concealment opportunities.

Safety and Security



Source RFDC

Safety and security windows, balconies and building entries address the street (click here to view [original image](#))

6.2.6 Fences

The design of front fences impacts significantly on the quality of the development, the public domain and adjoining properties. Appropriate design of front fences promotes surveillance and defines the interface between the public and the private domain. Fences between the property boundary and the building setback line should be predominantly constructed to allow a visual connection between the dwelling and the street.

Objectives

- To allow for the physical separation of properties for resident privacy and security.
- To ensure that the design, heights and materials of fencing are appropriately selected.
- To ensure fencing design and location should aim to complement the building design and enhance the streetscape.
- To ensure that the design allows for casual surveillance of the street.
- To ensure that clear lines of sight are maintained for motorists and pedestrians to and from the development.

Controls

- (1) Front and side fences between the property boundary and the building setback line must be a maximum average height of 1.2m if solid or 1.5m if 50% transparent.
- (2) The maximum height of any portion of a front fence must not exceed 1.5m above street level.
- (3) Side fences between the front building line and the rear property boundary must be a maximum of 1.8m in height.
- (4) Fences must be constructed of timber, metal, lightweight materials or masonry.
- (5) The height and design of any proposed fence on top of a retaining wall must be included in the consideration of

the height of the fence.

- (6) Protect and retain existing mature trees in the design and location of fences.
- (7) All fences are to be constructed to allow the natural flow of stormwater drainage or runoff.

Hawks Nest Town Centre Additional Controls

- (1) In Hawks Nest, front fences are to be designed and constructed such that they do not impede the movement of koalas.

6.3 Building Configuration

6.3.1 Adaptable Housing

Flexibility in building design is important to ensure that buildings remain functional over their life. Flexible buildings can accommodate uses other than residential when first constructed and they can accommodate future changes in use, particularly on ground and lower floor levels, for example from residential to commercial.

Flexible design ensures that buildings have the capacity for adaptability to accommodate a wide range of occupants and their changing lifestyle and business needs, such as:

- household structure change; single, couple, family, extended family, special access needs; and
- flexible living/working spaces.

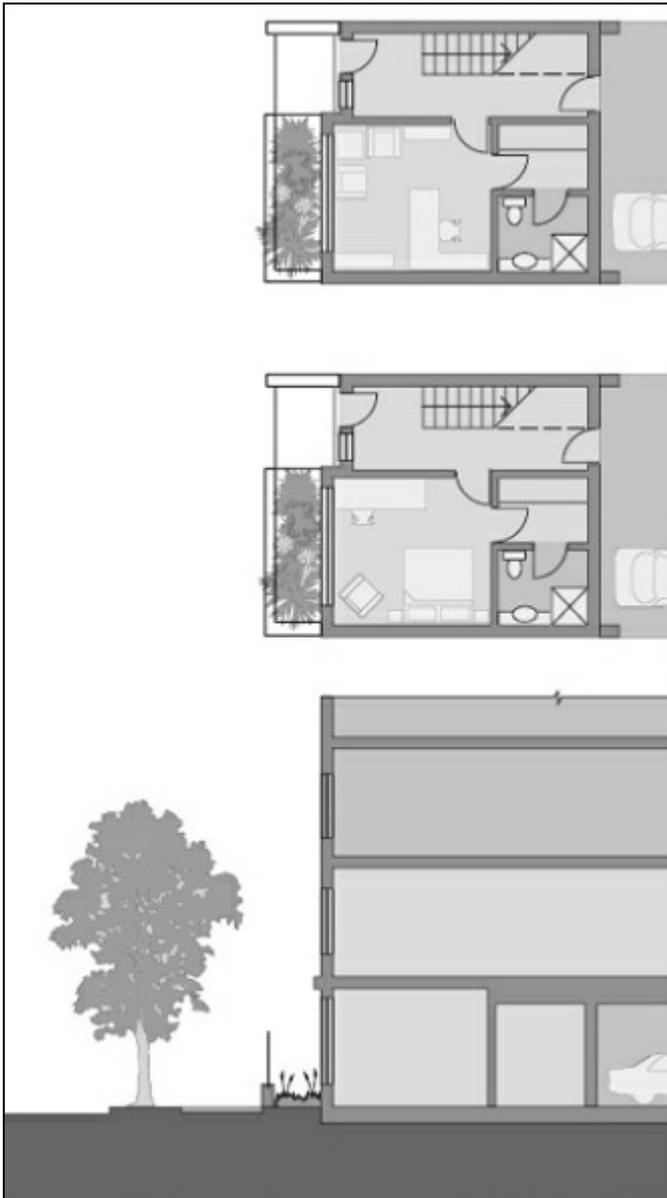
Objectives

- To ensure that building design is sufficiently flexible to allow for changes in use for the life of the building.
- To ensure a sufficient proportion of dwellings include accessible layouts and features to accommodate changing requirements of residents over time.
- Ensure the provision of housing that will, in its adaptable features, meet the access and mobility needs of any occupant.
- To save the embodied energy expended in building demolition.

Controls

- (1) Within developments subject to this Plan, 10% of all dwellings (or at least one dwelling) must be designed to be capable of adaptation for disabled or elderly residents. Dwellings must be designed in accordance with the Australian Adaptable Housing Standard, which includes “pre-adaptation” design details to ensure visitability is achieved.
- (2) Where possible, adaptable dwellings shall be located on the ground floor, for ease of access.
- (3) Dwellings located above the ground level of a building may only be provided as adaptable dwellings where lift access is available within the building. The lift access must provide access to all levels including the basement to allow access for people with disabilities.
- (4) Incorporate increased ceiling heights for the lower levels in buildings.
- (5) The development application must be accompanied by certification from an accredited Access Consultant confirming that the adaptable dwellings are capable of being modified, when required by the occupant, to comply with the Australian Adaptable Housing Standard.

Flexible design



Source RFDC

Demonstrates flexibility in design to allow transition between residential and non-residential uses ([click here to view original image](#))

6.3.2 Dwelling Layout and Mix

A mix of dwelling types provides housing choice and supports equitable housing access. By accommodating a range of household types, a mix of dwellings can ensure that residential buildings support the needs of society now and in the future. This is particularly important for buildings used for residential purposes as they form a significant and often permanent part of the urban fabric.

Objectives

- Provide variety in apartment sizes and layouts to cater for a range of household types.
- Provide flexible living/work spaces within dwellings design.
- Ensure that building design is sufficiently robust to accommodate mixed use and potential changes in use for the life of the building.

Controls

- (1) Provide a mix of dwelling types and sizes as follows:
 - (a) studio apartments – maximum 15%
 - (b) 1 bedroom apartments – maximum 15%
 - (c) 2 bedroom apartments – minimum 40%
 - (d) 3 bedroom+ apartments – minimum 15%
- (2) Substantive variations to unit mix must be supported by an independent analysis of current and future market demand prepared by an appropriately qualified and experienced person.
- (3) Consideration should be given to the design of apartments to encourage future flexibility. This may include opportunities to combine smaller apartments with adjacent dwellings should resident's lifestyle change or may include the ability to accommodate other activities such as a home office.
- (4) Consideration should also be given to the location of one and three bedroom apartments on the ground level where accessibility is more easily achieved for disabled or elderly people and families with children.
- (5) Apartments should be designed with internal space which is flexible and adaptable to resident's requirements. This should involve the efficient utilisation of available floor space to maximise useable room areas.
- (6) Apartment layouts should also respond to the site opportunities, including views and aspect.
- (7) Provide apartments with the following minimum internal floor area:
 - (a) Studio and 1 bedroom apartments 50m²
 - (b) 2 bedroom apartments 70m²
 - (c) 3 bedroom apartments 95m²

6.3.3 Ceiling Heights

Ceiling heights are measured from finished floor to finished ceiling level. Ceiling heights are design elements for defining the three-dimensional space of a dwelling in conjunction with walls and floors. Well designed and appropriately defined ceilings ensure quality residential amenity and create spatial interest and hierarchy in dwellings. Generous ceiling heights are particularly important in residential and mixed use developments.

Objectives

- To increase the sense of space in apartments.
- To promote the penetration of daylight into the depths of dwellings.
- To contribute to the flexibility in future use of residential buildings.
- To achieve high quality interior spaces while considering the external building form requirements.

Controls

- (1) Provide the following minimum floor to ceiling heights:
 - (a) Minimum 3.3m for ground and first floor to encourage future flexibility of use as residential, retail or commercial.
 - (b) A minimum 3.3m floor to ceiling height must be provided for all levels of a development within the town centre proposing only commercial or retail occupation.
 - (c) For all other residential floors provide the following minimum floor to ceiling heights:
 - (i) 2.7m minimum for all habitable rooms on all floors.
 - (ii) 2.4m minimum for non-habitable rooms on all floors.
 - (d) Attic spaces, must have a 1.5m minimum wall height at edge of room with a 30 degree minimum ceiling slope.

- (2) Maximise heights in habitable rooms by stacking wet areas from floor to floor.
- (3) Promote the use of ceiling fans for cooling and heat distribution.
- (4) Coordinate internal ceiling heights and slab levels with external heights requirements and key datum points, such as:
 - (a) Parapet lines set by the context of adjoining buildings.
 - (b) Elements of heritage or character buildings.
 - (c) Exterior awning levels or colonnade heights.

6.3.4 Storage

Providing storage space for items ancillary to people's living needs is particularly important in residential and mixed use developments where the size of dwellings and their configuration are constrained. Storage is conventionally calculated on a unit by unit basis, proportional to the size of the unit.

Objectives

- To provide accessible storage for household and recreational items which cannot be readily accommodated within dwellings.

Controls

- (1) Residential and mixed use buildings are to provide a secure space to be set aside exclusively for storage for each residential dwelling unit.
- (2) The storage area must comply with the following requirements:
 - (a) One bedroom apartments: storage area of 3m² and storage volume 6m³
 - (b) Two bedroom apartments: storage area of 4m² and storage volume 8m³
 - (c) Three or more bedroom apartments storage area of 5m² and storage volume 10m³
- (3) A minimum of 50% of the required storage within each apartment is to be accessible from either the hall or the living area.
- (4) Basement storage is to be provided either adjacent to the unit parking area or within a separate storage area that forms part of the unit title.
- (5) Where basement storage is provided, ensure that it does not compromise natural ventilation in car parks or create potential conflicts with fire regulations.

6.3.5 Basements and Podiums

Objectives

- To integrate the siting, scale and design of basement parking into the site and building design.

Controls

- (1) The construction of a basement must respond to the site constraints and reduce the overall bulk and scale of a development.
- (2) Basements should not encroach upon the minimum setbacks to any property boundary.
- (3) The roof of any basement podium, measured to the top of any solid wall located on the podium, must not be greater than 1m above natural or finished ground level, when measured at any point on the outside walls of the

building. On sites with a greater slope, a change in level in the basement must be provided to achieve this maximum height.

- (4) Council recognises that there may be occasions where this standard cannot be achieved. Should such a circumstance arise, the additional portion of the basement podium above 1m height must be included in the total gross floor area calculation for the development.
- (5) In addition, the following must be satisfied:
 - (a) landscaped terraces are provided in front of the basement podium to reduce the overall visual impact;
 - (b) the height of the basement does not result in the building having a bulk and scale which dominates the streetscape; and
 - (c) the main pedestrian entry to the building is identifiable and readily accessible from the street frontage.
- (6) The following setbacks from front, side and rear boundaries apply to basement podiums:
 - (a) Where the height of the basement podium (measured to the top of any solid wall located on the podium) is less than 1m above natural or finished ground level (whichever distance is greater), the basement podium may extend to the property boundary.
 - (b) A minimum 1.5m wide landscaped planter must be provided on the perimeter of any section of the basement podium which is located on a side or rear property boundary. Such planter must prevent direct access to the outer edge of the podium, to minimise direct overlooking of adjacent dwellings and open space areas.
 - (c) Any portion of the basement (measured to the top of any solid wall located on the podium, excluding planter) which exceeds 1m above natural or finished ground level (whichever distance is greater) must be setback a minimum of 1.5m from the property boundaries, and thereafter at a ratio of 1:1 (height:setback), with this area to be landscaped.
- (7) Basements must be protected from inundation from 100 year ARI flood levels (or greater).
- (8) Driveways are to be designed with the crest at or above the local or mainstream 100 year flood level.
- (9) Driveway gradients are to be in accordance with AS 2890.1.

6.4 External Building Elements

Streetscape and public domain are defined by their buildings, streets and public places. The maintenance and improvement of the public domain is dependent on a consistent approach to the design of new development including the articulation and finish of building exteriors.

6.4.1 Facade Articulation

The composition and detailing of the building façade has an impact on its apparent scale as well as appearance. The pattern or rhythm established by the proportions of the façade, the modulation of external walls, the design of façade elements, their materials and their detailing are all important considerations. The maintenance and improvement of the public domain is dependent on a consistent approach to the design of new development including the articulation and finish of building exteriors.

Objectives

To ensure that new buildings:

- contribute positively to the streetscape and public domain by means of high quality architecture and robust selection of materials and finishes,
- provide richness of detail and architectural interest especially at visually prominent parts of buildings
- present appropriate design responses to nearby development that complement the streetscape,
- clearly define the adjoining streets, street corners and public spaces and avoid ambiguous external spaces with poor pedestrian amenity and security,
- maintain a pedestrian scale in the articulation and detailing of the lower levels of the building, and

- contribute to a visually interesting skyline.

Controls

- (1) Adjoining buildings (particularly heritage buildings) are to be considered in the design buildings in terms of:
 - (a) appropriate alignment and street frontage heights,
 - (b) setbacks above street frontage heights,
 - (c) appropriate materials and finishes selection,
 - (d) facade proportions including horizontal or vertical emphasis, and
 - (e) the provision of enclosed corners at street intersections.
- (2) Horizontal elements of new buildings at the street edge, such as string courses, cornices, parapets, window sills and heads are to relate to those of existing buildings, particularly heritage buildings.
- (3) Articulate facades so that they address the street and add visual interest. Buildings are to be articulated to differentiate between the base (street frontage height) and the top in design.
- (4) Establish a well proportioned vertical rhythm particularly up to street frontage height by breaking the facade into bays of up to 6m wide.
- (5) Visible parts of side and rear boundary walls are to be treated with similar consideration of proportion, detailing and materials as other elements of the façade.
- (6) Finishes with high maintenance costs, those susceptible to degradation or corrosion from a coastal environment or finishes that result in unacceptable amenity impacts, such as reflective glass, are to be avoided.
- (7) To assist articulation and visual interest, no single wall plane shall exceed 120m².
- (8) The top storey of a building is to be setback from the outer face of the floors below on all sides.
- (9) Limit sections of opaque or blank walls greater than 4m in length along the ground floor to a maximum of 30% of the building frontage.
- (10) Highly reflective finishes and curtain wall glazing are not permitted above ground floor level.
- (11) A materials sample board and schedule is to be submitted with applications for development.
- (12) Limit excessive repetition of building modules to avoid monotony.

6.4.2 Roof Design

The roof is an important architectural element for the overall composition and expression of a building. The shape and form of a roof and its associated elements responds to the environment and the context. Quality roof design responds to various viewpoints within the local context, such as the roofscape observed from adjacent taller buildings and the silhouette viewed from the street below. In some areas, the roof forms part of a distant view and sits within a larger skyline.

Objectives

- To provide quality roof designs, which contribute to the overall design and performance of buildings.
- To integrate the design of the roof into the overall façade, building compositions and desired contextual response.

Controls

- (1) Roof design shall relate to the desired built form by:

- (a) articulating the roof to minimise the apparent bulk and relate to the context of smaller building forms.
 - (b) using a similar roof pitch or material to adjacent buildings, particularly in areas with an identifiable character.
 - (c) using special roof features, which relate to the desired character of an area, to express important corners.
- (2) The roof height of a building shall be a maximum of 5.5m above the top-most floor level. This does not include any vent, chimney, flue, antennae or the like.
 - (3) Roof design must respond to the orientation of the site and solar access. For example, by using eaves and skillion roof forms.
 - (4) Roof projection is allowed beyond the outer face of the top storey.
 - (5) Lift over runs and service plants must be concealed within the roof of the building to minimise the visual intrusiveness of service items.
 - (6) Rooftop structures, such as air conditioning, lift motor rooms, satellite dishes, and the like are to be incorporated into the architectural design of the building.
 - (7) Communication towers such as mobile phone towers and the like, but excluding satellite dishes, are not to be located on residential buildings.
 - (8) Landscaped and shaded areas on the roof of buildings will be considered where residential amenity, e.g. by way of noise generation or overlooking, and building appearance is not unreasonably affected.

6.5 Building Amenity

6.5.1 Acoustic Privacy

Acoustic privacy is a measure of sound insulation between apartments and between external and internal spaces. Designing for acoustic privacy relates to the location and separation of buildings within a development and the arrangement of apartments and internal spaces within apartments. The proximity of the building to major external noise sources such as busy roads is also a major consideration.

Objectives

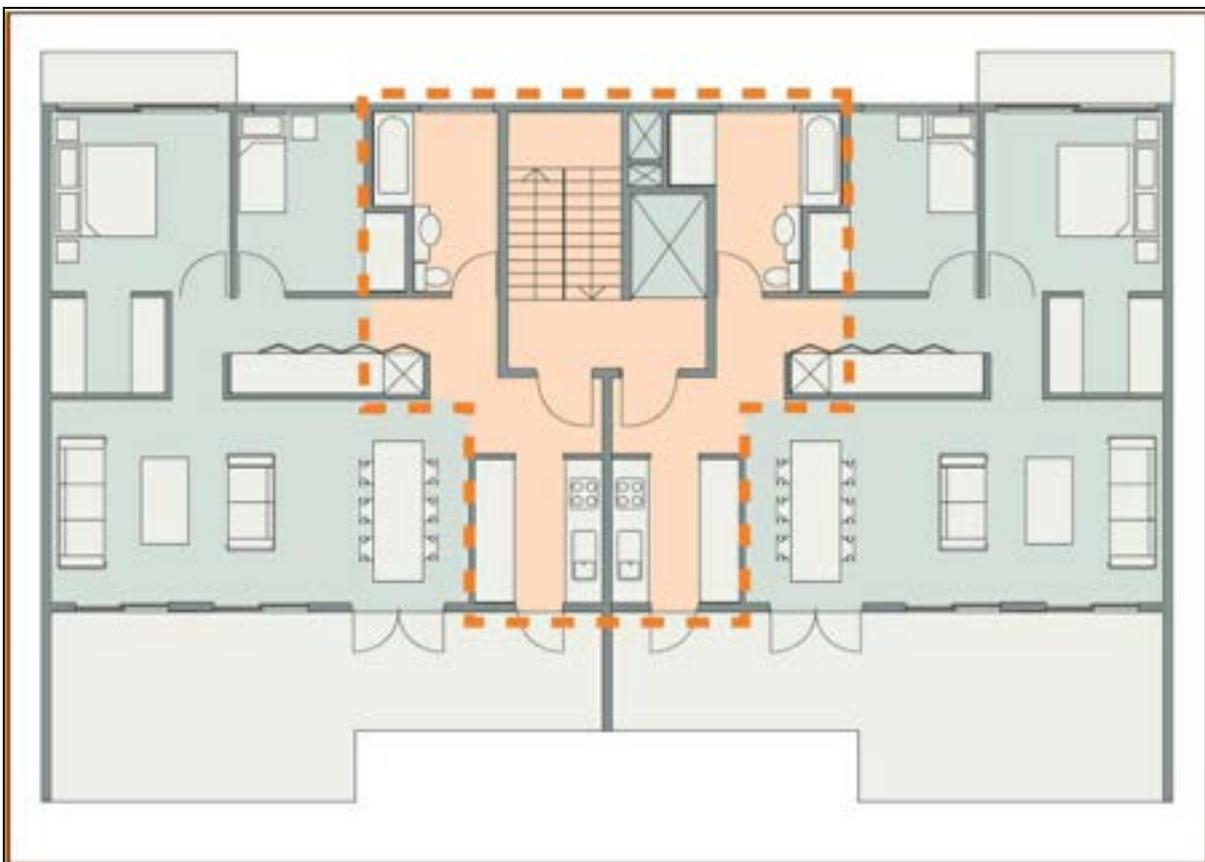
- To ensure a high level of amenity by protecting the acoustic privacy of residents within residential and mixed use developments within apartments and in private open spaces.
- To minimise impacts from noise generating uses (traffic, service vehicles, air conditioners and other plant equipment).
- To ensure acoustic privacy within mixed-use buildings between uses and between adjacent buildings.

Controls

- (1) Maximise acoustic privacy with regard to the site and building layout by:
 - (a) providing adequate building separation within the development and from neighbouring buildings,
 - (b) ensuring vertical as well as horizontal separation between conflicting uses generating different noise levels.
- (2) Where there are commercial/retail and residential uses located adjacent to each other, or within the same building, pay particular attention to the location of air conditioning units, building entries, and the design and layout of areas serving after hours uses.
- (3) Provide a minimum RW rating of 55 between apartments and between shared walls and floors of apartments,

unless the BCA specifies a higher rate, in which case the higher rating will apply.

- (4) Arrange dwellings within a development to minimise noise transmission between units by:
 - (a) locating busy areas next to each other and quieter areas next to other quieter areas (i.e. living rooms with living rooms, bedrooms with bedrooms)
 - (b) using storage and circulation areas within an apartment to buffers noise from adjacent apartments, mechanical services, corridors and lobby areas.
 - (c) minimising the amount of shared (party) walls between apartments.
 - (d) using service areas and corridors to buffer quiet areas such as bedrooms from noise generators including traffic areas and service vehicle entries.
- (5) Resolve conflicts between noise, outlook and views by using design measures such as double glazing, screened balconies and continuous walls to ground level courtyards.
- (6) Reduce noise transmission from common corridors or from outside the building by providing seals to entry doors of units.



Source RFDC

Acoustic privacy: living spaces are located away from noise sources such as lift and stairs (click here to view [original image](#))

6.5.2 Solar Access and Overshadowing

Daylight penetration within dwellings is important, particularly for upper level apartments where there are limited opportunities to move outside. Access to daylight within a dwelling reduces reliance on artificial light, improving energy efficiency and residential amenity.

In addition, the heat loading resulting from direct solar penetration into buildings during the hotter part of the year can have a major impact on residential amenity and energy efficiency. It is therefore important to ensure development is planned and designed to optimise the benefits of sunlight access, whilst minimising the negative effects.

Objectives

- To ensure that daylight access is provided to all habitable rooms and encouraged in all other areas of residential and mixed use development.
- To provide adequate ambient lighting and minimise the need for artificial lighting during daylight hours.
- To provide for controllable sunlight access into the principal living rooms of dwellings.
- To provide residents with the ability to adjust the quantity of daylight to suit their needs.
- To minimise the extent of loss of sunlight to living areas and private open spaces within the development and of adjacent dwellings.
- To minimise the extent of loss of sunlight to surrounding public areas such as waterways, foreshores and public reserves.

Controls

- (1) Provide at least 75% of residential apartments with at least 3 hours of sunlight to living rooms and private open spaces between 9.00am and 3.00pm in mid-winter.
- (2) Limit the number of single aspect apartments with a southerly aspect (SW-SE) to a maximum of 10% of the total number of units proposed. Developments which seek to vary from the minimum standards must show how site constraints and orientation prohibit the achievement of these standards and address the energy efficiency requirements of this Plan.
- (3) Design for shading and glare control through the use of shading devices (eaves, awnings, balconies, etc).
- (4) Adjacent residential buildings and their open spaces must receive at least 3 hours of direct sunlight between 9.00am and 3.00pm on June 21.
- (5) Public foreshore reserves and beaches are not to be overshadowed by the development after 9.30am and before 3.00pm midwinter or after 8.30am and before 5.00pm midsummer.
- (6) In determining access to sunlight, overshadowing by fences, roof overhangs and changes in level must be taken into consideration. Overshadowing by vegetation should also be considered where dense vegetation appears as a solid fence.
- (7) In areas undergoing change, the impact of overshadowing on development likely to be built on adjoining sites must also be considered in addition to the impacts on existing development.
- (8) Shadow diagrams showing the impact of the proposed development on reserves, beaches, adjacent residential developments and their private and communal open spaces, are required.

6.5.3 Natural Ventilation

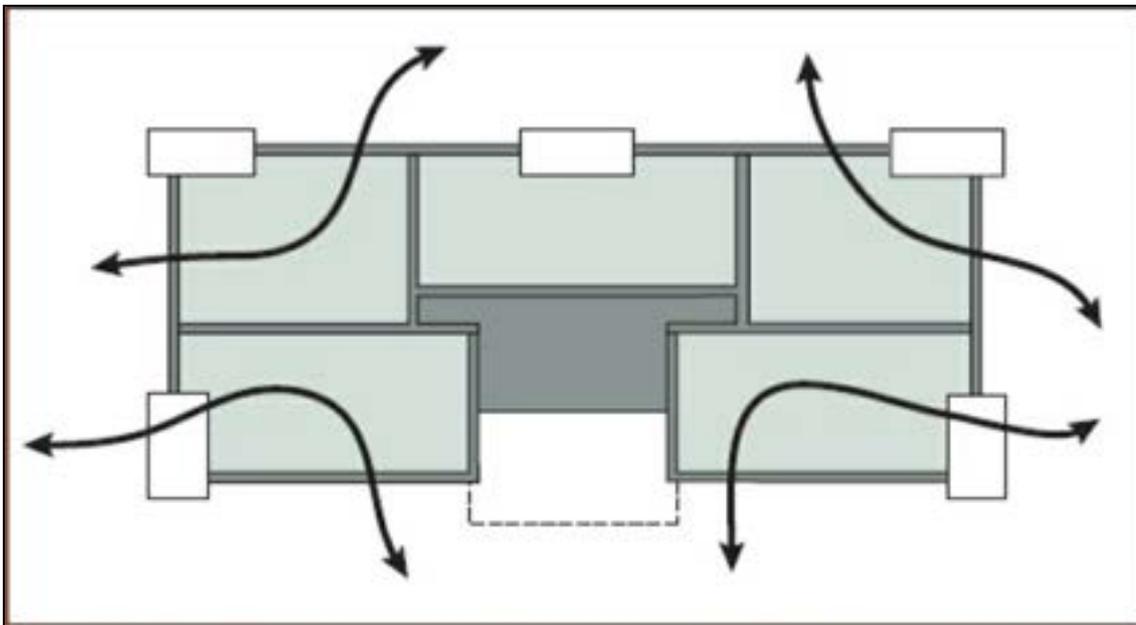
Natural ventilation is the circulation of sufficient volumes of fresh air through dwellings and other building spaces to create a comfortable indoor environment. Designing for natural ventilation exercises sustainable building practice by responding to local climatic conditions and by reducing or eliminating the need for mechanical ventilation. To achieve adequate natural ventilation, the design must address the building's orientation, the configuration of the dwelling and the external building envelope.

Objectives

- To encourage apartment design which allows for natural ventilation of habitable rooms.
- To provide natural ventilation in non-habitable rooms, where possible.
- To reduce energy consumption by minimising the use of mechanical ventilation.

Controls

- (1) Provide residential apartment buildings with a building depth of between 10m and 18m. The depth is measured across the shortest dimension of the building. Dwellings should be a maximum depth of 21m measured from the outside of the balcony.
- (2) Variation to this standard will only be considered where it can be demonstrated that apartments will achieve the minimum requirements with regard to natural ventilation. This may be achieved where apartments have a wider frontage, or increased ceiling and window height to allow for greater penetration of natural light. The building depth is measured across the shortest axis, excluding the depth of any unenclosed balconies.
- (3) A minimum 60% of all residential apartments shall be naturally cross ventilated.
- (4) A minimum 25% of kitchens within a development must have access to natural ventilation. Where kitchens do not have direct access to a window, food preparation and cooking areas must be no more than 8m from a window.
- (5) Single aspect apartments must be limited in depth to 8m from a window.



Internal layout - natural ventilation (click here to view [original image](#))

6.5.4 Night Lighting

The design of lighting has a very significant influence on the visual environment during the night. The benefits of well designed lighting include a pleasant night environment, safety, energy saving, and better visibility of the night sky.

Objectives

- To minimise visually intrusive lighting.
- To minimise light pollution and light looms.
- To ensure that lighting design aids orientation around buildings making entries easy to identify.
- To emphasize positive architectural and landscape qualities of the development.
- To provide safe movement for pedestrians.

Controls

- (1) Light elements (globes and tubes) are not to be visible from the public domain, rather light is to be orientated to illuminate surfaces.
- (2) All light sources are to be oriented so that they are invisible from an aerial view.
- (3) Pedestrian level lighting is preferable to high level lighting.
- (4) Illuminated signs are to have moderate visual prominence in the night and comply with all relevant Australian Standards.
- (5) Warm coloured lighting is to be used in preference to cold colours.
- (6) Lighting is to be designed and located so that it does not cause nuisance especially that which spills from one building into the living spaces of another. A light spill plan is to be provided where flood lighting is proposed within any development.
- (7) Measures are to be taken to minimise energy use.

6.5.5 Site Facilities and Servicing

Development should make appropriate provision for site servicing facilities which include:

- Mail boxes.
- Communication structures.
- Air conditioners.
- Services vents.
- Loading and unloading areas.

Poorly designed, visually incompatible or unattractive site servicing facilities can significantly detract from the overall appearance or image of a development. The location and design of all such facilities should minimise impact on the streetscape and building envelope as well as being safe and convenient to users.

Objectives

- To ensure that site facilities (such as clothes drying areas, mail boxes, recycling and garbage disposal units/areas, screens, lighting, storage areas, air conditioning units and communication structures) are effectively integrated into the development and are unobtrusive.
- To ensure that site services and facilities are adequate for the nature and quantum of development.
- To establish appropriate access and location requirements for servicing.
- To ensure service requirements do not have adverse amenity impacts.

Controls

- (1) Mail boxes for residential buildings and/or commercial tenancies should be provided in one accessible location adjacent to the main entrance to the development.
- (2) Mail boxes should be integrated into a wall where possible and be constructed of materials consistent with the appearance of the building
- (3) Mail boxes shall be secure and large enough to accommodate articles such as newspapers.
- (4) Satellite dish and telecommunication antennae, air conditioning units, ventilation stacks and any ancillary structures should be located:
 - (a) away from the street frontage,
 - (b) integrated into the roofscape design and in a position where such facilities will not become a skyline feature at the top of any building, and
 - (c) adequately setback from the perimeter wall or roof edge of buildings,

- (5) A master antenna should be provided for residential and mixed use buildings. This antenna should be sited to minimise its visibility from surrounding public areas.
- (6) Adequate facilities are to be provided within any new development for the loading and unloading of service/delivery vehicles.
- (7) Service access is to preferably be located off rear lanes, side streets or rights of way.
- (8) All service doors and loading docks are to be adequately screened from street frontages and from active overlooking by existing development.
- (9) Circulation and access to service docks is to be in accordance with AS 2890.1.

6.6 Building Performance

The ability of development to optimise thermal performance, thermal comfort and daylight access will provide increased amenity to occupants, contribute to the energy efficiency of the building, reduce greenhouse gas emissions and reduce energy costs.

Objectives

- To minimise the need for artificial lighting and the necessity for mechanical heating and cooling.
- To minimise greenhouse gas emissions.
- To provide thermal comfort by minimising temperature variations within buildings.

Controls

- (1) Development applications for new buildings and alterations and additions to existing buildings must comply with the SEPP (Building Sustainability Index: BASIX) 2004. This requires that an application must be accompanied by a BASIX certificate or BASIX certificates for the development issued no earlier than 3 months before the date on which the application is made. All commitments listed on a BASIX certificate must be marked on all relevant plans and specifications.
- (2) Reduce reliance on artificial lighting by providing a mix of lighting fixtures and using high efficiency lighting (e.g. Fluorescent), particularly for common areas.
- (3) Incorporate passive solar design techniques to optimise heat storage in winter and heat transfer in summer.
- (4) Reduce reliance on mechanical heating and cooling by:
 - (a) Allowing for adjustable awnings or blinds to be attached to the outside of windows
 - (b) Providing ceiling fans for improved air circulation.

6.7 Minimum Allotment Frontages

Objectives

- Allow for development of sites which are of sufficient size to accommodate the required building envelope, car parking and landscaping requirements.
- Locate and design development in response to flood, geo-technical or other environmental hazards.
- Promote the efficient utilisation of land.
- Encourage amalgamation of allotments to provide for improved design outcomes, including solar access and amenity.

6.7.1 Medium Density Residential Zone Controls

- (1) A minimum site width of 18m is required for medium density development. Exceptions will only be considered for social housing developments. Site width shall be measured for the full length of the primary street frontage boundary and perpendicular to the side boundary.
- (2) Sites may be amalgamated, where required, to achieve the minimum site width requirements.

6.7.2 High Density Residential & Mixed Use Zones Controls

- (1) Amalgamation of allotments will be required in the circumstance where an isolated allotment would otherwise be created.
- (2) Council will only allow development which would result in the creation of an isolated allotment with a frontage of less than the minimum frontage where it is demonstrated that negotiations to purchase the isolated allotment have been entered into but have been unsuccessful.
- (3) Council will only allow development of a site with a frontage less than the minimum frontage for the purpose of a building 3 storeys or more in height, where it is demonstrated that:
 - (a) Sufficient amenity for future residents is achieved in terms of solar access, daylight penetration and privacy;
 - (b) The proposed development does not adversely impact on the amenity of adjoining buildings with respect to solar access and privacy to living areas and private open space areas; and
 - (c) The building form and height positively contributes to the streetscape and townscape character.

6.7.2.1 Coastal Town Centres Additional Controls

Forster and Tuncurry

- (1) A minimum site width of 30m is required. Site width must be measured for the full length of the primary street frontage boundary and perpendicular to the side boundary.

Tea Gardens and Hawks Nest

- (1) A minimum frontage of 18m is required for the construction of a 3 storey building. Site width shall be measured for the full length of the primary street frontage boundary and perpendicular to the side boundary

6.8 Building Depth and Bulk

Controlling the building depth in new buildings allows for good internal amenity in regards to natural light and ventilation and mitigates potential adverse effects that bulky buildings may have on the public domain, including overshadowing and street amenity.

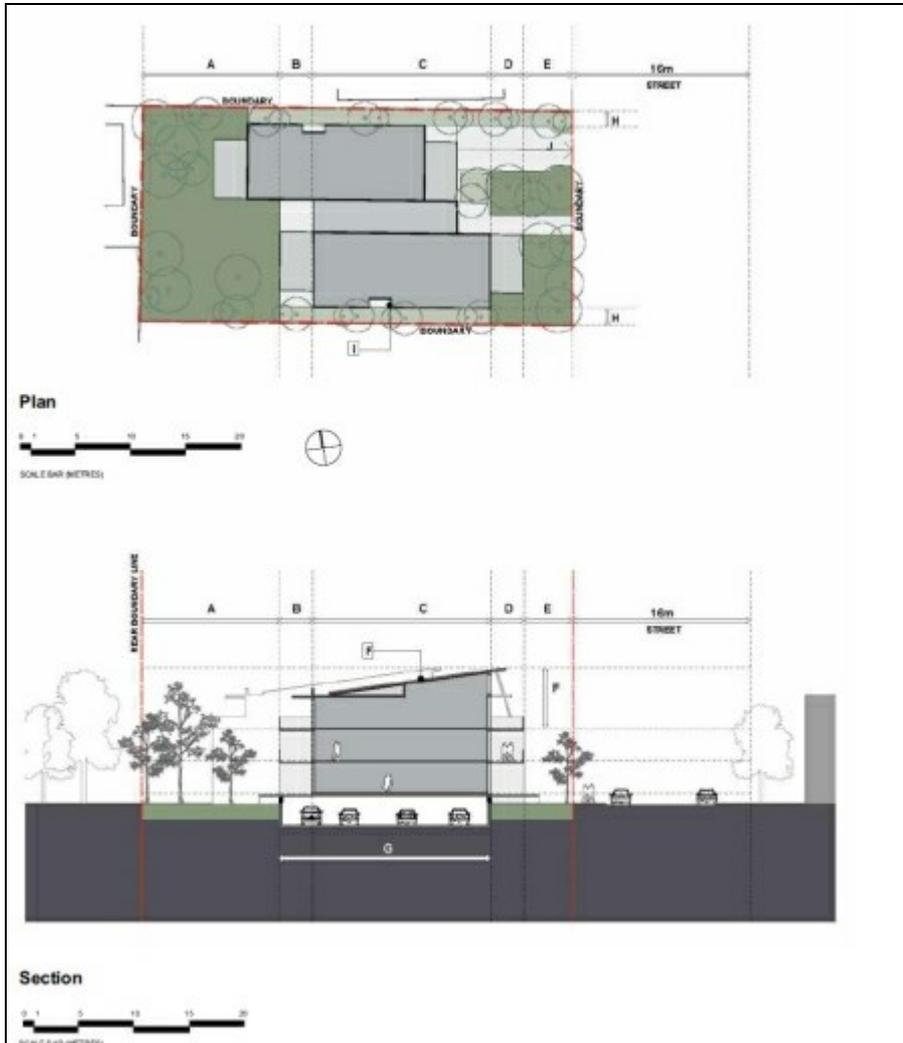
Objectives

- To promote the design and development of sustainable buildings.
- To achieve the development of living and working environments with good internal amenity and minimise the need for artificial heating, cooling and lighting.
- To achieve useable and pleasant streets and public domain at ground level by controlling the size of upper level floor plates of buildings.
- To reduce the apparent bulk and scale of buildings by breaking up expanses of building wall with building separation, modulation of form and articulation of facades.

6.8.1 Medium Density Residential Zone Controls

- (1) The maximum floor-plate depth of any residential floor is 18m, exclusive of balconies.

- (2) The gross floor area of the top-most level of the building can be a maximum of 60% of the floor level directly below.
- (3) Atria, light wells and courtyards should be used as appropriate to improve internal building amenity and achieve cross ventilation and/or stack effect ventilation.



Building and Site Use

-  Residential Use
-  Deep Root Planting
-  Raised Planter Beds

Key Notes

- A Minimum 6 metre rear setback.
- B 3 metre building articulation zone.
- C Maximum residential building depth to be 18 metres.
- D 3 metre building articulation zone.
- E Minimum 4.5 metre front setback.
- F Roof form to integrate services. Height of roof must not exceed 5.5m above upper most unit floor level.
- G Extent of Basement Carparking. Top of carpark does not exceed 1.2 metres above natural ground level.
- H Minimum 1.5 metre setback from side boundary.

Medium density small lot (20x50m) residential layout (click here to view [original image](#))



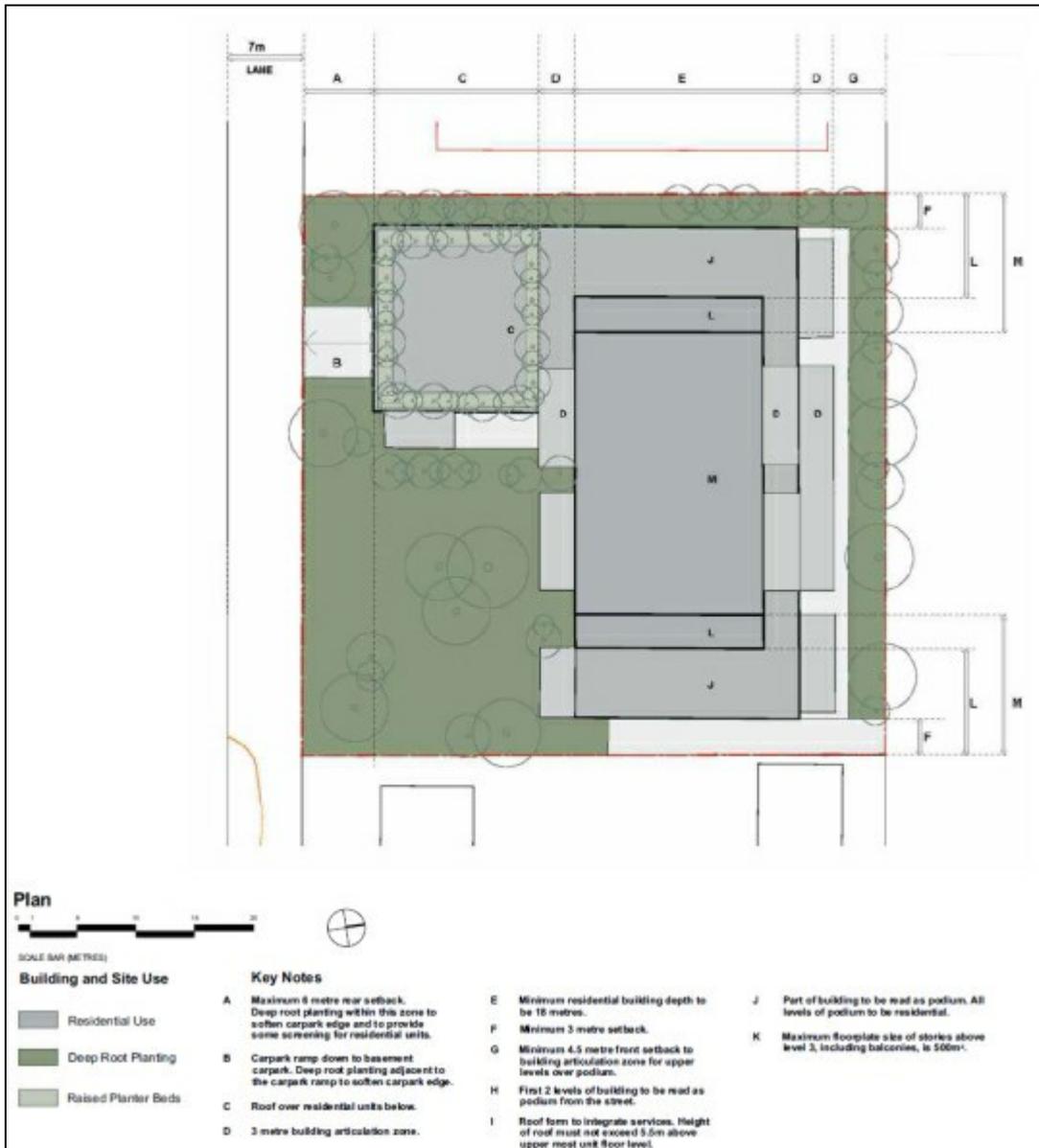
Building and Site Use	Key Notes	
 Residential Use	A Minimum 6 metre rear setback.	G Extent of Basement Carparking. Top of carpark does not exceed 1.2 metres above natural ground level.
 Deep Root Planting	B 3 metre building articulation zone.	H Roof form to integrate services. Height of roof must not exceed 5.5m above upper most unit floor level.
 Raised Planter Beds	C Maximum residential building depth to be 18 metres.	I Minimum 6 metre setback from side boundary.
	D 3 metre building articulation zone.	J Smaller building form facing street.
	E Carpark ramp down to basement carpark.	
	F Minimum 4.5 metre front setback.	

Medium density large lot (40x50m) residential layout (click here to view [original image](#))

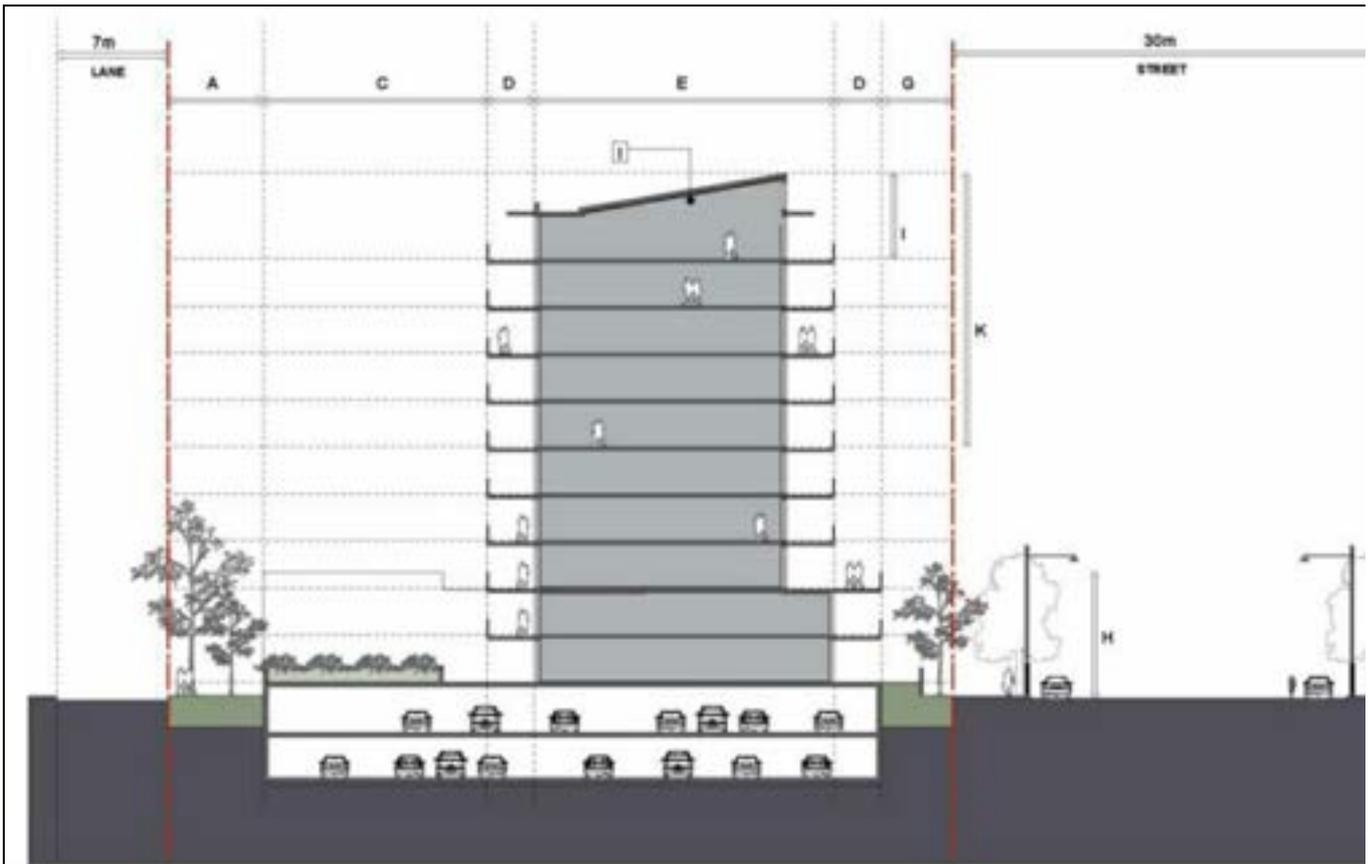
6.8.2 High Density Residential & Mixed Use Zone Controls

- (1) The maximum floor-plate size of buildings above 5 storeys is 500m², inclusive of balconies.
- (2) The maximum floor-plate depth of any residential floor is 18m, exclusive of balconies.
- (3) The gross floor area of the top-level of the building can be a maximum of 60% of the floor level directly below.
- (4) Atria, light wells and courtyards should be used as appropriate to improve internal building amenity and achieve cross ventilation and/or stack effect ventilation.

High Density Residential Building Design Examples



High density large lot (40x50m) residential layout (click here to view [original image](#))



Section



Building and Site Use

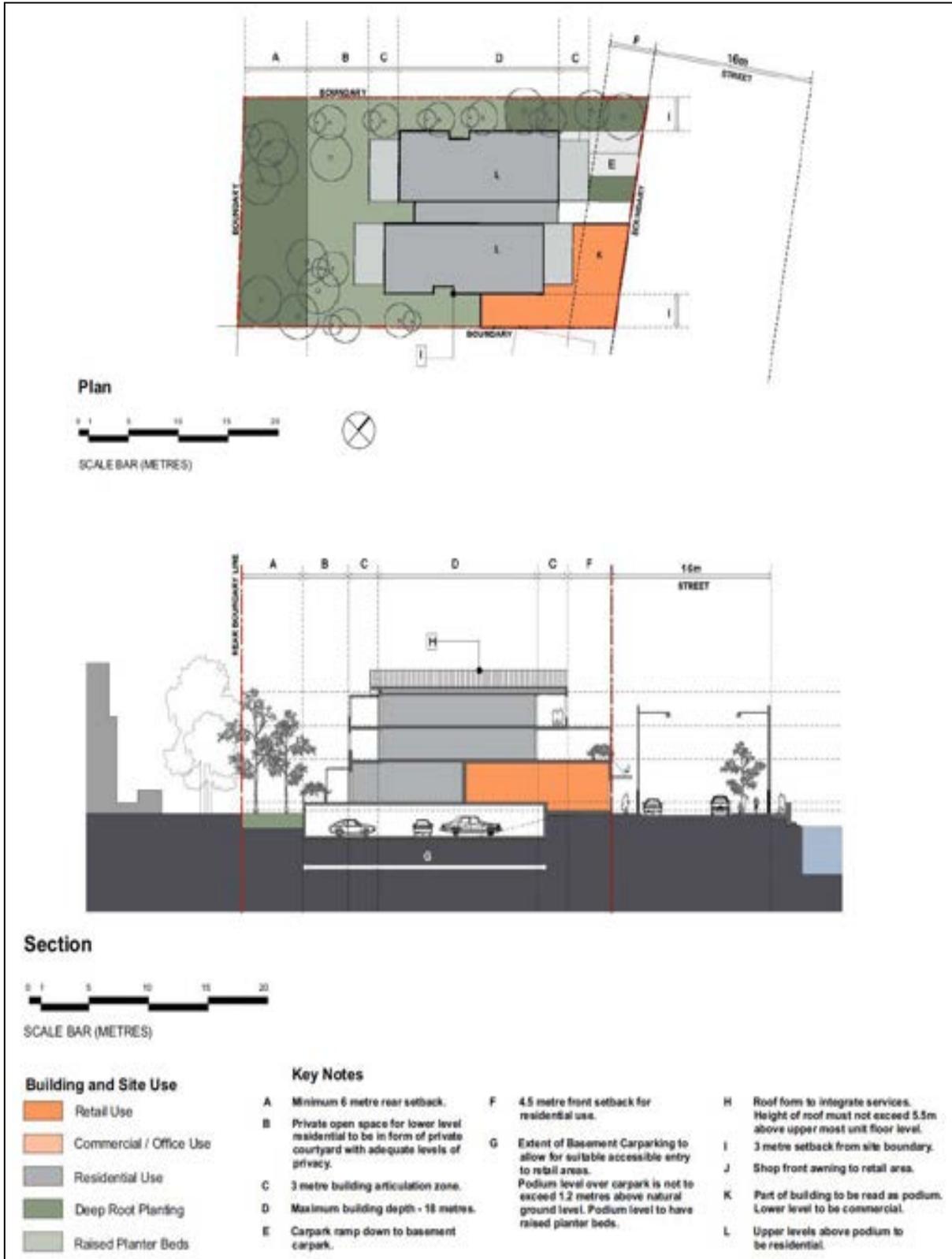
-  Residential Use
-  Deep Root Planting
-  Raised Planter Beds

Key Notes

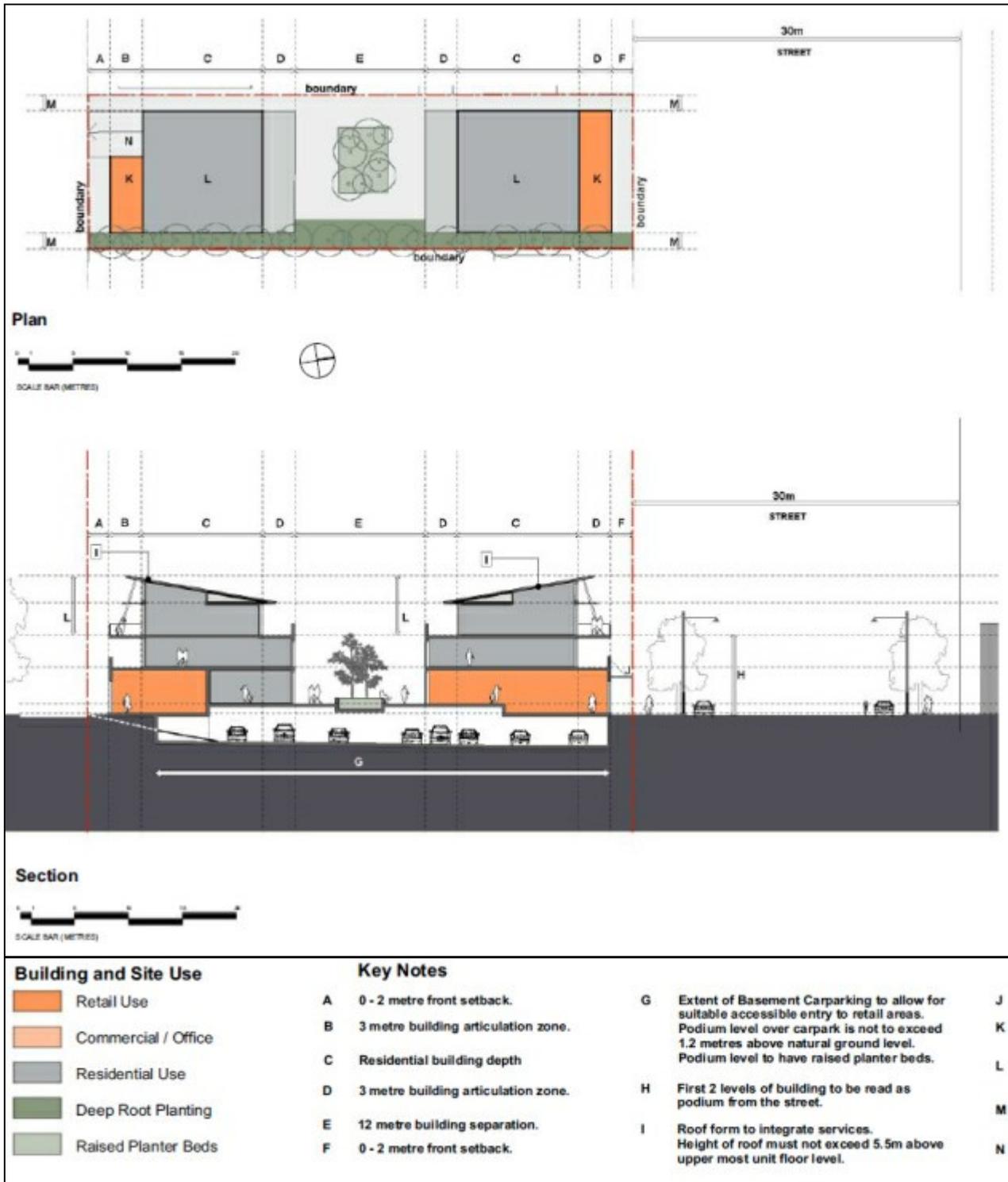
- | | | |
|---|---|---|
| <p>A Maximum 6 metre rear setback. Deep root planting within this zone to soften carpark edge and to provide some screening for residential units.</p> <p>B Carpark ramp down to basement carpark. Deep root planting adjacent to the carpark ramp to soften carpark edge.</p> <p>C Roof over residential units below.</p> <p>D 3 metre building articulation zone.</p> | <p>E Minimum residential building depth to be 18 metres.</p> <p>F Minimum 3 metre setback.</p> <p>G Minimum 4.5 metre front setback to building articulation zone for upper levels over podium.</p> <p>H First 2 levels of building to be read as podium from the street.</p> <p>I Roof form to integrate services. Height of roof must not exceed 5.5m above upper most unit floor level.</p> | <p>J Part of built levels of podium.</p> <p>K Maximum floor level 3, incl</p> |
|---|---|---|

High density residential flat large lot (40 x 50m) layout ([click here to view original image](#))

Mixed Use Building Design Example



Mixed use building small lot (20 x 50m) layout (click here to view [original image](#))



Mixed use building small lot (20 x 50m) layout (click here to view [original image](#))



Mixed use building in local centre small lot (20 x 50m) layout (click here to view [original image](#))



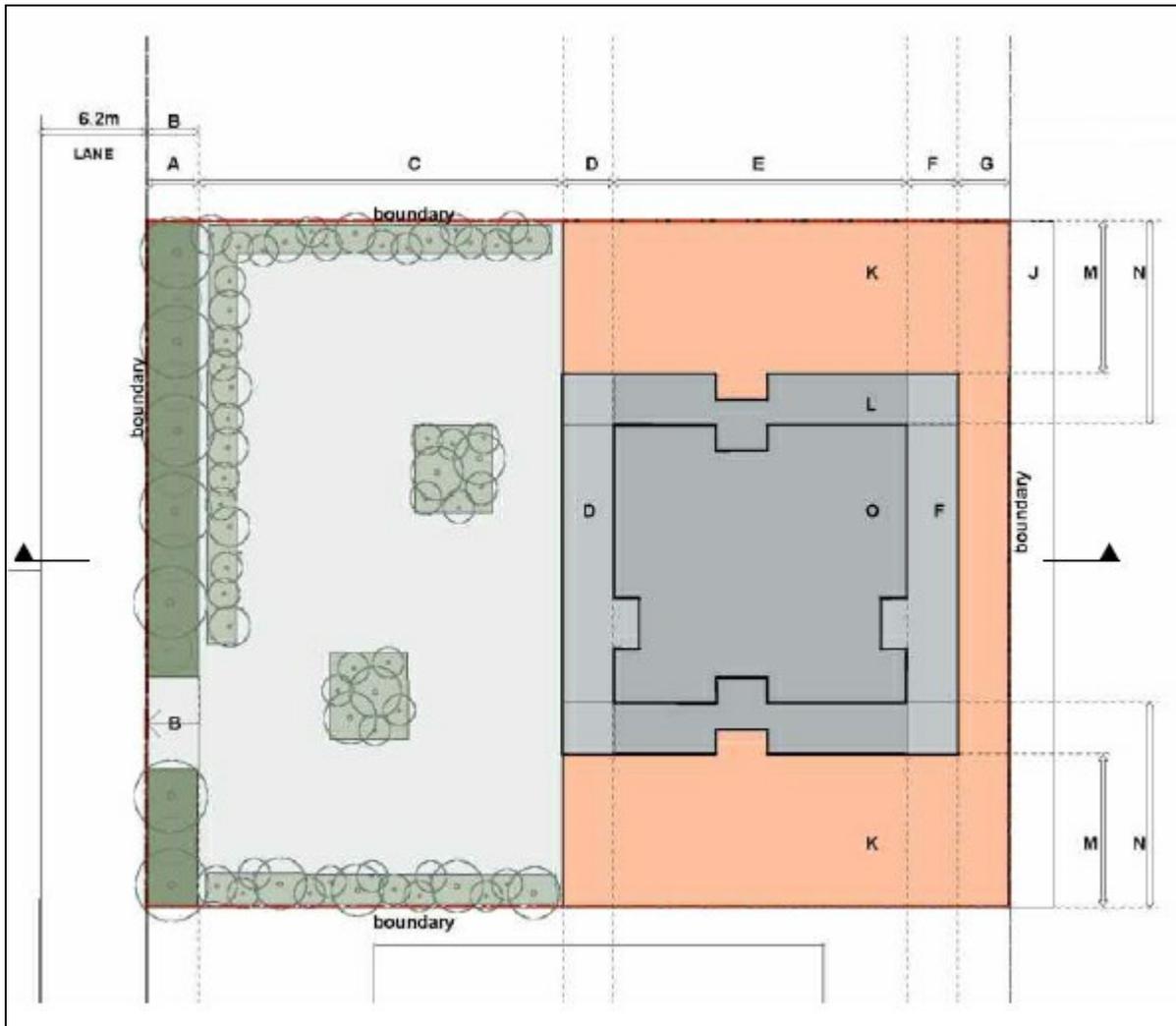
Building and Site Use

- Retail Use
- Commercial / Office Use
- Residential Use
- Deep Root Planting
- Raised Planter Beds

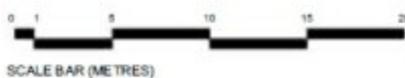
Key Notes

- | | | |
|--|---|--|
| <p>A Minimum 3 metre rear setback.</p> <p>B Carpark entry ramp down to basement carpark.</p> <p>C Maximum residential building depth - 18 metres.</p> <p>D Minimum 12 metre building separation.</p> <p>E 3 metre building articulation zone.</p> <p>F Minimum 3 metre front setback to building articulation zone for upper levels over podium.</p> | <p>G Extent of Basement Carparking to allow for suitable accessible entry to retail areas. Podium level over carpark is not to exceed 1.2 metres above natural ground level. Podium level to have raised planter beds.</p> <p>H First 2 levels of building to be read as podium from the street.</p> <p>I Roof form to integrate services. Height of roof must not exceed 5.5m above upper most unit floor level.</p> <p>J Shop front awning to retail area.</p> <p>K Part of building to be read as 2 storey podium. 2 levels to be commercial.</p> | <p>L Upper levels to</p> <p>M Top floor: 60 %</p> <p>N Minimum 6 met boundary to lev</p> <p>O Minimum 9 met boundary to th podium.</p> <p>P Podium level. One level of ba carpark to havi</p> <p>Q Through site pi</p> |
|--|---|--|

Mixed use building large lot (35 x 65m) layout ([click here to view original image](#))



Plan



Building and Site Use

	Retail Use
	Commercial / Office
	Residential Use
	Deep Root Planting
	Raised Planter Beds

Key Notes

A	Minimum 3 metre rear setback. Deep root planting within this zone to soften carpark edge and to provide some screening.	E	Maximum residential building depth to be 18 metres.	K	Part of building 1 levels of podium
B	Carpark entry / exit zone. Deep root planting adjacent to the carpark ramp to soften carpark edge.	F	3 metre building articulation zone.	L	Upper levels to b
C	Podium level. Carpark at rear of site with one level of basement carparking. Roof over carpark to have raised planter beds.	G	Minimum 3 metre front setback to building articulation zone for upper levels over podium.	M	9 metre setback / levels above pod
D	3 metre building articulation zone.	H	First 3 levels of building to be read as podium from the street.	N	12 metre setback to upper most le
		I	Roof form to integrate services. Height of roof must not exceed 5.5m above upper most unit floor level.	O	Upper most level
		J	Shop front awning to retail area.		

Mixed use large lot (40 x 50m) building in local centre (click here to view [original image](#))



Section



Building and Site Use

- Retail Use
- Commercial / Office Use
- Residential Use
- Deep Root Planting
- Raised Planter Beds

Key Notes

- | | | |
|--|---|---|
| <p>A Minimum 3 metre rear setback. Deep root planting within this zone to soften carpark edge and to provide some screening.</p> <p>B Carpark entry / exit zone. Deep root planting adjacent to the carpark ramp to soften carpark edge.</p> <p>C Podium level. Carpark at rear of site with one level of basement carparking. Roof over carpark to have raised planter beds.</p> <p>D 3 metre building articulation zone.</p> | <p>E Maximum residential building depth to be 18 metres.</p> <p>F 3 metre building articulation zone.</p> <p>G Minimum 3 metre front setback to building articulation zone for upper levels over podium.</p> <p>H First 3 levels of building to be read as podium from the street.</p> <p>I Roof form to intergrate services. Height of roof must not exceed 5.5m above upper most unit floor level.</p> <p>J Shop front awning to retail area.</p> | <p>K Part of buildi levels of pod</p> <p>L Upper levels</p> |
|--|---|---|

Mixed use large lot (40 x 50m) building in local centre (click here to view [original image](#))

6.9 Primary Street Setbacks

Primary street setbacks and building alignments establish the front building line. They help to create the proportions of the street and can contribute to the public domain by enhancing streetscape character and the continuity of street facades.

The way in which buildings address the street has important implications for the quality of the public domain. In general terms, streets should be fronted by buildings that respond to the street alignment by orientation of their main entrances and facades.

6.9.1 Medium Density Residential Zones

Objectives

- Reinforce the existing character of the street by acknowledging existing building setbacks.
- Promote compatibility in front setbacks to provide for unity in the building line and to create a distinction between the public and private domain.
- Provide adequate setbacks from boundaries and adjoining dwellings to retain privacy levels, views, sunlight and daylight access and to minimise overlooking.
- Provide appropriate separation between buildings to achieve the desired urban form.
- Minimise overshadowing of adjacent properties and private or public open space.
- Create usable spaces that add to the amenity of ground floor dwellings.

Controls

- (1) The following setback requirements apply from the primary street frontage to the front façade of the building:
 - (a) The same distance as one adjoining residential building, provided the difference between the setbacks of the two adjoining buildings is less than 2m.
 - (b) The average of the setbacks of the two adjoining residential buildings, if the difference between the setbacks of the buildings is greater than 2m.
 - (c) An absolute minimum front setback of 4.5m applies.
- (2) The front setback shall be a minimum of 4.5m for all levels.
- (3) On corner allotments a minimum setback of 3m to the secondary street frontage from the dwelling façade must be provided.
- (4) Balconies may project up to 900mm into front building setbacks, within the building articulation zone within the property boundary, provided the cumulative width of all balconies at each particular level totals no more than 50% of the horizontal width of the building façade, measured at that level.
- (5) An increase in setbacks may be required to retain existing trees or respect adjacent heritage items or buildings located in a Heritage Conservation Area.
- (6) Council may only consider granting a variation to the setback controls where the following can be demonstrated:
 - (a) The siting of the building satisfies the setback objectives; and
 - (b) Windows which are located on the side or rear boundary are primarily provided for natural light or ventilation purposes. This would include highlight windows with a minimum 1.7m sill, fixed obscure glass windows, glass bricks or windows with fixed louvres; and
 - (c) The amenity of the adjoining property is not unreasonably affected; and
 - (d) The design will result in a significant improvement in amenity for residents who will occupy the proposed dwelling.

6.9.2 High Density Residential & Mixed Use Zones

Objectives

- To achieve a strong and consistent definition of the public domain.
- To ensure that the external facades of buildings are aligned with the streets that they front.
- To provide front setbacks appropriate to building function and streetscape character.
- To establish the desired spatial proportions of the street and define the street edge.
- To create a transition between public and private space.
- To allow an outlook to, and passive surveillance of, the street.

- To allow for street landscape character where appropriate.
- To maintain reasonable solar access to the public domain.

Controls

- (1) Balconies may project up to 600mm into front building setbacks, within the building articulation zone within the property boundary, provided the cumulative width of all balconies at each particular level totals no more than 50% of the horizontal width of the building facade, measured at that level.
- (2) Minor projections into front building setbacks for sun shading devices, entry awnings and cornices are permissible.
- (3) The front building setback of the upper levels shall be a minimum of 4.5m.
- (4) Where buildings are built to the street alignment, balconies may project over the road or footpath.
- (5) An increase in setbacks may be required to retain existing trees or respect adjacent heritage items.

6.9.3 Coastal Town Centres Additional Controls

- (1) Street building alignment and street setbacks are to comply with the setbacks shown in the street alignment and setback plan.
- (2) In the situation of an inconsistency between and the street alignment and setback plans and the development controls in this section, the provisions of the plans shall take precedence.

Tuncurry



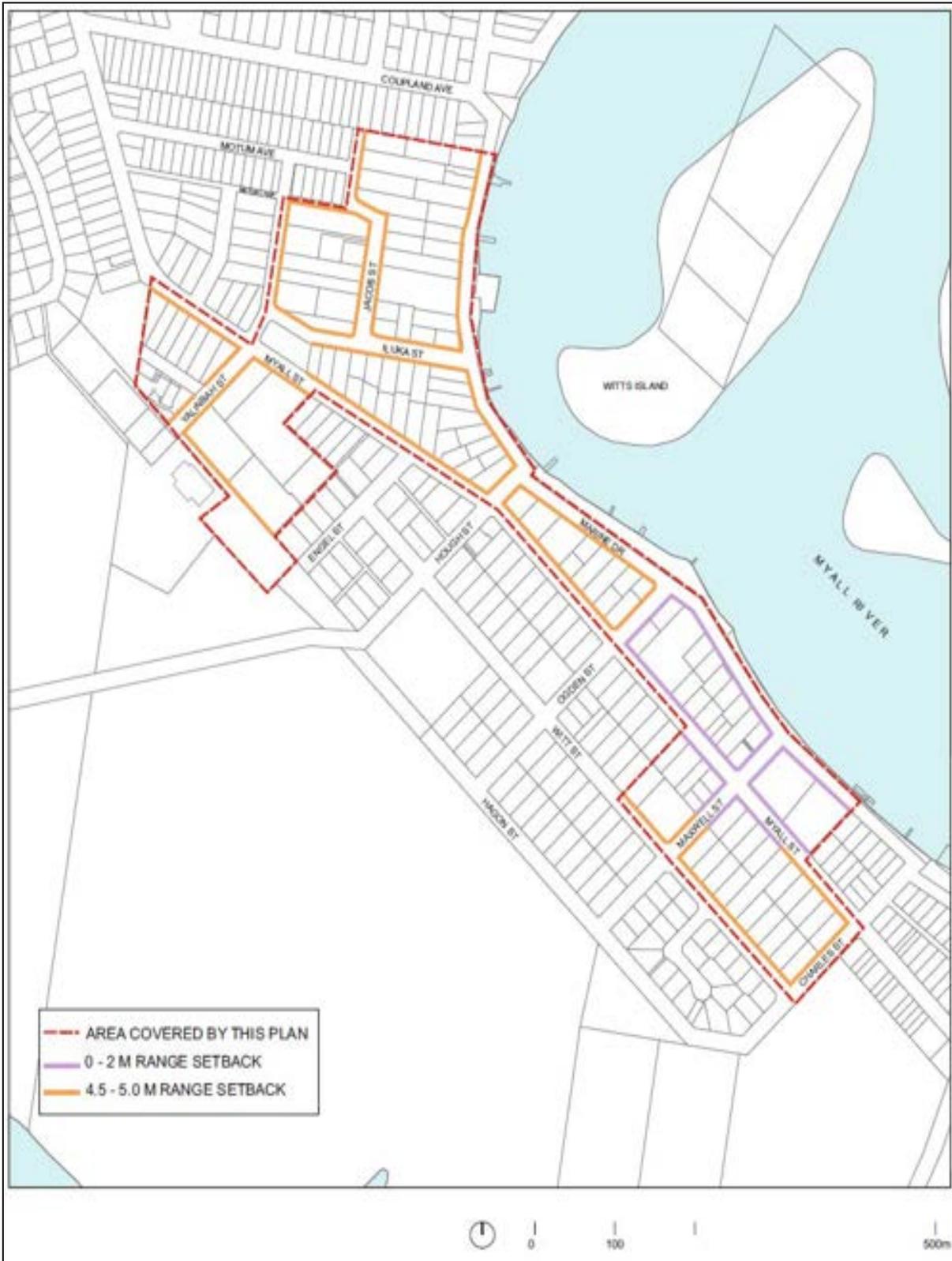
Tuncurry town centre street alignment and setback plan (click here to view [original image](#))

Forster



Forster town centre street alignment and setback plan (click here to view [original image](#))

Tea Gardens



Tea Gardens town centre street alignments and setback plan (click here to view [original image](#))

Hawks Nest



Hawks Nest town centre street alignments and setback plan (click here to view [original image](#))

6.10 Side and Rear Setbacks

Side and rear setbacks, where provided, allow ventilation, solar access, increase privacy, and reduce adverse wind effects. Building separation increases in proportion to building height to ensure appropriate urban form, amenity and privacy for building occupants.

Side setbacks that increase with building height will mean that only consolidated lots will achieve the full height

allowed. These side setbacks are based on the SEPP 65 reference document “Residential Flat Design Code”.

In residential buildings, separation between windows on side and rear facades and to other buildings is particularly important for privacy, acoustic amenity and view sharing.

In mixed use buildings, the inclusion of reduced setbacks at the lower level of the building promote active uses at the street front and enable an efficient floor plate for non-residential uses. The separation between windows on side and rear facades and other buildings for the upper level residential component is particularly important for privacy acoustic amenity and view sharing. Accordingly, separation for mixed use buildings containing residential and commercial uses is to be in accordance with specified distances for each component use.

6.10.1 Medium Density Residential Zones

Objectives

- Provide adequate setbacks from boundaries and adjoining dwellings to retain privacy levels, views, sunlight and daylight access and to minimise overlooking.
- Provide appropriate separation between buildings to achieve the desired urban form.
- Optimise the use of land at the rear of the property and surveillance of the street at the front of the property.
- Minimise overshadowing of adjacent properties and private or shared open space.

Controls

- (1) For multi dwelling housing the side or rear boundary setbacks are measured from the wall of the building or the outer edge of a balcony/deck, to the adjacent property boundary. The minimum side and rear boundary setbacks are as follows:
 - (a) 6m where a habitable room/balcony faces an adjacent property
 - (b) 1.5m where non-habitable rooms/blank walls face an adjacent property
- (2) Council may only consider granting a variation to the setback requirements where the following can be demonstrated:
 - (a) The siting of the building satisfies the setback objectives; and
 - (b) Windows which are located on the side or rear boundary are primarily provided for natural light or ventilation purposes. This would include highlight windows with a minimum 1.7m sill, fixed obscure glass windows, glass bricks or windows with fixed louvres; and
 - (c) The amenity of the adjoining property is not unreasonably affected; and
 - (d) The design will result in a significant improvement in amenity for residents who will occupy the proposed dwelling.

6.10.2 High Density Residential, Mixed Use and Business Zones

Objectives

- To ensure an appropriate level of amenity for building occupants in terms of daylight, outlook, view sharing, ventilation, wind mitigation and privacy.
- To achieve usable and pleasant streets and public domain areas in terms of wind mitigation and daylight access.
- To ensure that new development is scaled to support the desired area character with appropriate massing and spaces between buildings.
- To provide deep soil zones for stormwater management and landscaping.

Controls

- (1) Buildings are to comply with the side and rear boundary setbacks listed in the relevant table for its zone and locality.
- (2) The separation distance between buildings on the same site are not to be less than that required between buildings on adjoining sites, unless it can be demonstrated that reducing the separation distances provides adequate privacy and solar access to the buildings concerned.
- (3) If the specified setback distances cannot be achieved when an existing building is being refurbished or converted to another use, appropriate visual privacy levels are to be achieved through other means. These will be assessed on merit by the consent authority.
- (4) Built to boundary walls will be considered for upper level commercial uses subject to adequate amenity provision for occupants and adjoining sites and appropriate streetscape appearance.

6.10.2.1 High Density Residential Zones Setbacks Table

Side and Rear Setback Controls in High Density Residential Zones	
Building Height	Minimum Side and Rear Setback
Levels up to 3 storeys	6m
Levels over 3 storeys	9m where a habitable room/balcony faces a habitable room/balcony on an adjacent property
	6.5m between habitable rooms/balconies and non-habitable rooms/balconies on an adjacent property
	4.5m where a non-habitable room/blank wall faces a non-habitable room/blank wall on an adjacent property

6.10.2.2 Coastal Town Centres Mixed Use and Business Control Tables

- (1) In the situation of an inconsistency between the street alignment and setback plans and the development controls in this section, the provisions of the diagrams shall take precedence.

Forster and Tuncurry Setbacks Table

Side and rear setback controls in Forster and Tuncurry mixed use and business zones	
Building Height	Minimum Side and Rear Setback
Levels up to 3 storeys	Nil for 1 side boundary and 2.5m for 1 side boundary
	Nil for commercial development
	6m where no rear lane access is possible
	3m where rear lane access is provided.
Levels over 3 storeys	9m where a habitable room/balcony faces a habitable room/balcony on an adjacent property
	6.5m between habitable rooms/balconies and non-habitable rooms/balconies on an adjacent property
	4.5m where a non-habitable room/blank wall faces a non-habitable room/blank wall on an adjacent property

Tea Gardens and Hawks Nest Setbacks Table

Side and rear setback controls in Tea Gardens and Hawks Nest business zones	
Building Height	Minimum Side Setback
Ground Floor	Nil for non-residential
	3m for ground floor residential

First and second floor	9m where a habitable room/balcony faces a habitable room/balcony on an adjacent property
	6.5m between habitable room/balcony and non-habitable room/balcony on an adjacent property
	4.5m where a non-habitable room/blank wall faces a non-habitable room/blank wall on an adjacent property
	Minimum Rear Setback
	6m where no rear lane is provided
	3m where rear lane access is provided

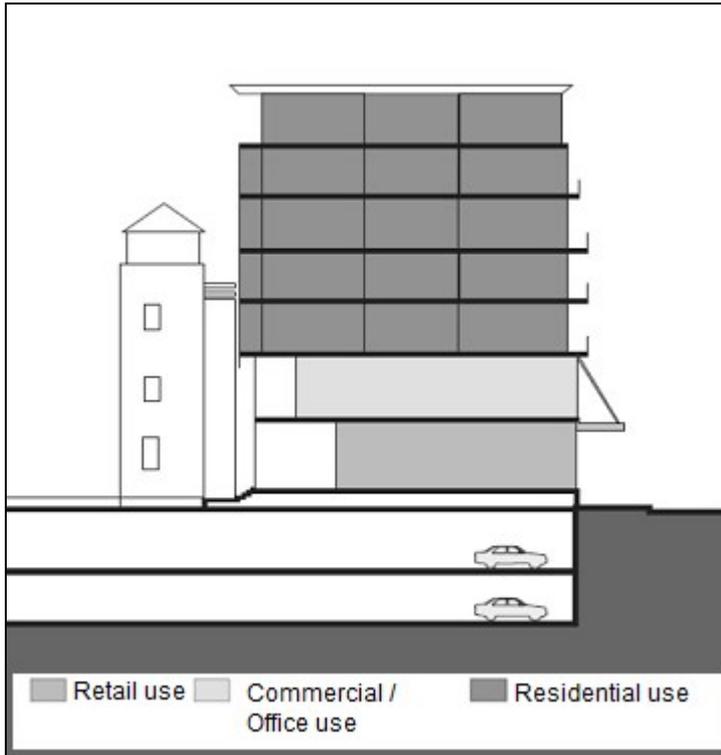
6.11 Ground Level Uses

Objectives

- Support the integration of appropriate retail and commercial uses with housing.
- Provide an identifiable and desirable street address to each building and dwelling.
- Create safe and more active lively streets and urban areas, which encourage pedestrian movement, and services to meet the needs of residents.
- Ensure that the design of mixed-use developments maintains residential amenity and preserves compatibility between uses.
- Allow for outlook and surveillance towards the street and the public domain.

Controls

- (1) Provide a variety of different sized non-residential spaces (e.g. boutique shops and cafes, art galleries, suites for local commercial services, etc).
- (2) All common areas (including the principal entrance to the building) are accessible by all persons.
- (3) Locate retail/commercial uses on the ground floor, retail/commercial uses on the first floor, and residential uses on the upper floors.
- (4) Provide services and facilities within the development that meet the needs of different population groups and build flexibility into communal space to meet changing needs.
- (5) Minimum floor to ceiling heights are to 3.3m for the first three floors of a building to provide flexible tenancy layouts.
- (6) A minimum 3.3m floor to ceiling height must be provided for all levels of a development within the town centre proposing only commercial or retail occupation.
- (7) Commercial service requirements, such as loading docks, are to be separate from residential access and primary outlook.
- (8) Clearly demarcated residential entries are to be directly accessible from the public street. The main pedestrian entrance or foyer must be 1.2m or less above natural ground level.
- (9) Where ground floor residential units are provided, they must have separate entrances and be accessible directly from the street.
- (10) Provide security access controls to all entrances into private areas, including car parks and internal courtyards.
- (11) Avoid the use of blank building walls at the ground level.



Mixed use building ground level uses (click here to view [original image](#))

6.12 Coastal Town Centres Street Frontage Heights

Street frontage heights refer to the height of the building that directly addresses the public street from the ground level up to the first (if any) setback.

Objectives

- Provide a strong, consistent and appropriate definition of the public domain.
- To achieve comfortable street environments for pedestrians in terms of daylight, scale, sense of enclosure and wind mitigation as well as a healthy environment for street trees.
- To protect solar access to key streets and public spaces.

Controls

- (1) The street frontage height of buildings should comply with the heights above mean ground level on the street front as shown in the street frontage height plan.
- (2) Notwithstanding the controls in the street frontage height plans, the street frontage height controls of any new building adjacent to any heritage item is to incorporate appropriate scale and massing.

Tuncurry



Tuncurry town centre street frontage height plan (click here to view [original image](#))

Forster



Forster town centre street frontage height plan (click here to view [original image](#))

Tea Gardens



Tea Gardens street frontage height plan ([click here to view original image](#))

6.13 Coastal Town Centres Concept Plans

The coastal town centre concept plans provide an overview of the desired pedestrian linkages and their relationship to the existing residential, recreational and commercial uses.

Tuncurry



Tuncurry town centre concept plan (click here to view [original image](#))

Forster



Forster town centre concept plan (click here to view [original image](#))

Tea Gardens



Tea Gardens town centre concept plan ([click here to view original image](#))

Hawks Nest



Hawks Nest town centre concept plan ([click here for original image](#))

7 Industrial Development

These controls apply to industrial and bulky goods development within the Great Lakes. Industrial development is permissible in the following zones:

- IN1 General Industrial
- IN2 Light Industrial
- IN4 Working Waterfront
- RU2 Rural Landscape
- RU5 Village
- B5 Business Development

7.1 Retailing in Industrial Areas

Objectives

To ensure retail development is complimentary to industrial uses and does not adversely impact on the use of the land for industrial purposes.

Controls

- (1) The maximum size of an industrial retail outlet must be in accordance with the provisions of Clause 5.4(4) of Great Lakes Local Environmental Plan 2014.

7.2 Building Setbacks

Objectives

To enhance the streetscape consistent with the characteristics of the street and ensure that adequate space is available to accommodate landscaping, water sensitive design elements, access, parking and manoeuvring of vehicles.

Controls

- (1) A building is to be setback a minimum of 7.5m from the primary street frontage.
- (2) Single storey elements, with a maximum height of 4m may be permitted with a 4.5m setback from the primary street frontage. Where a single storey element is setback 4.5m from the primary street frontage, the remainder of the area between the building and the front boundary is to be landscaped (other than an access driveway).
- (3) Car parking, access driveway's and water sensitive design elements are permitted in the front setback area, provided adequate landscape screening is provided to the street and sightlines are maintained for pedestrians and vehicle movement. A larger front building setback may be necessary to provide a suitable space for car parking, stormwater systems etc.
- (4) Where a site has frontage to two streets, a building is to be setback a minimum of 4.5m from the secondary street frontage and the areas between the building and the street boundary are to be adequately landscaped. Water sensitive design elements are permitted in this area.

7.3 Appearance and General Amenity

Objectives

- To ensure industrial development is suitable for its purpose and function.
- To ensure the appearance of industrial development is complementary to adjoining development.
- To ensure industrial development contributes to a safe and activated streetscape.

Controls

- (1) Elevations of buildings which are visible from a public road, public reserve, adjacent to or adjoining a residential area are to be constructed of:
 - (a) Brick, masonry, pre-coloured profiled metal cladding; or
 - (b) Appropriately finished concrete panel; or
 - (c) Other light-weight cladding that is appropriately finished; or
 - (d) A combination of these materials.
- (2) Building entries should be prominently located, clearly demarcated and positioned to maximise casual surveillance.
- (3) External materials and colours are to be sympathetic to the existing streetscape. Highly reflective materials are not acceptable.
- (4) All driveways, car parking and manoeuvring areas shall be bitumen sealed or concrete paved.
- (5) Where a single building is to be divided to provide a number of industrial factory units for separate occupation, the following additional requirements will apply.
 - (a) the maximum number of factory units permissible is one unit for every 400m² of site area;
 - (b) each factory unit should have a minimum floor area of 100m²;
 - (c) internal walls separating the various factory units are to be of brick or concrete masonry construction;
 - (d) each unit is to have its own male and female toilet.

7.4 Landscaping

Objectives

- To improve the visual quality and amenity of industrial areas through the provision of low maintenance landscaping.

Controls

- (1) All areas within setbacks which adjoin public areas are to be landscaped, except for approved access driveways and car parking spaces.
- (2) A landscaped garden bed with a minimum width of 2.5m is to be provided between any car parking spaces and the front boundary.
- (3) Landscape design must be integral with water sensitive design elements, car parking and access driveway design. Landscape works are to provide adequate screening from the street whilst maintaining good pedestrian sightlines through a combination of low planting and trees.
- (4) Landscape design should use low maintenance plant species. Council recommends the use of predominantly local indigenous species.
- (5) A landscape plan showing the location of trees, shrubs and other groundcovers, including the species name and pot size is to be submitted with the development application.

7.5 Open Storage Areas

Objectives

- To minimise the impact of open storage and work areas on the visual amenity of the locality.

Controls

- (1) Open work and storage areas are to be located behind the primary building line and screened from public view by the use of landscaping and/or screen fencing.
- (2) The storage or display of materials or goods will only be permitted forward of the primary building line where it is an integral component of the proposed use and Council is satisfied that the outcome will not detract from the visual amenity of the locality.

7.6 Security and Fencing

Objectives

- To ensure adequate provision is made for site security and to minimise the impact of fencing on the visual amenity of the locality.

Controls

- (1) All fencing must be located behind the building line.
- (2) Security fencing may be permitted forward of the building line where it is constructed as an open style fence with a high quality finish such hollow-section steel vertical pickets, pre-finished metal palisade or black chain-mesh and where screen landscaping is provided in the front setback. Solid fencing, such as masonry, timber paling or colorbond is not permitted forward of the building line.

8 Heritage

All development within the Heritage Conservation Area and/or affecting a Heritage Item (by reference to two lots in any direction) must ensure that the significance and integrity of the Area and/or Item is retained. Development consent is generally required to carry out work on land or buildings in a “heritage conservation area” and/or affecting a “heritage item”.

This section provides additional site and building controls for development of heritage items or buildings located within a nominated Heritage Conservation Area.

8.1 Development Applications

Applicants are encouraged to contact Council in the first instance as a development application may not be required for minor work if, in Council's opinion, the proposed development would not adversely affect the heritage significance of the heritage conservation area and / or heritage item. Council's opinion on whether a development application will be required for minor work is based on compliance with the controls in this DCP. For example: Property owners may submit a written request to Council proposing external paint colours for their property. If the colours are appropriate to the era and style of the building, Council shall provide written advice that a development application will not be required.

Heritage Impact Statement

A Heritage Impact Statement is to be submitted with a development application for any proposed works including alternations and demolition:

- within a Heritage Conservation Area
- affecting a heritage item; and
- for a property in the vicinity of a heritage item (by reference to two lots in any direction)

An Heritage Impact Statement must be based on an understanding of the history and significance of the place. The assessment should:

- address the controls within this Development Control Plan relating to heritage conservation;
- document the history of the place and why it is significant;
- include aspects of the proposal that will enhance or diminish the significance of the place;
- provide alternative approaches that were considered but discounted and the reasons why; and
- include recommendations as to how the proposal could be amended to be more sympathetic and/or minimise its impact on the heritage significance of the place.

Development applications may be referred to Council's Heritage Advisor to ensure compliance with the intent of the Development Control Plan controls.

8.2 Controls for Development within the heritage conservation areas and/or affecting heritage items

8.2.1 Heritage Items

Interior building works controls

- (1) Where possible alterations to the interior of a heritage listed building should have consideration for:
 - (a) Preservation of relatively intact decorative schemes (e.g. wallpapers, paint, curtains, floor coverings etc.) from a given period.
 - (b) Address structural problems, such as rising damp, cracked walls or leaking roofs, in order to preserve existing schemes and to minimise disturbance caused by those works.

- (c) The reconstruction of an earlier decorative scheme is only appropriate where the existing scheme has little or no significance, and where there is sufficient historic evidence to allow for authentic reconstruction of all elements of the scheme.
- (2) Significant items of joinery, cabinetry or other built-in furniture which are associated with past uses of a heritage listed building (e.g. shop counters) should be retained within their original space, but may be adapted for a new use as appropriate. If removed, these items must be appropriately stored for later restoration.
- (3) Prior to making changes, a record should be made of the existing interior scheme, which may include photographs, reference to standard paint colours, and samples of materials.

Original fabric controls

- (1) Original fabric must be retained in situ in a sound and stable condition or accurately reconstructed with traditional construction techniques.
- (2) In the exceptional circumstances where original fabric must be removed, it should be kept on site for future reference or possible reinstatement, and must be adequately recorded before removal.
- (3) The Burra Charter states that cultural significance is “embodied in the place itself, its fabric, setting, use, associations, meanings, records, related places and related objects”. As such, development of existing heritage items or buildings within the heritage conservation area must retain their original fabric wherever possible or strive for the authentic reconstruction of missing elements.

Adaptive reuse controls

- (1) Adaptive reuse must only occur where the original use is no longer viable and the new use does not compromise the inherent heritage significance and value of the building.
- (2) Adaptive reuse must also ensure that additions, plant, equipment or services which are required to facilitate adaptive reuse are concealed from view within the broader streetscape.

Alterations and additions controls

- (1) Any additions and alterations to an identified heritage item must ensure that the significance and integrity of both the building and its curtilage are retained or enhanced.

Reconstruction controls

- (1) Where reconstruction of a heritage item is proposed these works must be based on historic information to allow accurate replication of the original fabric, building or structure.
- (2) Reconstruction of demolished heritage item is only appropriate where:
 - (a) The item was of considerable historic significance and/or a landmark within the townscape;
 - (b) Reconstruction is important in the interpretation of a particular aspect of the town’s history;
 - (c) There is sufficient documentary evidence to allow accurate reconstruction; and
 - (d) It is undertaken under the guidance of an appropriately qualified and experienced heritage consultant.
- (3) Rather than the actual reconstruction of demolished heritage buildings or other structures, their form may be interpreted through landscaping or sculptural works using recovered materials.

Demolition controls

- (1) Demolition of any building requires Development Consent from Council.
- (2) Demolition of any building identified as a Heritage Item or as being within a Heritage Conservation Area will not be permitted unless:
 - (a) The item is structurally unsound past the point of repair and represents a public danger; or

- (b) There is a concurrent Development Consent for a replacement structure.

8.2.2 State Significant Heritage Items

Where a heritage item is noted as being of State Significance, a Conservation Management Plan may be required.

A Conservation Management Plan is a comprehensive document which establishes the heritage significance of a place based on historic research, investigation of the site and comparison with other similar or related items, and which identifies the conservation policies and management mechanisms that are appropriate to enable that significance to be retained. It is sometimes referred to as a Conservation Management Plan, or may be part of a broader Management Plan for the place.

While in practice a Conservation Management Plan will often be prepared only when redevelopment of a place is proposed, theoretically the plan should be independent of any such proposal as it should include identification of what sort of development or new uses would be appropriate. It should also act as a guide for ongoing maintenance and repairs. As such it must cover the full scope of the significance of the place, including the curtilage and any archaeological potential.

A Conservation Management Plan must include a formal “conservation policy” which succinctly defines the guidelines for how the place should be managed and which, when formally endorsed by Council or the Heritage Office, provides certainty of what works will be permitted and/or exempt.

Guidelines for preparing Conservation Management Plans are available on the Department of Planning, Heritage Branch website: www.heritage.nsw.gov.au

All proposals within a heritage conservation area or in the vicinity of a heritage item should be discussed with Council prior to a development application being lodged.

Council can provide access to a Heritage Advisor/Officer and can offer complementary advice to assist property owners with their renovation plans.

A free Fact Sheet is also available from Council's website www.greatlakes.nsw.gov.au.

8.3 Heritage Colours for Exterior Paints

The use of colours should be carefully considered in regards to heritage items and to development within a Heritage Conservation Area.

Controls

- (1) Colours should be selected to suit the period of the building;
- (2) Property owners are encouraged to establish the original colour of their building by way of paint scrapings and repaint in those colours;
- (3) Overly bright colours such as red, yellow, orange, purple, rich blue, black or silver should be avoided. These colours are unacceptable as they are often inappropriate for the style and period of the building and frequently contribute to a decline in the area's amenity;
- (4) Unpainted brickwork or masonry should not be painted, instead incorporate their colours into the overall scheme;
- (5) Emphasise architectural details with stronger colours;
- (6) Plain white should be avoided for walls (except for 1940s – 1950s buildings where there is evidence that white is historically correct). Owners seeking to paint in pale colours should select from the available range.

8.3.1 Recommended Colour Schemes

Due to the different ages and styles of buildings within the Great Lakes Council Area there is no one range of preferred colours to suit all buildings. The colour descriptions for different eras are provided as a general guide. A suggested reference book for colour selection is: *Colour Schemes for Old Australian Houses: I. Evans, C. Lucas, I. Stapleton The Flannel Flower Press Pty Ltd (2004).*

Up to about 1870

The various lime washes and oil paints available at the time provided a range of colours varying through off-white, beige and pink-beige to the later use of salmon pink. Trim was usually in shades of beige, drab or dark green or stone but darker colours, including deep crimson, appeared later in the period.

Advice should be sought from Great Lakes Council or a suitably qualified practitioner regarding colour schemes for these buildings because of their high level of significance within the Heritage Conservation Area.



*Source: Colour Schemes for Old Australian Houses:
I. Evans, C. Lucas, I. Stapleton
The Flannel Flower Press Pty Ltd (2004)*

A copy of this book is available from the Stroud Library to assist property owners in selecting colours and colour schemes.

Please note that these colours are provided for illustration purposes only and may not be a true colour representation due to print variations. A manufacturer's colour sample should be referred to in all instances.

Suggested colours up to approximately 1870 (click here to view [original image](#))

From about 1870 to about 1920

Walls, if painted, were often in shades of beige, fawn, pink or brown. Trim could be in contrasting colours such as beige, biscuit, cream, deep red or deep green. Many timber dwellings in rural Australia were originally left unpainted and allowed to weather.

The range of colours generally used in rural areas was much simpler than richer variety of colours and contrasting effects used in fashionable city areas and a mid stone colour for walls with a contrasting darker stone or brown for trim became common during this period and lasted through to the 1930s.



*Source: Colour Schemes for Old Australian Houses:
I. Evans, C. Lucas, I. Stapleton
The Flannel Flower Press Pty Ltd (2004)*

A copy of this book is available from the Stroud Library to assist property owners in selecting colours and colour schemes.

Please note that these colours are provided for illustration purposes only and may not be a true colour representation due to print variations. A manufacturer's colour sample should be referred to in all instances.

Suggested colour schemes from approximately 1870 to 1920 (click here to view [original image](#))

The 1920s and 1930s

The colour schemes used at this time were often simpler than the preceding period. This is often referred to as the "Redwood era" because of the influence of Californian bungalow style. Red oxide and various deep red/brown colours were popular for walls with contrasting cream trim. Deep green walls with paler cream or biscuit trim was also used. These can produce eye catching colour schemes but can be seen as being too dark or unsuited to the Australian summer, so that paler colours such as fawn, cream or biscuit with contrasting trim are often preferred and are acceptable. Various shades of stone remained popular in rural areas throughout much of the period.



Source: Colour Schemes for Old Australian Houses:

I. Evans, C. Lucas, I. Stapleton

The Flannel Flower Press Pty Ltd (2004)

A copy of this book is available from the Stroud Library to assist property owners in selecting colours and colour schemes.

Please note that these colours are provided for illustration purposes only and may not be a true colour representation due to print variations. A manufacturer's colour sample should be referred to in all instances.

Suggested colour schemes for the 1920s and 1930s ([click here to view original image](#))

The 1940s and 1950s

This period saw a reaction to the dark colours and lighter cream or white for walls along with darker brown or green trim to create contrast became popular. Pastel blues began to appear in the period but are generally not acceptable unless there is historical evidence that the colour was originally used on the building.



Suggested colour scheme for the 1940s and 1950s (click here to view [original image](#))

8.4 Exterior Bricks

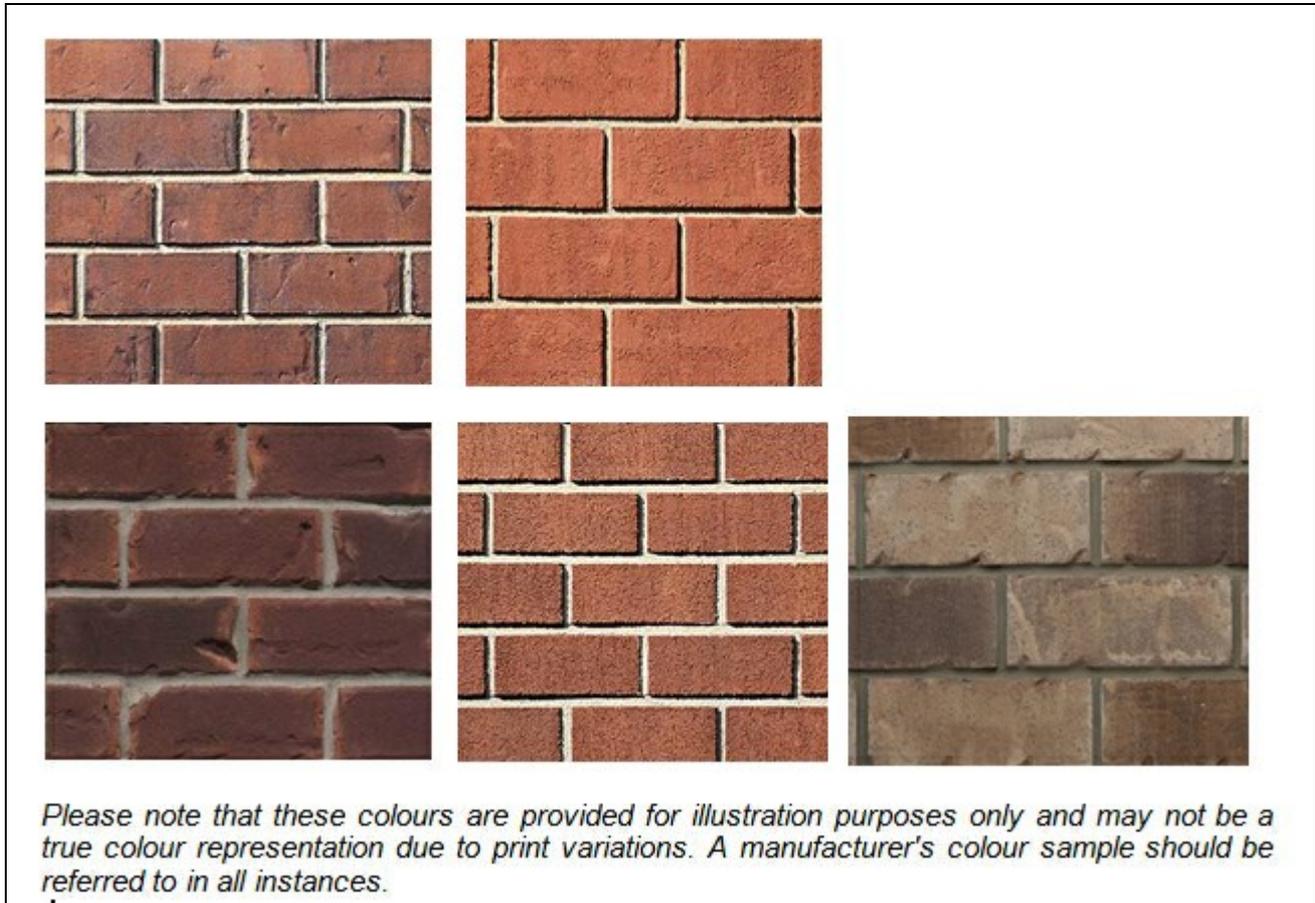
Controls

The use of external bricks should be carefully considered in regards to development within the Heritage Conservation Area and/or affecting heritage items. The following general principles should be followed:

- (1) Bagged/rendered masonry is desirable when the texture, colour and finish are sympathetic.
- (2) Plain face bricks in traditional soft reds and browns are preferred. Alternative brick colours would only be acceptable for additions and alterations if proposed as a match to the existing building.
- (3) Traditional coloured mortar with clean struck off finish or lightly raked joints. Mortar colours must be considered at the same time as the brick colours for an appropriate finish.
- (4) Bricks should be of rectangular form and uniform in colour.
- (5) Avoid the following:
 - (a) special effect bricks e.g.: overly twisted, overly textured, grooved or striated etc.
 - (b) misshapen bricks e.g.: broken edged or knobbly etc.

- (c) strong or extreme colour mottling within bricks.
- (d) special effect bonding/mortar e.g. strongly contrasting, deeply raked black mortar with paler bricks.

8.4.1 Suggested Colours



Suggested brick colouring (click here to view [original image](#))

8.5 Solid Metal Fences

Controls

The use of solid metal fences (colorbond) should be carefully considered in regards to development within a Heritage Conservation Area. A traditional fence such as timber post and rail is preferred within most Heritage Conservation Areas and/or affecting heritage items.

Where solid metal fencing is proposed, the following general principles apply:

- (1) Solid metal fences should not be located forward of the front wall of the building.
- (2) Solid metal fences should only be considered on the side and rear fences. Consider limiting the height of these fences to 1.5m.
- (3) Landscaping should be provided alongside metal fences to minimise the visual impact on the streetscape.
- (4) Fences should be in subdued colours (in the colour palette shown).
- (5) Colours should be selected so that they blend with surrounding aged fencing or soft greens of vegetation.
- (6) A single colour should be selected for the post, rail and panels of the fence i.e. no contrasting trims.
- (7) Strong and/or bright colours should be avoided, particularly reds, blues, creams, and whites.

8.5.1 Suggested Colours



Suggested fencing colours (click here to view [original image](#))

8.6 Glossary of Heritage Terms

Adaptation

means the modification of a place to suit a proposed compatible use (also referred to as Adaptive Reuse).

Archaeological Feature

means any physical evidence of past human activity, including buildings, works, relics, structures, foundations, deposits, cultural landscapes and shipwrecks.

Australia ICOMOS

is the national committee of the International Council on Monuments and Sites, a United Nations affiliated organisation, and acts as a loose professional association for heritage consultants.

Australian Heritage Commission

(or AHC) is an independent statutory authority which is responsible to the Commonwealth Minister for the Environment, and maintains the Register of the National Estate.

Burra Charter

is the charter adopted by Australia ICOMOS which establishes the nationally accepted principles for the conservation of places of cultural significance.

Conjectural Reconstruction

means alteration of a place to simulate a possible earlier state which is not based on documentary evidence.

Conservation

means all the processes of looking after a place so as to retain its cultural significance. It includes maintenance and

may, according to circumstances, include preservation, restoration, reconstruction and adaptation, and will commonly be a combination of more than one of these.

Conservation Plan

means a document which establishes the heritage significance of a Heritage Item or Heritage Conservation Area, prepared in accordance with the Heritage Office guidelines. It is based on historic research, investigation of the site and comparison with other similar or related items, and which identifies the conservation policies and management mechanisms that are appropriate to enable that significance to be retained (also referred to as a Conservation Management Plan).

Conservation Policy

is a succinct and concise statement intended to guide all future conservation and development of heritage items, based on the assessed significance of the place, and should be suitable for formal adoption by the items occupiers, owners and consent authorities.

Cultural Landscape

means broad geographical areas of the landscape that have been significantly modified by human activity. They include rural lands such as farms, villages and mining sites, as well as country towns. The landscape may contain various heritage items or heritage conservation areas, and act as the heritage curtilage to those items or areas.

Curtilage

means the geographical area that provides the physical context for an item, and which contributes to its heritage significance. Land title boundaries and heritage curtilage do not necessarily coincide, as the curtilage may include only part of the area (e.g. fenced garden around a house) or may include a greater area (e.g. the entire street space, or views to and from the item and related places).

Excavation Permit

is the permit issued by the NSW Heritage Office which conditions the excavation of any known or potential archaeological site, and is issued to the archaeologist who will undertake the work.

Fabric

means all the physical material of the place including components, fixtures, contents, and objects. It includes building interiors and sub-surface remains, as well as excavated material. Fabric may define spaces and these may be important elements of the significance of the place. Some parts of the fabric will be particularly important to the significance of a place, while others may not or may be intrusive.

Heritage Assessment

means a document which provides an overview of the heritage significance of a heritage item based on historic research, investigation of the site and comparison with other similar or related items

Heritage Office

is the NSW State government agency responsible for providing policy advice to the Minister, administrative services to the Heritage Council, and specialist advice to the community on heritage matters. They undertake the day-to-day work of assessing development applications for heritage listed items, issuing excavation permits and allocating grant funding. They also maintain the State Heritage Inventory.

National Estate

is the register of heritage items maintained by the Australian Heritage Commission. Listing on the register makes it incumbent upon Commonwealth Ministers not to allow any works that would diminish the significance of a place, but does not otherwise have any statutory power to authorise development proposals.

National Trust

is a community organisation who promote, educate and lobby for heritage protection, and who own a number of heritage places which are open to the public, but has no statutory authority to protect heritage places.

Preservation

means maintaining the fabric of a place in its existing state and retarding deterioration.

Restoration

means returning the existing fabric of a place to a known earlier state by removing accretions or by reassembling existing components without the introduction of new material.

Reconstruction

means returning a place to a known earlier state and is distinguished from restoration by the introduction of new material into the fabric. New material may include recycled material salvaged from other places

Significance

means the aesthetic, historic, scientific, social or spiritual value a place may hold for past, present or future generations (sometimes referred to as Cultural Significance or Heritage Value). The significance of a place is embodied in the place itself, its fabric, setting, use, associations, meanings, records, related places and related objects. Places may have a range of values for different individuals or groups. Significance may change as a result of the continuing history of the place. Understanding of cultural significance may change as a result of new information.

State Heritage Inventory

is the register of heritage items maintained by the NSW Heritage Office, and to which the provisions of the NSW Heritage Act apply

Note: These definitions have generally been quoted or adapted from various documents, including the list of Heritage Terms and Abbreviations in the Heritage Manual published by the NSW Heritage Office, the Burra Charter published by Australia ICOMOS, and The Conservation Plan published by the National Trust.

9 Subdivision

This section provides site controls for the subdivision of land.

9.1 Objectives

- Facilitate the development of a range of sites appropriate to the types of activity occurring in the Great Lakes.
- Encourage economic utilisation of land resources and avoid unnecessary fragmentation of land.
- Optimise use of existing infrastructure and ensure appropriate levels of service are achieved by utilities and road network.
- Maintain and protect environment and amenity of existing development and adjacent land uses, by ensuring a high standard of design and construction in new subdivisions.
- Ensure new subdivisions are designed and constructed to accommodate quality development for the location in which it is proposed.
- Maximise the retention of native vegetation and where possible implement measures to alleviate the fragmentation of wildlife corridors.
- Ensure environmental constraints and impacts, such as flooding, drainage, vegetation, erosion etc are adequately considered.
- Encourage innovative design and energy efficiency.
- Ensure adequate provisions are made for building areas, services, access, parking and manoeuvring on allotments within the subdivision.

Residential Subdivision - Additional Objectives

- To minimise the extent of excavations works and/or fill required for establishing a suitable building envelope and associated infrastructure.
- To consider the design of roads and allotments so as to create variety and interest in the streetscape, and to preserve significant natural features.
- To ensure each allotment has sufficient area and dimensions to enable a dwelling and ancillary outbuildings; the provision of private outdoor space and convenient pedestrian and vehicle access.
- To prevent access points to battle-axe allotments becoming a dominating feature of the street and one which inhibits on-street parking,
- To encourage variety and choice in housing forms by providing allotments for a broad range of dwelling sizes, regardless of project size.
- Strike a balance between cost effectiveness and recurrent costs to Council and the community.
- Provide an appropriate level of amenity for new and existing residential areas.
- To preserve and enhance the unique characteristics of existing areas by adopting sympathetic subdivision design principles.
- To create pleasant street environments and take advantage of any views or outlook.
- To enable, where practicable, the application of energy conservation principles.

Commercial and Industrial Subdivision - Additional Objectives

- To create allotments with sufficient area and dimensions to enable the siting and construction of building development, the parking and manoeuvring of vehicles and the provision of appropriate loading facilities.
- To encourage variety and choice in industrial and business accommodation and to meet the projected demand for such premises.
- To provide a range of land parcels to fulfil a variety of industrial requirements.
- To minimise the excessive fragmentation of valuable commercial land.

Large Lot Residential, Rural and Environmental Zones Subdivision - Additional Objectives

- Ensure that the pattern of subdivision reflects and follows the natural features of the site rather than imposing

- an artificial geometric pattern simply to satisfy the minimum area standard or specific dimensions;
- Ensure that the proposed lots do not fragment agriculturally viable land;
- Ensure that the lots created avoid, or make provision to minimise, the likely affect of natural hazards;
- Ensure that the size, shape and characteristics of new lots are appropriate to the zoning and the possible range of uses;
- Protect the scenic value and natural habitats of rural land; and
- Ensure that new lots are in character with the locality and the specific landform, vegetation, soils and geology of the site.;

9.2 General Requirements for subdivision in all zones

9.2.1 Design Principles

Good subdivision design goes beyond minimum lots size requirements. Careful appraisal and systematic analysis of the site with consideration of all the natural and man-made constraints is required to ensure that its best qualities are used most effectively to suit the proposed development. The matters that may be taken into account when determining the suitability or otherwise of a site for subdivision include, but are not necessarily limited to, the following:

Hazards and Constraints:

- Hazards such as soil stability, acid sulphate soils, flooding, erosion and bushfire;
- Possible contamination of the site from previous land use activities;
- Potential impact of sea level rise and coastal erosion and the need for foreshore protection;

Protection and enhancement of natural features:

- The likely impact of the proposal upon threatened species or their habitat;
- Retention of special qualities or features such as trees and views;
- Protection of dominant ridge lines and hilltop;
- Protection of existing waterways;
- Heritage and archaeological conservation;
- Slope and orientation of the land and the extent of excavation works and/or fill required;

Infrastructure and surrounding development:

- Availability of utilities;
- Design of roads, access ways and individual site access;
- Provision of adequate site drainage;
- Potential impact of stormwater runoff and pollutant discharge into waterways;
- The relationship of the subdivision layout to adjacent land suitable for subdivision;
- Enhancement of existing or future subdivision in the locality;

Future land uses and development:

- Provision of public open space in line with any adopted open space and landscaping strategies;
- Proposed future use of the land and relevant development controls such as setbacks, car parking, landscaping etc;
- The proposed method of effluent disposal, location and sizing of related land application areas and the likely impacts upon the receiving environments;
- Energy efficiency of the subdivision and the opportunities for solar access to future development.

9.2.2 Site Design

Objectives

- To preserve mature trees and significant landscape elements.
- To limit stormwater runoff and incorporate water sensitive design.
- To ensure heritage conservation objectives are met for both European and Aboriginal heritage.

- To avoid degradation of unique or sensitive environments such as wetlands, littoral rainforests, estuarine areas, and coastal lakes and areas.

Controls

- (1) Site works and landscaping shall be designed to enhance the natural features of the site and adjoining areas. Existing landscape elements such as rock formations, vegetation or watercourses should be preserved.
- (2) Subdivisions should incorporate existing vegetation, landforms and contours wherever possible, rather than completely reshaping the site.
- (3) Subdivision design should maintain existing mature trees and consideration should be given to the objectives and controls contained in the [Tree and Vegetation Preservation](#) chapter of this plan.
- (4) Council will encourage the location of boundaries along natural features where appropriate, in order to minimise the likelihood of soil erosion. However, allotment boundaries should not follow watercourses.
- (5) Where subdivision affects heritage items, Council may require the submission of a Heritage Impact Statement prior to consideration of the application. The impact of any subdivision on the curtilage or immediate context of a heritage item must be evaluated in this Statement.
- (6) Consideration should be given to the location and type of water sensitive design measures in accordance with the Water Sensitive Design section of this plan.
- (7) Consideration will also be given to the likely effects of flooding.

9.2.3 Services

Objectives

- To provide public utilities to each allotment in a manner that is efficient and cost-effective.
- To maximise the opportunities for shared (common) trenching and reduced restrictions on landscaping within road reserves.
- To ensure that rural, residential, industrial and commercial areas are adequately serviced in a manner that is timely, cost-effective, coordinated and efficient.

Controls

- (1) Where available, satisfactory arrangements shall be made with the appropriate authority for the provision of utility services to each allotment in the subdivision. The design and construction of utility services shall conform to the specific standards of the relevant servicing authorities including: water supply and sewerage; electricity; and telecommunications.
- (2) A certificate of compliance from the telephone supply authority is required confirming that arrangements have been made for the provision of telephone supply throughout the subdivision.
- (3) In areas where reticulated water supply is available, water supply mains and service conduits should be provided to each allotment in the subdivision. An adequate reticulated water supply system is to be provided for domestic supply and fire fighting purposes.
- (4) In areas where sewerage service is available, sewerage reticulation should be provided to each allotment in the subdivision. Sewerage reticulation is to be arranged where possible to allow the whole of each new allotment to be serviced by gravity drainage. Where necessary, pumping stations, rising mains and extension of existing mains shall be provided.
- (5) Subdivisions in unsewered areas may only be permitted where allotment sizes and layouts are adequate to allow on-site disposal of all sewage and wastewater generated on the allotment. Council does not support the installation of effluent pumpout systems due to the high potential for system failure and associated risk of contamination of sensitive waterways. Refer to Council's current On-site Sewage Management Strategy and Decision Assessment Framework to determine requirements for the land application area.
- (6) For subdivision requiring a new low voltage electricity supply, reticulation is to be via an underground supply system unless Council determines the ground conditions to be unsuitable for extensive underground

infrastructure.

- (7) Battleaxe blocks are to be serviced with underground electricity.
- (8) Where possible, compatible public utility services shall be coordinated in common trenching to maximum cost effect.
- (9) Services shall be planned to provide a common accessible service easement of width to be determined by Council considering the particular circumstances. Easements are to be provided in accordance with authority requirements for each service.

9.2.4 Landscaping

Objectives

- To maintain and enhance existing streetscape and landscape character.
- To enhance the setting of buildings and provide for acoustic and visual privacy.
- To provide shade, wind and weather protection for buildings and areas of open space.
- To preserve mature trees and significant landscape elements.

Controls

- (1) A plan is to be submitted showing the location of any existing Cabbage Tree Palms so that a decision can be made as to whether these should be relocated or should remain.
- (2) In established areas, landscaping shall relate to the scale of other elements of the streetscape and the landscaping of adjoining development. Where possible, landscaped areas shall adjoin the landscaped areas of adjacent allotments.
- (3) The provision of landscaped buffers and/or earth mounds may be required to screen developments from nearby roads. Plantings may also be required adjacent to public roads where access is to be restricted.
- (4) For subdivisions involving the creation of greater than 5 lots, a landscape/street tree-planting concept plan is to be submitted with the development application. Council, as a condition of approval, will require at least one advanced tree in the road reserve in front of each lot, where the soil is suitable. Two trees (one on each frontage) will be required for corner lots. Further plantings may be necessary where drainage /water quality control facilities or public open space are to be provided.
- (5) Earthworks including excavation, filling and levelling will not be permitted within the root zone of trees intended to be kept.

9.2.5 Drainage

Objectives

- To prevent stormwater damage to the built and natural environment.
- To provide overflow paths to convey large stormwater flows to trunk drainage systems.
- To reduce nuisance flows to a level that is acceptable to the community.
- To provide a stormwater system which can be maintained economically.
- To provide a stormwater system which utilises open space in a manner compatible with other uses.
- To protect sensitive waterways and environments from urban stormwater pollutants.
- To prevent both short and long term inundation of development.
- To maintain environmental flows where possible and maximise the use and effectiveness of existing and natural drainage systems.
- To stabilise land forms to prevent soil erosion and sedimentation.

Controls

- (1) Excavation or filling of land should be limited to 1m above or below existing ground levels. Levels shall be adjusted so that allotments drain to the street and/or the stormwater drainage system to ensure there is no intensification of runoff to adjacent land. Where required, a system of inter-allotment drainage shall be required with the subdivision application.
- (2) Drainage from subdivision sites should be consistent with the pre-development stormwater patterns.
- (3) Drainage systems should be designed to ensure safety and minimise the likelihood for stormwater inundation of habitable floor areas. The drainage system shall be designed in accordance with Council's Design Specifications and Construction Specifications.
- (4) For integrated development (i.e. lots under the 450m²), an appropriate stormwater flow management system should be established to reduce the velocity of stormwater discharge.
- (5) Allotment drainage shall discharge to the roadway gutter wherever possible. Inter-allotment drainage (including the creation of easements to drain water) will be required where discharge to the street for all lots is not possible.
- (6) Allotment drainage and stormwater must not be directed to land application areas associated with onsite effluent disposal systems.
- (7) On-site stormwater detention may be required in the development to maintain flows no greater than the undeveloped rate of flow, both within and downstream from the development area. Advice should be sought from Council's Engineering Services Division to determine if this is required.
- (8) Development must not detrimentally affect water quality or result in the discharge of effluent from the site. Natural drainage systems should not be altered, particularly in catchments for estuaries and wetlands.
- (9) Water sensitive design measures must be provided on-site, in accordance with the Water Sensitive Design section.
- (10) Any application for subdivision may be required to include drainage calculations in respect of run off discharge prepared by and certified by a suitably qualified person.
- (11) Easements shall be created over drainage systems, including piped stormwater lines and open drainage channels. Widths of required easements will depend upon the circumstances.
- (12) Drainage reserves may be required to be dedicated (at no cost to Council) over natural and artificial watercourses.

9.2.6 Road Design and Construction

Council's current Design and Construction Specifications will prevail in the event of any inconsistency with the details contained within this Development Control Plan. If an application does not meet the requirements of Council's Design and Construction Specifications, but does meet the road design and construction objectives, it may be considered for approval.

Contact Council's customer service section for further information on the Design and Construction Specifications.

Objectives

- To reinforce and define vehicle speed control design elements.
- To provide roads consistent with their function within the road network, having regard to their safety and visual impact.
- To preserve the character of village area through sympathetic road design.
- To provide sufficient road reserve, carriageway and verge widths to allow roads to perform their designated functions within the road network.
- To allow all users of the road - motorists, pedestrians and cyclists - to proceed safely, conveniently and with minimal delay.
- To provide access for emergency and service vehicles to all dwellings, particularly larger vehicles including garbage trucks and fire engines.

- To accommodate sufficient on-street parking.
- To accommodate and co-ordinate the location of public utility services and drainage systems without adversely effecting road pavements.
- To provide road pavements and edges that are appropriate for the control of vehicle movements, perform any required drainage function, are structurally adequate and use materials that reinforce the residential function of the street.
- To minimise road construction and life cycle costs without compromising other objectives.
- To minimise the need for earthworks due to road construction.
- To ensure safe and convenient access is available to each new allotment created.

Controls

- (1) Where subdivision involves the construction of new roads, the road network to be established shall be designed in such a manner so that each lot can be developed and accessed in a practical and feasible manner.
- (2) The developer shall be responsible for connecting new to existing road construction.
- (3) The configuration and design of roads shall be in accordance with Council's Design Specifications.
- (4) Where a subdivision adjoins an existing road, the road infrastructure may be required to be upgraded. This may include the construction of kerb and guttering, pavement widening and sealing, ancillary drainage and footpaths.
- (5) Council, except for Community Title subdivision, will require the dedication of all roads and pathways constructed to public road standards. The dedication of roads within Community Titles subdivisions will be considered on a case-by-case basis.
- (6) Street name signs shall be erected at the junction of all roads in the subdivision. Proposed street names shall be submitted for approval by Council's Engineering Services Division. Signage shall conform to and be located according to Council's standard drawings.

9.3 Residential Subdivision

9.3.1 Allotment Dimensions

Controls

- (1) Each allotment should have a depth to frontage ratio sufficient to avoid the possibility of "gun barrel" development and permit development to respond to particular site circumstances such as orientation, topography etc.
- (2) Larger lot sizes may be required in the following instances:
 - (a) Where there is a need for on site disposal of sewage effluent;
 - (b) Where there are special environmental considerations such as tree preservation, fauna protection, or to ensure the protection of water courses and estuaries; and
 - (c) When the lot adjoins a reserve.
- (3) Building setbacks from roads need to be considered when formulating allotment dimensions in order to ensure that a dwelling can be situated on an allotment.
- (4) Allotment dimensions should allow for the inclusion of buffer distances for onsite sewage management systems as prescribed by the [NSW Department of Local Government's Environment & Health Guidelines titled "On-site Sewage Management for Single Households"](#).
- (5) Land application areas for on-site disposal systems are not to be located on or adjacent to areas where mature trees have been removed. Residual tree roots have the potential to cause the disposal area to fail due to funnelling of effluent. Details may be required with the subdivision application.
- (6) Residential allotments in village zones must be capable of retaining 25% of the land area as absorbent surfaces. Such surfaces must be either lawn or landscaping. New lots should be capable of containing a

rectangle suitable for building purposes measuring 8m x 20m or 10m x 16m located behind the building line and a private open space area of 40m² with a minimum dimension of 4m.

Allotment Dimensions Additional Controls Excluding Site Specific Controls

- (1) A minimum street frontage of 12.6m, except for battle-axe allotments is required to ensure that the site is a suitable width to permit vehicular and pedestrian access, with landscaping to provide visual relief to development, and privacy for its inhabitants.

Seal Rocks, Pacific Palms, Tea Gardens & Hawks Nest - Additional Site Specific Allotment Dimensions Controls

- (1) The minimum street frontage of any newly created allotment is to be 15m.
- (2) Building envelopes are to be identified for any vacant allotments created.

9.3.2 Allotment Orientation

Controls

- (1) Allotments (excluding corner allotments) should not have frontages to more than one public road.
- (2) Staggering of allotments and extensive use of landscaping are encouraged to reduce adverse wind impacts and achieve maximum exposure to cooling breezes in summer, and create streetscape variety and interest.
- (3) Allotment orientation should take into account the various types of dwellings that may be constructed on them and ensure that potential indoor living and related private open space areas of future dwellings can be oriented to the north. Consider the possible overshadowing impact of and on existing or future adjoining buildings. Consideration of road orientation is an important factor in influencing allotment orientation to achieve an energy efficient subdivision.
- (4) Roads running close to east west provide for good orientation of allotments for solar access to dwellings and private open space, while maintaining a narrow allotment frontage. This will contribute to minimising the street length and reduce lengths of utility and service related infrastructure.
- (5) On roads running north south, allotments may need to be widened to provide for solar access and prevent overshadowing of dwellings and private open space.
- (6) Where land slopes are generally greater than 5%, road and allotment design should provide for dwellings to be generally parallel with the contours to minimise earthworks. Special care should also be taken in the configuration of roads and allotments to:
 - (a) Minimise boundary retaining walls, particularly associated with building to boundary minimise potential overlooking; and
 - (b) Maintain solar access, where slopes face south. A greater distance between dwellings will generally be required to achieve the same solar access as on level sites or north facing slopes.

9.3.3 Sloping Sites

Controls

- (1) On sites with a slope greater than 10% it may be necessary to provide lots larger than the minimum lot size to provide sufficient area to accommodate a dwelling and associated infrastructure such as driveways, retaining walls, water sensitive design measures and on-site sewage disposal.
- (2) In considering applications for subdivision of land with a slope greater than 10% the following matters must be taken into consideration:
 - (a) Suitable area for the provision of water sensitive design measures;

- (b) Provision of a driveway and car parking that complies with relevant Australian Standards
 - (c) Extent of cut and fill required to provide access and streetscape impacts
 - (d) If the site is not connected to a reticulated sewerage system, provision of suitable area for onsite sewage disposal in accordance with Councils Decision Assessment Framework.
- (3) In village areas, the subdivision of land to create battle-axe lots on land with a slope greater than 15% is undesirable.

9.3.4 Allotments in Cul-de-sacs

Controls

- (1) The convergence of lot boundaries towards the street in cul-de-sac heads intensifies the appearance of development. A minimum allotment width of 12.6m width at the street frontage should be provided to avoid the possibility of a cluttered appearance of driveways and housing.
- (2) Where a lot is at the head of an access place (cul-de-sac) and is subject to the 12.6m frontage requirement, the lot is to be of a reasonable shape for the erection of a dwelling and associated domestic structures and afford practical open space usage. That is, the lots are not to converge towards the rear.

9.3.5 Battle-axe Allotments

Battle-axe allotments are recognised as lots:

- with a street front boundary of no greater than 4m; and
- with the shorter side boundary which adjoins the street that is no less than 10m in length as measured 90 degrees to the street front boundary.

Controls

- (1) Battle-axe lots will only be considered where:
 - (a) One shared driveway can be provided for access to both front and rear allotments. Driveway design and location must take into account the provisions for parking and driveways; and
 - (b) the lot adjoins an area of open space or where the site or outlook provides enhanced amenity (does not infringe upon privacy of surrounding lots).
 - (c) The development is for multi-dwelling housing, an integrated housing development or "green-field" subdivision.
- (2) The access corridor will not be included in the site area calculation for battle-axe allotments.
- (3) Requirements for access corridors are:
 - (a) Minimum width 4m (constructed width 3m)
 - (b) Minimum width, shared corridor 6m (constructed 4.5m)
 - (c) Maximum length 40m
- (4) No more than two allotments should be served by a shared access corridor.
- (5) Special consideration needs to be given to the creation of private outdoor spaces in relationship to building setbacks and sight distance requirements on corner lots.

9.3.6 Vehicle Access Design Considerations

Controls

- (1) Rights of ways will be considered in the following circumstances:
 - (a) As reciprocal rights of way for battle-axe allotments; and
 - (b) As reciprocal rights of way in approved existing multiple dwelling development subdivisions

- (2) No more than 2 lots should have an interest in a right of way in an urban area.
- (3) Special consideration will be required for the arrangement of service easements where rights of way exist.

9.3.7 Lots Smaller than the Minimum Lot Size

Controls

- (1) Allotments less than the minimum permitted lot size, frontage and/or battle-axe lots will only be considered where those lots are:
 - (a) Incorporated within an integrated housing development (i.e. a single development application for both subdivision and construction of dwelling/s); or
 - (b) Created via subdivision of an approved existing multi dwelling development.
- (2) In determining the suitability or otherwise of any subdivision application for allotments that are less than the minimum permitted lot size, frontage and/or battle-axe lots, the following matters will be taken into consideration:
 - (a) Cost of providing services and the capacity of existing services;
 - (b) The advantages of building to a boundary and using attached and semi-detached forms of housing;
 - (c) That adequate visual and aural privacy can be assured for each proposed dwelling; and
 - (d) That adequate provision is made for access to the sun and natural light for each proposed dwelling.
 - (e) Ability of each allotment to control stormwater runoff and comply with stormwater quality load reduction targets identified in any relevant Council policies.

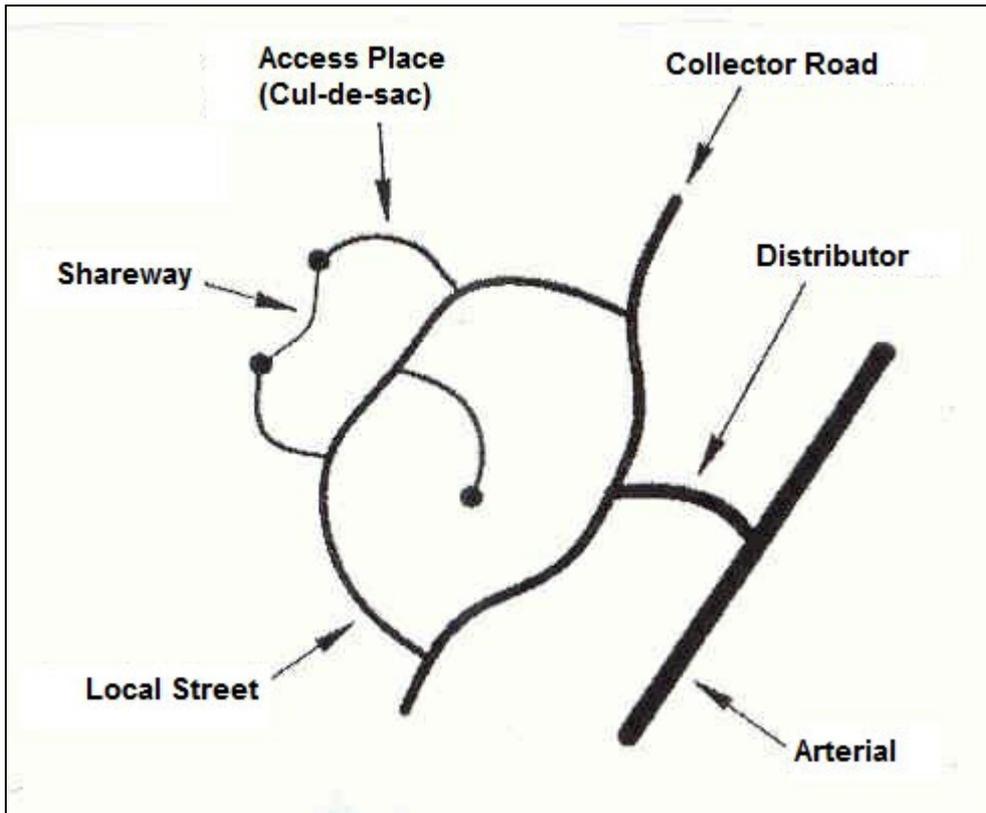
9.3.8 Road Network

9.3.8.1 Road Hierarchy

Within the internal road network of a residential estate, up to five distinct levels of roads may be provided. They are:

- Shareway
- Access Place (Cul-de-sac)
- Local Street
- Collector Road
- Distributor Road

Please consult [Council's Design Specifications](#) for definitions of these streets/roads.



Road hierarchy (click here to view [original image](#))

Objectives

- To provide a distinctive and hierarchical network of roads with clear physical distinctions between each type of road, based on function, capacity, vehicle speeds, and public safety.
- To provide acceptable levels of access, safety and convenience for all road users in residential areas, while ensuring acceptable levels of amenity, and protection from the impact of traffic.
- To establish a road network which provides:
 - the basis for cost-effective design and construction of roads;
 - efficient and accessible bus routes;
 - safe and convenient movement of pedestrians;
 - integrated natural drainage and open space systems;
 - efficient provision of public utilities networks;
 - roads within any residential neighbourhood which do not function as through-traffic for externally-generated traffic;
 - opportunities for the provision of access to adjoining land suitable for residential development; and
 - the effective provision of street plantings.

Controls

- (1) Larger subdivisions, or those which require direct access to distributors or the external road network, are subject to negotiation with Council.
- (2) Where large lots for future development are created, potential traffic generation from these lots should be taken into account when determining road characteristics.
- (3) The road network shall conform to a structure plan for the area (where such plan exists) showing an existing and proposed major road network above the level of collector which satisfies projected district and regional travel.
- (4) The road network shall provide for access to bus routes within acceptable walking distance from all dwellings

(400m). Contact Council for further clarification on Council's Design Specifications.

- (5) The road network shall provide opportunities for road connections to adjoining land, suitable for subdivision, in accordance with an overall subdivision concept or as agreed by Council.

9.3.8.2 Road Design and Construction

Objectives

- To create safe residential environments in which children will be especially protected.
- To promote a variety of streetscape possibilities designed to create interesting and inviting residential development, such as by effective street plantings.
- To provide appropriate engineering standards for both public and private roads.
- To make provision for vehicles, pedestrians and cyclists.
- To provide limited on-street parking.

Controls

- (1) The design of roads and streets including kerb and gutter shall be in accordance with [Council's Design Specifications](#). Any technical information relating to road design which are provided in this DCP are for general information only. Council's Design Specifications is to take precedence in the event of any discrepancies.
- (2) A combination of measures may be required to limit design speeds by:
 - (a) limiting street length;
 - (b) introducing bends; and
 - (c) introducing slow points, bends and other traffic management measures such as constriction of carriageway width, speed humps etc. These may not be appropriate in all situations.
- (3) Minimum carriageway, verge and road reserve widths shall be in accordance with [Council's Design Specifications](#). Lesser standards may be considered as part of integrated housing projects where adequacy can be demonstrated.
- (4) Proposed allotments in urban areas (excluding corner allotments) will not be permitted to have frontages to more than one public road. However, if subdivision is approved in these circumstances, a greater verge width will be required to enable the placement of an earth mound and tree/shrub planting between the road and the rear fences of the subdivision.
- (5) A road serving more than 50 allotments shall be provided with a minimum of one 1.2m wide paved footpath.
- (6) Where an approved strategy exists, pedestrian and cyclist paths shall be provided in accordance with that plan.

9.3.9 Public Open Space

Objectives

- To ensure adequate provision and distribution of public open space in convenient locations and of a quality to meet the recreation needs of the community, in line with any adopted Greening Strategy.
- To encourage opportunities to link open space networks, community facilities and public services with dwellings.
- To encourage the retention of significant existing vegetation within open space areas, and integration with private site landscaping and natural bushland areas.

Controls

- (1) Open space shall be provided within the particular subdivision, generally at the rate of 2.83 ha per 1000 population (28.3m²/person). Population rates are to be calculated on the basis of 3.3 persons per dwelling allotment. Council reserves the right not to accept land it considers unsuitable.

- (2) Council may require the provision of a contribution for the embellishment of land within the development, or contribution for the provision of and/or the embellishment of open space within the vicinity.
- (3) Applicants should consult with Council officers at the design stage regarding the location, size and shape of open space located within a development. Such areas shall be within 500m safe walking distance of each allotment.
- (4) Land for open space must have the following attributes:
 - (a) It relates to other public open space or future open space with which it can readily be consolidated;
 - (b) It is generally flat;
 - (c) It is free of drainage functions if these conflict with the intended purpose;
 - (d) it is free of debris; and
 - (e) It is provided with legal and practical access to road, electricity and reticulated water.
- (5) Where it is proposed to provide open space off-site, justification is to be provided via an open space strategy. Where Council determines that the public open space component of a subdivision shall be located elsewhere, a contribution will be required for acquiring and/or improving more suitable open space in the vicinity in accordance with Council's current contribution rate.
- (6) Public open space and reserves shall be suitably landscaped and embellished with play equipment or sports equipment.
- (7) Council may require the dedication of land where it considers prominent natural features such as rocky outcrops, ridges, significant tree stands and the like should be transferred to public ownership.

9.4 Commercial and Industrial Subdivision

Controls

- (1) Each lot should be large enough to accommodate the other site requirements set out in this Development Control Plan such as boundary setbacks and on-site parking requirements.
- (2) Consideration will be given in the assessment of any proposal to the likely future use of the site, and the need for access by articulated vehicles.
- (3) Generally, industrial sites should be capable of allowing manoeuvring and turning of large vehicles on site. The design standard to be applied, in accordance with the [Traffic Authority of NSW guidelines](#), shall be that for a "large rigid truck" of minimum turning circle 25m.
- (4) Building envelope, access design and landscaping may need to be defined in the development application for subdivision of industrial allotments proposing a frontage of less than 30m and commercial developments proposing a width of less than 20m.
- (5) Within commercial areas consideration shall be given to the relationship of the site and associated infrastructure to the pedestrian network and public transport. In particular the relationship of electrical substations and drainage structures with respect to pedestrian pathways, bus stops etc. will require special consideration.
- (6) Subdivision should minimise the possibility of any increase in conflict between pedestrian pathways and vehicular crossing points.

9.5 Large Lot Residential, Rural and Environmental Subdivision

Controls

- (1) An allotment size in excess of this minimum area standard as shown in the LEP 2014 lots size map may be required where land is identified as having agricultural or environmental value that would be compromised if the land is fragmented by subdivision.
- (2) Allotment dimensions should allow for the inclusion of buffer distances for onsite sewage management

systems as prescribed by the NSW Department of Local Government's Environment & Health Guidelines titled "On-site Sewage Management for Single Households".

- (3) Land application areas for on-site disposal systems are not to be located on or adjacent to areas where mature trees have been removed. Residual tree roots have the potential to cause the disposal area to fail due to funnelling of effluent. Details may be required with the subdivision application.
- (4) Where sites contain areas of significant vegetation, the subdivision boundaries shall be designed so as to minimise the clearing of land.
- (5) Boundaries over hills, ridgelines and elevated areas shall be designed so as to minimise visual impact as a result of clearing.
- (6) All subdivision boundaries are to be designed so as to ensure the best practical location for fence-lines and fire trails.
- (7) A topographical map is to be submitted showing the proposed boundaries and all site improvements including buildings, dams etc.
- (8) Proposed allotments will indicate a dwelling site that allows for reasonable sunlight access.
- (9) The plan of subdivision shall indicate an appropriate dwelling site for each lot, taking into consideration the constraints and opportunities for the future development of the land.

9.6 Additional Information

Strata Title

For strata title subdivisions Council must also have regard to those issues specified in Section 37(1) of the [Strata Titles Act 1973](#) (or as amended).

Community Title

The [Community Land Development Act 1989](#) allows:

- land to be subdivided with common property (e.g. a swimming pool) being shared between owners and managed by an association;
- a theme to be created for a total project;
- subdivision and development comprising several stages, and
- permits projects from small groups of houses clustered around common open space, to larger communities with shared roadways and recreational facilities.

Applications for Community Title subdivision must include a draft Community Management Statement. The format and content of a draft Community Management Statement is prescribed in the [Community Land Development Act, 1989](#).

Section 88B Instruments

Generally, Council does not support the use of Section 88B instruments (restrictive covenants under Section 88B of the [Conveyancing Act 1919](#)).

However, development applications for the subdivision of land with a slope of greater than 20%, must include a Section 88B instrument identifying the location and dimensions of future building envelopes for each allotment, to ensure compliance with the planning outcomes for steeply sloping land.

Section 94 Contributions

Section 94 of the [Environmental Planning & Assessment Act, 1979](#) enables local councils to levy contributions for public amenities and services required as a consequence of development, by means of the creation of a Section 94 Plan. Council may require the developer to dedicate land or pay a monetary contribution towards provision of necessary public services and amenities.

The public amenities and public services likely to be in demand as a consequence of a subdivision development may

include, but are not necessarily limited to, the following:

- Community facilities;
- Public open space where applicable, as an alternative to the dedication of land;
- Public recreation facilities;
- Stormwater drainage;
- Water supply and sewerage headworks;
- Local road facilities;
- Arterial road facilities;
- Traffic management works;
- Public car parks and facilities;
- Street tree planting;
- Library facilities;
- Surf life saving facilities;
- Bush fire fighting facilities;
- Cycleways and pedestrian infrastructure;
- Street and traffic signage; and
- Flood mitigation/management.

10 Car Parking, Access, Alternative and Active Transport

This section contains controls for the design of access driveways, car parking and bicycle parking across the local government area.

Making adequate provision for vehicles to access and park on a property has a significant impact on the site layout, landscape design, deep soil zones and stormwater management for any development. Particularly if the development is on a constrained site or additional areas are required for visitors, service vehicles, waste storage and removal, due to the scale of the vehicles involved and the potential for conflict with resident vehicles.

The amount of parking provided is related to the type and scale of development, however, parking provisions should also be considered in relation to the local context. In this regard, the location of public transport facilities, services and recreational facilities within walking or cycling distance may reduce the need for parking spaces and increase the need for other forms of vehicle storage and access.

10.1 Objectives

- To ensure that there is adequate and safe provision for access, manoeuvring and parking within the development.
- To restrict vehicular access to buildings in a manner that is compatible with pedestrian movements and safety.
- To integrate vehicle access and parking facilities without compromising street character, active street frontages or landscape.
- To promote alternative and active transport for both commuting and recreational transport.
- To provide an adequate level of on-site parking based upon anticipated occupancy rates and proximity to alternate and active transport, such as walking and bicycling.
- To ensure that parking requirements are met without imposing an undue burden on developers or an additional liability on the present and future ratepayers.
- To ensure adequate space is provided in non-residential development for safe vehicle manoeuvring so that vehicles enter and exit the site in a forward direction.

Additional objective Residential Apartment Buildings, Mixed Use Development and Business Premises Objectives

- To integrate the siting, scale and design of basement parking into the site and building design.

10.2 Discounts

Where a development has an approved use with a shortfall in the car parking rate as calculated by Council, there may be consideration to the use of existing car parking credits for future development discounts.

No discount is given on rates prescribed by NSW State legislation.

Where a development is requesting a discount in the parking rate based on factors such as mixed land use or increased access to alternate transport, a detailed travel demand assessment will be required to justify the discount. Discounts for increased access to alternate transport, such as access to public transport or the provision of shower/locker rooms, will be capped at a maximum of 5% of the overall car parking rate. Discounts will only be applied for bicycle parking where it exceeds the minimum requirements of this policy. No discounts will be given for residential development.

Where a development cannot provide the required number of parking spaces and it is located within an area identified for car parking contributions, consideration may be given for a contribution to offset the shortfall as outlined in the relevant Section 94 Contributions Plan.

10.3 Car Parking

10.3.1 Car Parking Rates

10.3.1.1 Single Dwellings, Dual Occupancies, Villas and Townhouses

Controls

- (1) A dwelling with a floor area equal to or less than 125m² must be provided with a minimum of one (1) covered car parking space.
- (2) A dwelling with a floor area great than 125m² must be provided with a minimum of two (2) spaces, at least of one of which must be covered.

10.3.1.2 Residential Apartment Buildings and Residential Component of Mixed Use Development

Controls

- (1) Car parking is to be provided as follows:
 - (a) one (1) car parking space for each one (1) bedroom dwelling
 - (b) 1.2 car parking spaces for each two (2) bedroom dwelling
 - (c) 1.5 car parking spaces for each three (3) or more, bedroom dwelling
 - (d) 0.2 visitor car parking spaces per dwelling
 - (e) 1 trailer space per eight (8) dwellings
- (2) Car parking requirement calculations shall be rounded up to the nearest whole number.

10.3.1.3 All Development Excluding Residential

Controls

- (1) The minimum parking requirements outlined in the table below should be used when minimum parking rates:
 - (a) are not provided by relevant legislation; or
 - (b) are not determined by a detailed parking demand survey in accordance with the Austroad publication Guide to Traffic Management Part 11 - Parking (2008).

Type	Car spaces
Bed & Breakfast Accommodation	1 off-road space per guest bedroom
Commercial Office / Business Premises	1 space per 40sqm GLFA*
Bulky Goods (Retail and Industrial)	1 space per 50sqm GLFA*
Retail/Shops	1 space per 24sqm GLFA*
Car/Caravan/Boat/Truck sales	1 space each 200sqm GLFA* 1 space each 24sqm of spare parts sales
Restaurant	1 space per 15 seats in an area identified in Council's S94 parking contributions plan 1 space per 3 seats elsewhere
Theatre/Church/Place of assembly	1 space per 10 seats or 1 space per 10sqm of seating area

Table Notes

GLFA is the gross leasable floor area as defined in the Roads and Maritime Services publication Guide to Traffic Generating Developments (2002).

Car parking requirement calculations shall be rounded up to the nearest whole number.

If the development type is not listed in the above table, reference may be made to the Roads and Maritime Services publication Guide to Traffic Generating Developments (2002) for the appropriate rate.

10.3.2 Car Parking Design Controls

10.3.2.1 Single Dwellings, Dual Occupancies, Villas and Townhouses

Controls

- (1) Car parking spaces are to be designed in accordance with Australian Standard AS2890.1 and be of the following dimensions:
 - (a) 2.4m x 5.5m for an unenclosed space.
 - (b) 3.0m x 6.0m for an enclosed space (e.g. between a fence and a house wall or a single garage).

10.3.2.2 Residential Apartment Buildings, Mixed Use Development and Business Premises

Controls

- (1) Car parking must be located behind the building setback and be screened from view using well designed structures and vegetation to minimise impacts on the streetscape.
- (2) Car parking for residents may be located within a basement.
- (3) Car parking areas should be designed to conveniently, efficiently and appropriately serve residents and visitors of the site by:
 - (a) Ensuring that car parking areas are located close to entrances and access ways.
 - (b) Car parking areas are secure and accessible.
- (4) Clearly identify areas for visitor parking and parking for disabled persons.
- (5) Driveways and car parking areas must be hard surfaced, designed and graded to manage stormwater.
- (6) Stacked car parking (one space immediately behind the other) is only permitted if both spaces are used by the same dwelling.
- (7) Car parking to be designed with a maximum 3 point turn for a vehicle to enter the and exit the property in a forward direction (for the 85% vehicle).
- (8) The minimum head height clearance for a parking space for disabled persons is 2.5m.
- (9) Where parking is provided within basement level/s, the scale and siting of the basement carpark must not impact upon the ability of the development to satisfy minimum landscaping and deep soil zone requirements.
- (10) Where parking is provided in a basement, ventilation structures for the basement parking and air conditioning units must be orientated away from windows of habitable rooms and private open space areas. Ventilation grills and structures must be integrated into the design of the façade of the building to minimise their visual impact and be above the 100 year ARI flood level.

10.3.2.3 Industrial Development

Objectives

- To reduce on-street parking pressure in industrial areas and promote the use of alternative transport for employees.
- To ensure adequate space is provided for safe vehicle manoeuvring so that vehicles enter and exit the site in a forward direction.

Controls

- (1) Car parking that is located in front of the building is to be screened from the street by a landscaped garden bed with a minimum width of 2.5m.
- (2) All car parking spaces are to be adequately sealed, drained and line-marked.
- (3) Vehicles (especially trucks) should not be reversed onto any site from a public street nor onto a public street

from any site.

10.3.3 Vehicle Access and Driveways

Vehicular crossings over footpaths can disrupt pedestrian movement and threaten safety, which in turn influences the quality of the public domain. Overly wide and numerous vehicular access points detract from the streetscape and the active use of street frontages.

The design and location of vehicular access to developments should therefore minimise both conflicts between pedestrians and vehicles on footpaths, particularly along pedestrian priority places, and visual intrusion and disruption of streetscape continuity. It is important that vehicle access is integrated with site planning from the earliest stages of development design.

Objectives

- To restrict vehicular access to buildings in a manner that is compatible with pedestrian movements and safety.
- To integrate vehicle access without compromising street character, active street frontages, landscape of pedestrian amenity and safety.

10.3.3.1 Single Dwellings, Dual Occupancies, Villas and Townhouses

Controls

- (1) Hard surface driveway areas are to be minimised to reduce the impacts of stormwater runoff and to improve visual amenity.
- (2) Driveways, car parking areas and uncovered paved or hard landscaped areas are to be constructed from permeable materials where possible to maintain natural drainage flows and maximise stormwater infiltration on site.
- (3) Vehicle crossovers are to be located a minimum 1m from the side boundary, at the front boundary.
- (4) Driveways and crossovers are to be:
 - (a) Limited to one per frontage;
 - (b) Located to minimise the removal of any existing street trees.
- (5) A turning area is to be provided to enable vehicles to enter and leave the site in a forward direction wherever possible. Turning areas are to be designed to allow the 85% Design Car Turning Path.
 - (a) This should be provided where the site is steep, fronts a busy road or is in a highly pedestrianised area.
 - (b) This shall be provided for shared driveways and where vehicles would otherwise have to reverse for more than 30m.
- (6) All driveways and car parking shall be designed in accordance with Australian Standard AS2890.1 and Council's Steep Driveway Policy.

10.3.3.2 Residential Apartment Buildings, Mixed Use Development and Business Premises

Controls

- (1) Vehicular entry points shall not comprise more than 25% of any street frontage.
- (2) Vehicle access should be provided from rear lane or secondary street frontages where these are available.
- (3) Only one vehicular access point is provided to a development except for special circumstances or where the site has frontage to two streets and a secondary access point is considered to be acceptable.
- (4) Vehicular access ramps parallel to the street frontage will not be permitted.
- (5) Vehicular entry points are to be integrated into the building design.
- (6) Doors to vehicular access points are to be roller shutters or tilting doors positioned behind the street alignment with a 6.0m setback provided.
- (7) Vehicular entries are to have high quality finishes to walls and ceilings as well as a high standard of detailing.

No service ducts or pipes are to be visible from the street.

- (8) Paving colour, texture and material should be sympathetic with the character of the precinct and reflect a pleasant visual appearance.
- (9) Driveways should be located to take into account any services within the road reserve, such as power poles, drainage inlet pits and existing street trees. Sight distances are required as prescribed by AS 2890.1.
- (10) Long straight driveways should be avoided because these adversely dominate the streetscape and landscape. Curved driveways are more desirable. Landscaping between the buildings and the driveways is encouraged to soften the appearance of the hard surface.
- (11) All driveways must be located a minimum of 6m from the perpendicular to the kerblines of any intersection of any two roads.
- (12) The design of driveway and crossovers must be in accordance with council's standard vehicle entrance designs and widths must be in accordance with Australian Standard 2890.1.
- (13) All vehicles within a multi-dwelling development must provide vehicular manoeuvring areas to all parking spaces so vehicles do not need to make more than a three point turn to enter and exit the site in a forward direction. Direct reversing onto the street will only be considered where the garage fronts a secondary road, carrying reduced traffic volume and all other requirements of the policy are met.
- (14) Driveway grades, vehicular ramp width/grades and passing bays must be in accordance with Australian Standard 2890.1. Crossover and driveway widths must comply with the following:
 - (a) Developments which generate truck movements need to be designed to facilitate the movement, loading and unloading of those vehicles. Loading docks should be located to provide easy access and should not be located within the building line. Applicants must be able to demonstrate that trucks can be satisfactorily manoeuvred within the site.
 - (b) Ramps to be designed for the 99% vehicle splays/truncated corners used at corners. Convex mirrors are to be used to improve visibility where required.
 - (c) Isle widths are to be a minimum of 6.6m (Note: 5.8m isle width will be allowable under special circumstances).
 - (d) The minimum head height clearance for ramps and isles is 2.2m (2.3m where access is required to a disabled parking space).

10.3.3.3 Industrial Development

Controls

- (1) Developments which generate truck movements are to be designed to facilitate the movement, loading and unloading of those vehicles wholly within the site.
- (2) Loading docks must be located behind the primary building line.
- (3) Access driveways, car parking and loading docks are to be designed and constructed in accordance with the current version of Australian Standard AS 2890.1 – Off-street car parking and Australian Standard 2890.2 – Off-street commercial vehicle facilities.
- (4) Access driveways are to be of a width that is consistent with the nature and needs of the development to avoid the obstruction of public roads by vehicles waiting for access to a site and which enables vehicles to be able to enter and leave the site in a forward direction.
- (5) Access driveways and car parking areas are to be constructed with a suitable impervious finish such as concrete or bitumen.
- (6) Driveways should be designed to avoid the obstruction of public roads by vehicles waiting for access to a site. On large sites (over 1.5ha) or sites likely to generate significant traffic, separate entrance and exit driveways should be provided;
- (7) Driveways should not be closer than 1.5m to the side boundary at the street alignment (to allow for landscaping) and not closer than 6m to an intersecting street;

- (8) Driveways must enter the site at right angles and be located so that vehicles turning from the street into the driveway can be readily seen by the driver of an approaching vehicle.

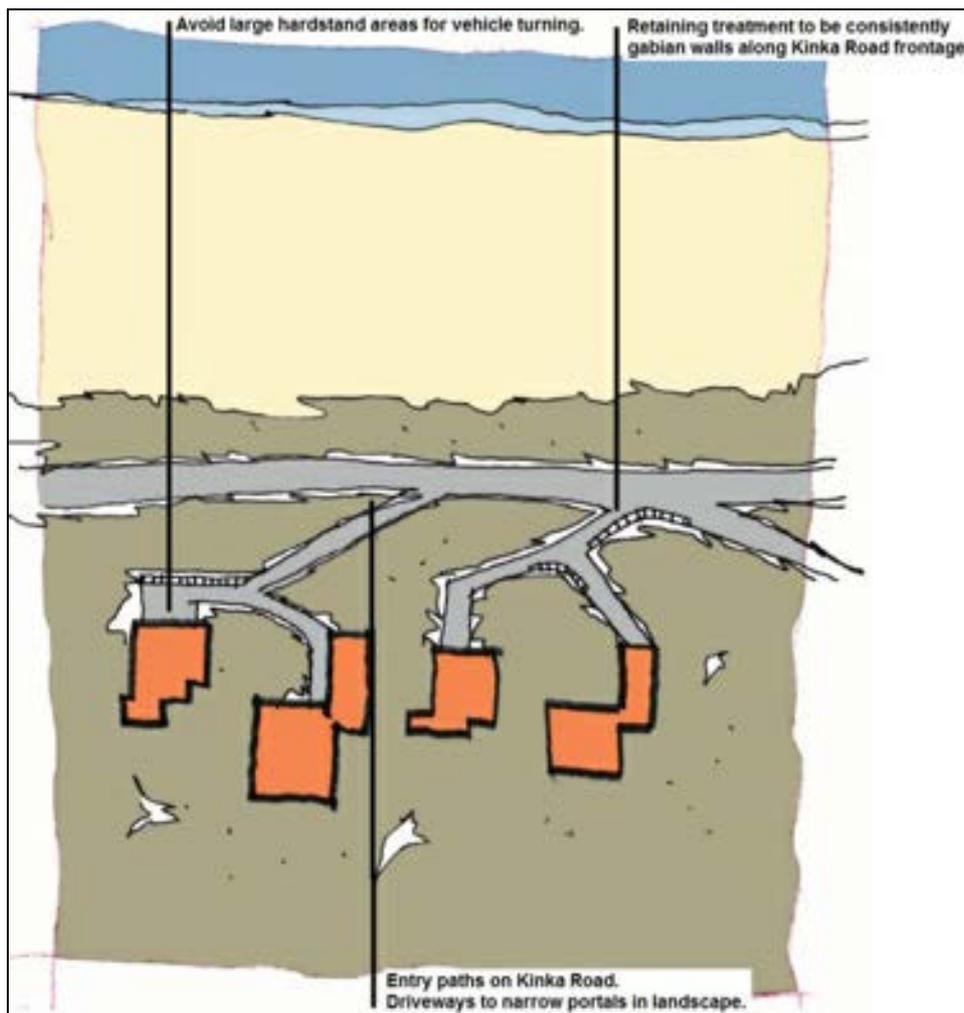
10.3.3.4 Seal Rocks - Shared Road Access

Objectives

- To maintain the natural character of the landscape and relaxed arrangement of access ways through this important frontage.

Controls

- Retaining materials with road reserve and allotment frontage should be ungrounded local stone (see the gabian wall example below).
- Driveways widths should be no wider than 3m at gradients that are sympathetic to the typology.
- Large turning areas for vehicles are to be avoided to reduce the footprint of driveways.
- A geotechnical report is to accompany all applications with a driveway with a slope greater than 1 in 6.
- Seek agreements with adjoining property owners to preserve existing shared access arrangements from Kinka Road. In the event that shared access is required over private property, an easement to legalise access will need to be created under the Conveyancing Act 1919.



Kinka Road Seal Rocks shared road access (click here to view [original image](#))



Kinka Road shared road access



Gabian Wall

10.4 Alternative and Active Transport

Objectives

- To promote alternative and active transport for both commuting and recreational transport.
- To reduce the barriers to cycling by ensuring bicycle parking is available within the town centres.
- To encourage cycling by providing end of trip bicycle parking facilities.
- To ensure requirements to install bicycle parking do not impose an unreasonable cost burden on developers.
- To allow flexibility in how bicycle parking is provided in small destination developments, while ensuring the needs of cyclists are met.
- To ensure bicycle parking is safe, secure, convenient and meets the needs of a wide range of cyclists.

Controls

- (1) Developments are required to provide bicycle parking suitable for residents/employees and for visitors/guests. Bicycle parking is to be provided according to current Australian Standards AS2890 series.
- (2) Large scale retail and commercial developments are required to undertake improvements in the development design to encourage active and healthy living. This may require the preparation of a Workplace Travel Plan to identify improvements in end of trip facilities, public transport and pedestrian connections for the large scale development as outlined in the Premier's Council for Active Living publication Development & Active Living: Designing Projects for Active Living (2010).
- (3) Bicycle parking is to be provided in accordance with the following table:

Type	Class 2 Bicycle Enclosure	Class 3 Bicycle Rail
Residential Flat Building	1 per unit	-
Office/Retail/Commercial/Industrial uses	1 per 500m ² GLFA* - minimum 1 space	1 per 500m ² GLFA* - minimum 1 space
Restaurants	1 per 200 seats - minimum 1 space	1 per 20 seats - minimum 1 space

Table Notes:

- GLFA is the gross leasable floor area as defined in the Roads & Maritime Services publication Guide to Traffic Generating Developments (2002).
 - Bicycle parking requirement calculations shall be rounded up to the nearest whole number.
 - Developments are required to provide bicycle parking in accordance with both Class 2 and Class 3 requirements.
- (4) All Bicycle Parking Spaces provided to meet the requirements must:
 - (a) be located outside of pedestrian movements paths. In particular, bicycle parking facilities must not be

- located within a continuous accessible path of travel; and
 - (b) be arranged so that a bicycle can be parked without damaging adjacent objects such as landscaping, access doors and corridors and other parked bicycles; and
 - (c) be protected from manoeuvring motor vehicles and opening doors; and
 - (d) be provided with adequate lighting.
- (5) For Bicycle Enclosures to be accepted Bicycle Parking Facilities, they must:
- (a) be designed in accordance with Australian Standard 2890.3 – Bicycle Parking Facilities; and
 - (b) contain one Bicycle Rail for each Bicycle Parking Space required; and
 - (c) be securely enclosed, for example by a wire mesh compound; and
 - (d) provide weather-protection for parked bicycles; and
 - (e) have a hard floor surface such as concrete or paving; and
 - (f) where visible from a public area, be designed to protect the aesthetic amenity of the surrounding streetscape and/or buildings.
- (6) For Bicycle Rails to be acceptable as Bicycle Parking Facilities, they must:
- (a) be designed in accordance with Australian Standard 2890.3 – Bicycle Parking Facilities; and
 - (b) be located outside where they are under continuous passive surveillance or casual overlooking; and
 - (c) provide a hard floor surface such as concrete or paving over the entire area used to park and manoeuvre bicycles.

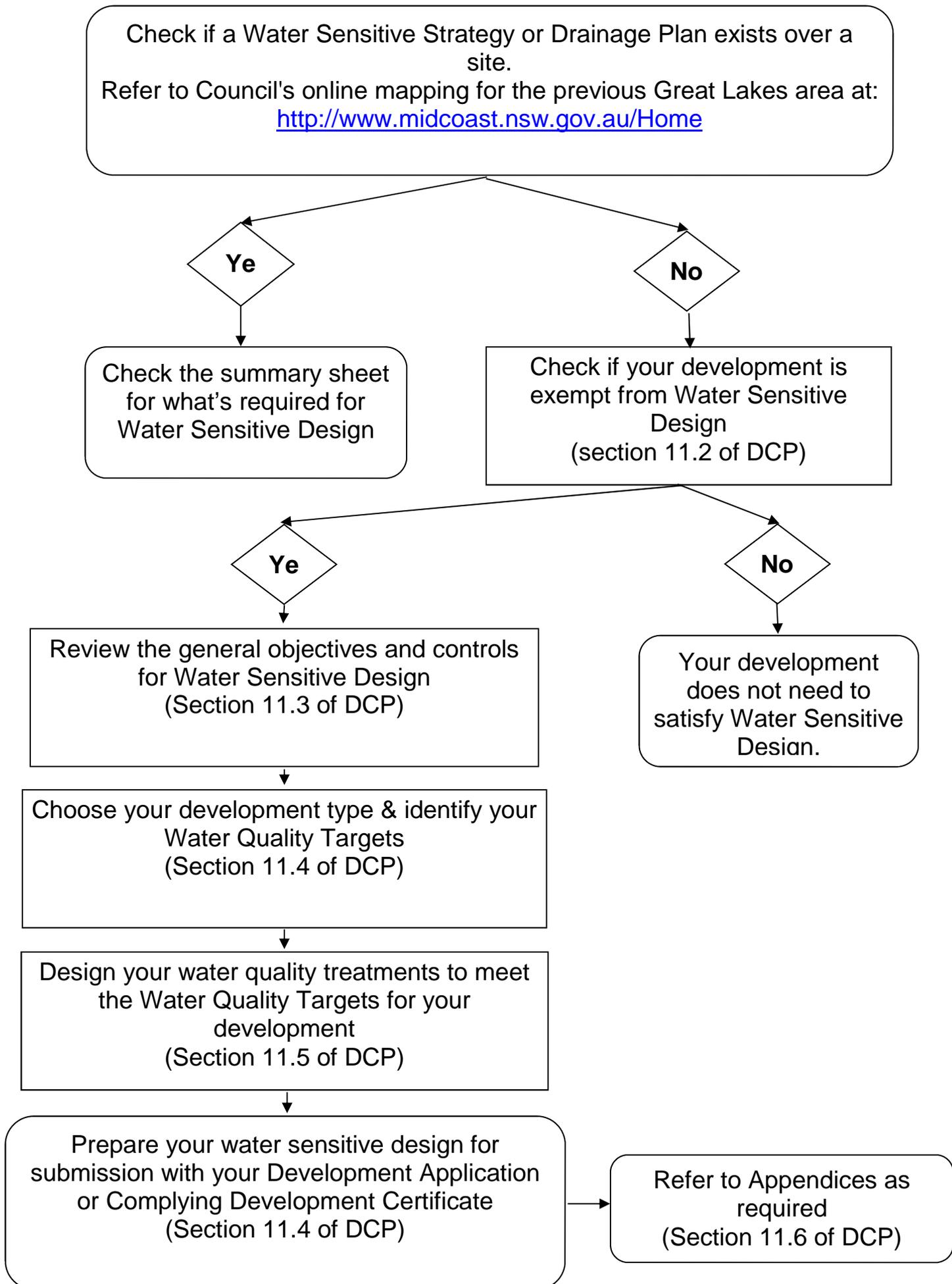
Amended Draft Chapter 11 - Water Sensitive Design of Great Lakes Development Control Plan

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11. Water Sensitive Design

11.1 Flow Chart of Water Sensitive Design Process



11.2 Where do Water Sensitive Design controls apply?

Water Sensitive Design (WSD) controls must be addressed as part of a Development Application or application for a Complying Development Certificate on sites covered by *Great Lakes Local Environmental Plan 2014*.

Council approved Stormwater Strategy or Drainage Plan

Sometimes a property can be included in a Council approved Stormwater Strategy or Drainage Plan which has considered WSD at the time of subdivision. The Strategy or Plan will set out the water quality targets for the site and a Summary Sheet will provide the details of any additional WSD measures that may be required as part of the development.

Where applicants wish to vary the WSD measures set out in the Summary Sheet this section of the DCP may be used to propose alternative water quality treatments to meet the water quality targets of the approved Stormwater Strategy or Drainage Plan.

To check if a property is included in a Council approved Stormwater Strategy or Drainage Plan check Council's online mapping. If there is no Council approved Stormwater Strategy or Drainage Plan associated with the property this section of the DCP will be used to assess WSD for the development.

Exemptions to Water Sensitive Design

Note: sites that are included within a Council approved Stormwater Strategy or Drainage Plan will still need to meet the WSD requirements set out within those documents regardless of the exemptions below.

General

WSD controls do not apply where the proposed development is:

- constructed over water e.g. boat shed; *or*
- a secondary dwelling.

Single Dwelling or Dual Occupancy

WSD controls do not apply to the development of dwelling house or dual occupancy where:

- the total roof area of all proposed buildings is 500m² or less; *and*
- the property is located outside the mapped Priority Areas as contained within Appendix D.

Alterations and additions

WSD controls do not apply to alterations and additions:

- for residential development; *or*
- for any other type of development (as outlined in section 11.4.4) where the increase to the overall impervious surface is less than 10%.

Note: impervious surfaces include roof area and all other hard surfaces including (but not limited to) driveways, pathways and courtyards that form part of the alterations and/or additions.

Subdivision

WSD controls do not apply to:

- boundary adjustments;
- strata subdivision;
- subdivision where the resultant lots are greater than 40ha; *or*
- where the resultant lots in a minor subdivision (subdivision that results in a total of 3 lots) are greater than 1ha.

11.3 General Objectives and Controls for Water Sensitive Design

Objectives

- To safeguard the environment by maintaining or improving the quality of stormwater run-off.
- To protect and restore aquatic, estuarine or riparian ecosystems and bushland areas.
- To harvest rainwater and urban stormwater runoff for use where appropriate.
- To control the hydrological impacts of development on receiving surface and ground water systems by controlling the frequency, magnitude and duration of flows to preserve, as far as practicable, pre-development groundwater and surface water regimes and interactions.
- To control the impacts of development on channel bed and bank erosion by controlling the magnitude, nature and duration of sediment-transporting flows.
- To promote disconnection of impervious areas to the drainage system by introducing appropriate measures to minimise the rate, frequency and volume of urban runoff events in order to improve WSD performance.

Controls

1. All development must meet the relevant water quality targets identified for that type of development as set out in the applicable Stormwater Quality Targets table within this DCP, except in the instance of a Council approved Stormwater Strategy or Drainage Plan which will specify the targets to be met for identified parcels of land.
2. Additional stormwater drainage measures may be required by Council to address potential flood issues related to the development. Instances where additional requirements apply may include:
 - a. residential development other than a dwelling house, dual occupancy or secondary dwelling; *or*
 - b. development in areas where there is insufficient capacity in existing stormwater infrastructure to absorb the increased stormwater runoff.
3. Water Quality Treatments:
 - a. are to be calculated and designed in accordance with this section of the DCP, except in the instance of a Council approved Stormwater Strategy or Drainage Plan which may prescribe the other measures to satisfy water quality targets.
 - b. wherever practical, are to be designed as part of any additional stormwater flow modification measures such as detention and infiltration in such a way as to retain, treat and infiltrate runoff events.
 - c. should be integrated into landscaped areas to fit within the built environment of the development.
 - d. and associated stormwater infrastructure which services more than one dwelling should be constructed on common property.
 - e. may be constructed within building setback areas.
 - f. can be any shape or size, as long as the area is consistent with that calculated to meet the relevant Water Quality Targets.
 - g. cannot be constructed:
 - i. within a drainage or sewer easements except for privately owned inter-allotment drainage; *or*
 - ii. within private open space areas; *or*
 - iii. above services e.g. electricity
 - h. should be designed in response to environmental constraints to ensure they:
 - iv. do not contribute to increased flooding risk;
 - v. comply with flood related development controls;
 - vi. withstand storm surge and inundation; *and*
 - vii. minimise the impact of discharge points on bushland areas (refer to Appendix C).

Note: Where physical site constraints impact on the ability to connect to Council's drainage system or inter-allotment drainage and there are there are potential water quantity impacts on neighbouring properties a variation to the water quality targets in this DCP may be accepted. The applicant should contact Council in these instances.

11.4 Development Type

11.4.1 Single Dwellings and Dual Occupancies

11.4.1.1 Stormwater Quality Targets

Note: sites that are part of a Council approved Stormwater Strategy or Drainage Plan may be required to meet different Stormwater Quality Targets. To check if a property is included in a Council approved Stormwater Strategy or Management Plan go to Council's online mapping.

Table 1: Stormwater Quality Targets Single Dwellings and Dual Occupancies

Development Type	Target Reduction Loads (based on increased pollution generated from development without treatment)			
	Gross pollutants	Total Suspended Solids	Total Phosphorus	Total Nitrogen
➤ Single Dwelling ➤ Dual Occupancy	90%	80%	60%	45%

11.4.1.2 Un-serviced Sites (not connected to reticulated water)

Calculating Water Sensitive Design Measures

To calculate the treatments required to meet the Stormwater Quality Targets for building a dwelling or dual occupancy on an un-serviced site;

1. The Deemed to Comply Solution (un-serviced sites); or
2. The Small Scale Stormwater Quality Model (S3QM).

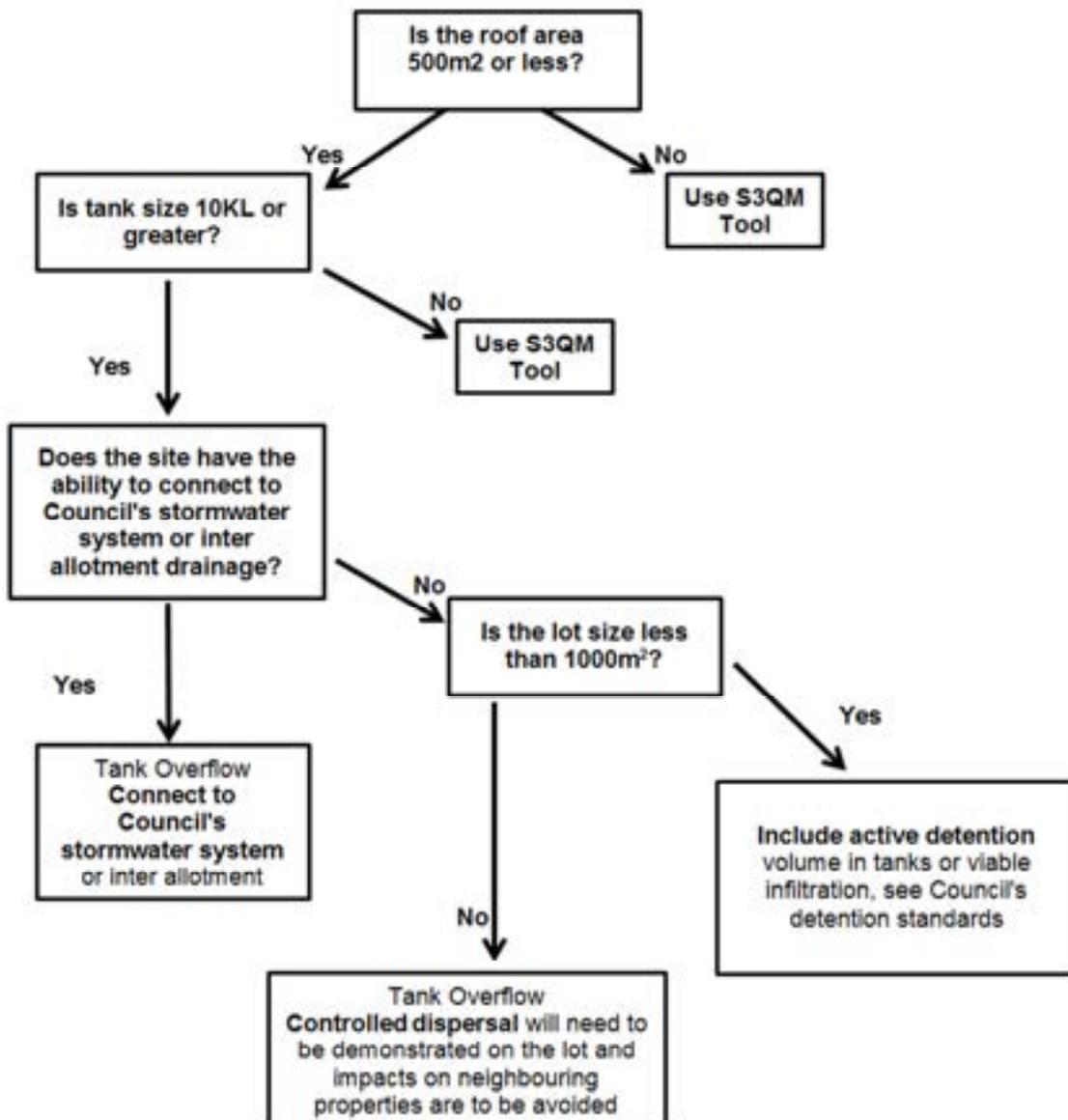
1. Deemed to Comply Solution (un-serviced sites)

The Deemed to Comply Solution (un-serviced sites) flowchart in Figure 1 is a simplified alternative that outlines the minimum size of the rainwater tank needed to meet Water Quality Targets and provides guidance on where to direct tank overflow. Where a Stormwater Strategy or Drainage Plan has stipulated a Water Quality Target of 'Neutral or Beneficial Effect' this flowchart cannot be used.

To satisfy WSD using this method the proposed development must meet the following criteria:

- a. 100% of the roof area including any proposed outbuildings must be directed to the rainwater tank;
- b. water from the rainwater tank must be used to service the household; and
- c. all other hard surfaces including (but not limited to) driveway, pathways and courtyards must be directed to adjoining landscaped areas within the property;

Figure 1: Deemed to Comply Solution - Single Dwellings and Dual Occupancies (un-serviced sites)



Note: For dual occupancies, the roof area and tank size in Figure 1 refers to the total roof area and tank size of both dwellings.

2. The Small Scale Stormwater Quality Model (S3QM)

The Small Scale Stormwater Quality Model (S3QM) is an online tool that can be used in all circumstances and offers greater flexibility in designing water quality treatment options. It uses the characteristics of the site and proposed development to calculate the required water quality treatments to meet the Stormwater Quality Targets. A link to the tool and user guide is available at www.S3QM.com.au

Council's preferred options for water quality treatments within the S3QM are:

- Biofiltration (raingarden for clay soils or infiltrating raingarden for sandy soils);
- Swales;
- Buffers; and
- Rainwater tanks.

Other water quality treatment options within the S3QM are not generally supported by Council, however if applicants are unable to make the preferred options work for a given development, other treatments may be considered on a case-by-case basis.

The S3QM tool will indicate whether the selected measures comply with applicable stormwater targets. If the proposed measures do not comply, the tool allows the user to adjust the treatment options until an acceptable solution is found and the stormwater targets are met.

Once an acceptable complying solution is identified, the S3QM allows the user to print a WSD Certificate, which should be attached to the Development Application or any application for a Complying Development Certificate for submission to the certifying authority. The commitments made using the S3QM, if approved, then form part of the conditions of any approval issued.

For further information on the S3QM or for an example on how to apply the tool contact Council. Guidance on how to assess soil type for a given property is available in Appendix B.

11.4.1.3 Serviced Sites (connected to reticulated water)

Calculating Water Sensitive Design Measures

Single dwelling

To calculate the treatments required to meet the Stormwater Quality Targets for building a single dwelling on a serviced site the following two options may be used:

1. The Small Scale Stormwater Quality Model (S3QM); *or*
2. The Deemed to Comply Solution (serviced sites) as shown in Table 2.

Dual Occupancy

The S3QM must be used to calculate treatments to meet the Stormwater Quality Targets for Dual Occupancy development on serviced sites. The Deemed to Comply Solution cannot be used for Dual Occupancy development on serviced sites.

1. The Small Scale Stormwater Quality Model (S3QM)

The Small Scale Stormwater Quality Model (S3QM) is an online tool that can be used in all circumstances and offers greater flexibility in designing water quality treatment options. It uses the characteristics of the site and proposed development to calculate the required water quality treatments to meet the Stormwater Quality Targets. A link to the tool and user guide is available at www.S3QM.com.au

Council's preferred options for water quality treatments within the S3QM are:

- Biofiltration (raingarden for clay soils or infiltrating raingarden for sandy soils);
- Swales;
- Buffers; and
- Rainwater tanks.

Other water quality treatment options within the S3QM are not generally supported by Council, however if applicants are unable to make the preferred options work for a given development, other treatments may be considered on a case-by-case basis.

The S3QM tool will indicate whether the selected measures comply with applicable stormwater targets. If the proposed measures do not comply, the tool allows the user to adjust the treatment options until an acceptable solution is found and the stormwater targets are met.

Once an acceptable complying solution is identified, the S3QM allows the user to print a WSD Certificate, which should be attached to the Development Application or Complying Development Application for submission to the certifying authority. The commitments made using the S3QM, if approved, then form part of the conditions of any Development Approval issued.

For further information on the S3QM or for an example on how to apply the tool contact Council. Guidance on how to assess soil type for a given property is available in Appendix B.

2. The Deemed to Comply Solution (serviced sites)

The Deemed to Comply Solution set out in Table 2 is a simplified alternative to using the S3QM to size water quality treatment for single dwellings. Table 2 outlines the size of the raingarden needed based on lot size, roof area and tank size. Where a Stormwater Strategy or Drainage Plan has stipulated a Water Quality Target of 'Neutral or Beneficial Effect' Table 2 cannot be used.

To use the Deemed to Comply Solution in Table 2 the proposed development must meet the following criteria:

- a. be a single dwelling; *and*
- b. a minimum of 75% of the total roof area, including any proposed outbuildings, must be directed to the rainwater tank with the remaining area directly connected to the raingarden; *and*
- c. rainwater re-use within the development must be connected to toilet, laundry and outdoor taps.

Notes: Where the lot size, tank size and roof size are not identical to the areas listed, use the next largest lot and/or roof size. Driveways are required to be directed to flow into the raingarden. Where site constraints prevent this, Council may accept the addition of 1m² to the applicable raingarden area and the driveway being directed to an adjoining landscaped area within the property, or the S3QM Model may be used to demonstrate compliance with the relevant Water Quality Targets.

Table 2: Deemed to Comply Solution - Single Dwellings (serviced sites)

Lot Size (m ²)	Dwelling Roof Area (m ²)	Minimum Rainwater Tank Size (KL)	Minimum Raingarden Area (m ²)
Measured by the legal property boundary except for R5 – Large Lot Residential Zone which uses development footprint, including the driveway, to calculate lot size.	A minimum of 75% of the total roof area, including any proposed outbuildings, will be directed to the rainwater tank with the remaining area directly connected to the raingarden.	Water from the rainwater tank is to be used outdoors, in the toilet and laundry.	Area is measured by the surface area of the filter material used.
400	150	2	4
400	200	2	5
400	150 - 200	3	4
400	150 - 200	5	4
400	150 - 200	6-10	3
500	150 - 200	2	5
500	250	2	6
500	150	3	4
500	200 - 250	3	5
500	150 - 200	5	4
500	250	5	5
500	150 - 250	6-10	4
600	150 - 250	2	6
600	300	2	8
600	150 - 200	3	5
600	250 - 300	3	6
600	150 - 250	5	5
600	300	5	6
600	150 - 200	6-10	4
600	250 - 300	6-10	5
800	200 - 300	2	8
800	400	2	10
800	500	2	12
800	200	3	6
800	250 - 400	3	8

800	500	3	10
800	200 - 250	5	6
800	300 - 400	5	8
800	500	5	10
800	200 - 300	6-10	6
800	400 - 500	6-10	8
1000	200 - 250	2	8
1000	300 - 400	2	10
1000	500	2	12
1000	200 - 300	3	8
1000	400	3	10
1000	500	3	12
1000	200 - 300	5	8
1000	400 - 500	5	10
1000	200 - 400	6-10	8
1000	500	6-10	10

11.4.1.4 Application Requirements

Developments that have used either the Deemed to Comply Solution or the Small Scale Stormwater Quality Model (S3QM) to calculate water quality treatments required will need to submit the following information along with the completed small scale development checklist (available from Council's website) as part of a Development Application or application for a Complying Development Certificate.

Water Sensitive Design Information required:

- Site plan showing roofed and other impervious areas, treatment measure locations and drainage layouts including lines and connections.
- Calculation of roof area, driveway and other impervious areas on the site plan.
- BASIX certificate for residential developments.
- When Deemed to Comply Sizing has been used, a summary on the plans must be provided.
- When the Small Scale Stormwater Quality Model is used, a 'Certificate' issued by the model must be provided. Note: Where more than one catchment has been selected in the model, the location and total area of each catchment is to be identified on the site plan.
- Detailed engineering drawings including plans and cross-sectional drawings of stormwater treatment systems, showing inlets, outlets and overflow points (these may be prepared from standard drawings, with site-specific levels and dimensions included).

11.4.2 Subdivision

11.4.2.1 Stormwater Quality Targets

Note: Sites that are part of a Council approved Stormwater Strategy or Management Plan may be required to meet different Stormwater Quality Targets. To check if a property is included in a Council approved Stormwater Strategy or Management Plan go to Council's online mapping.

Table 3: Stormwater Quality Targets - Subdivision

Site Characteristics	Target Reduction Loads (based on increased pollution generated from development without treatment)			
	Gross pollutants	Total Suspended Solids	Total Phosphorus	Total Nitrogen
<p>Lots over 2,500m² in size where the percentage of existing impervious surface is less than 10% of the area.</p> <p>➤ Lot size is calculated over the parent lot prior to subdivision. This means development cannot be broken down into stages for the purposes of measuring the 2,500m² threshold.</p>	90%	Neutral or Beneficial Effect on Water Quality - meaning loads of pollutants from future development must be equivalent to or less than that from the existing land use prior to development.		
<p>➤ Lots less than 2,500m² in size <u>or</u> where the percentage of existing impervious surface is <u>greater</u> than 10% of the area (regardless of lot size).</p> <p>➤ Development located within the Coastal Drainage Areas (refer to Coastal Drainage Maps in Appendix A). . Where development is partially located within a Coastal Drainage Area, targets are to be determined in consultation with Council Staff.</p>	90%	80%	60%	45%

11.4.2.2 Minor - results in a total of 3 Lots

For minor subdivision, Water Quality Targets are identified based on the parent lot prior to subdivision but it is expected that the construction of the WSD measures will occur on the individual lots at the time of further development. To ensure that WSD can be achieved on the proposed lots a Stormwater Drainage Plan will be required at the subdivision stage.

Application Requirements

At a minimum, the Stormwater Drainage Plan is to:

- Identify the applicable water quality targets; *and*
- Demonstrate how WSD infrastructure on each block will drain to Council's stormwater infrastructure/system in a concept Stormwater Drainage Plan that has been prepared by an Engineer.

11.4.2.3 Major - results in over 3 Lots

A WSD Strategy (WSDS) based on MUSIC modelling will be required to address water quality over the parent lot for the entire development when fully operational. This means development cannot be broken down into stages. On-lot treatments, apart from rainwater tanks, will not be considered except in the R5 Large Lot Residential Zone where Council is satisfied there are no other practical alternatives.

Water Sensitive Design Strategy

A WSDS is a written report detailing management of water quality during and after development. It also outlines the stormwater quantity and integrated water cycle management measures that are to be implemented on the development site. At a minimum, the WSDS is to include the following details:

1. **Background information** - including any relevant previous studies, concurrent studies and mapping data.
2. **Site context** - identify sub-catchments, surface and subsurface hydrology, soil type, topography and receiving environments (both within and downstream of the site). This should also include characteristics of the ecological values of the site and receiving environments.
3. **Hydrological requirements** - identify the hydrological requirements needed to maintain the existing flow regimes of receiving environments.
4. **Proposed development** - a description of the proposed development, including site boundaries, proposed land uses, densities, population, infrastructure and development staging (if applicable).
5. **Water Quality Targets** - include the applicable water quality targets that apply to the proposed development.
6. **Constraints and opportunities** - identify the key constraints and opportunities for water management on the site, including flooding. This should include the identification of natural watercourses and other sensitive environments within the site that should be preserved and/or remediated by the development.
7. **Best planning practices** - the capital and life-cycle costs of infrastructure required to meet the Water Quality Targets can be minimised by considering site planning opportunities early in the planning process, such as development layouts, integration with open space, riparian zones etc. If left to the end of the planning process, it can be more difficult and costly to incorporate the required treatments. The applicant should therefore show how the planning of the development has considered the WSD measures at all stages of the process. Opportunities for multiple use of stormwater infrastructure should be investigated for example the water quality benefits of modified detention basins and unlined, vegetated channels.
8. **Soil and water management plan** - a conceptual soil and water management plan (SWMP) for the construction stage prepared in accordance with the 'Blue Book Volume 1' (Landcom 2004) and the 'Blue Book Volume 2' (DECC 2008).
9. **Integrated Water Cycle Management** - this section should demonstrate how the potable water will be supplemented with roof water, treated stormwater and / or wastewater. Source control rainwater and capture and reuse should be considered for all developments in the first instance, followed by large scale infrastructure.
10. **Stormwater management** - this section should demonstrate how the Water Quality Targets and applicable flow regimes for receiving environments will be met. The following details are required to be submitted:
 - a. A description of the proposed stormwater treatment measures, their location and, where relevant, the size of the sub-catchment that will drain to the treatment measure.
 - b. Specific design elements including the hydraulic basis for sizing, dimensions of the stormwater treatment measures and access arrangement for maintenance.
 - c. Stormwater quality and flow modelling results and identify the location, size and configuration of stormwater treatment measures proposed for the development. Consideration should be given to quality and quantity across the frequency spectrum from quarterly (0.25 year ARI) treatment flows up to the safe control of 100 year ARI discharges to ensure appropriate levels of risk in relation to flooding (probability of damage).

- d. Assessment of the frequency of discharge from the site pre and post development taking into consideration the sensitivities of the receiving surface or ground water systems and the acceptable limits for altering the hydrological regime.
11. **MUSIC Water Quality Model**
 - a. Modelling for the determination of the size and configuration of WSD elements must utilise MUSIC modelling. Modelling must be calibrated and in accordance with the Draft NSW MUSIC Modelling Guidelines - August 2010 (or later version) and any specific MidCoast Council Guidelines;
 - b. Where the Water Quality Targets are neutral or beneficial effect, the model should accurately represent site conditions, i.e. before and after development using appropriate source and treatment nodes. It is recommended for major subdivision that discussions are held with Council to determine pre-existing site conditions prior to undertaking the MUSIC modelling;
 - c. Details of all assumptions that have been adopted in the MUSIC model such as proportion of impervious surfaces, notional dwelling sizes and landscaped areas; and
 - d. An electronic copy of the MUSIC model must accompany the Development Application.
 12. **Integration with the urban design** - demonstrate how WSD elements will integrate with the urban design.
 13. **Costs** - prepare operation and maintenance cost estimates of proposed water cycle management measures. Both typical annual maintenance costs and corrective maintenance or renewal/adaptation costs should be included.
 14. **Operation and Maintenance Plan** - this will outline inspection and maintenance requirements to ensure proposed measures remain effective. The Operation and Maintenance Plan should be provided at the Construction Certificate Stage. Examples of maintenance check lists are also available from Council.

Note: All WSDS and Development Applications containing WSDS elements must comply with; Australian Standard 3500:2003, 'Plumbing and Drainage,' Standards Australia, 2003 and any other applicable standard pertaining to the relevant discipline for example Landscaping, Civil Design, Road Construction etc.

Additional assistance in the preparation of a WSDS is available on Council's website.

Application Requirements

Developments that require a WSDS will need to include the WSDS and MUSIC modelling as part of a Development Application along with the completed checklist for large scale developments (available from Council's website).

11.4.3 Intensive Livestock Agriculture or Intensive Plant Agriculture

Stormwater Quality Targets

Note: sites that are part of a Council approved Stormwater Strategy or Management Plan may be required to meet different Stormwater Quality Targets. To check if your property is included in a Council approved Stormwater Strategy or Management Plan go to Council's online mapping.

Table 4: Stormwater Quality Targets Intensive Livestock Agriculture or Intensive Plant Agriculture

Development Type	Target Reduction Loads (based on increased pollution generated from development without treatment)			
	Gross pollutants	Total Suspended Solids	Total Phosphorus	Total Nitrogen
<ul style="list-style-type: none"> ➤ Intensive Livestock Agriculture ➤ Intensive Plant Agriculture 	90%	80%	60%	45%

Tip: check the dictionary in the Great Lakes Local Environmental Plan 2014 for definitions of Intensive Livestock Agriculture and Intensive Plan Agriculture - <http://www.legislation.nsw.gov.au>

Water Sensitive Design Strategy (Intensive Livestock Agriculture and Intensive Plant Agriculture)

Intensive Livestock Agriculture and Intensive Plant Agriculture is defined within the dictionary of the *Great Lakes Local Environmental Plan 2014* and requires a WSDS specific to this form of development.

A WSDS is a written report detailing management of water quality for the proposed development. The requirements for the strategy will depend on the nature and scale of the development and it is recommended that discussions are held with Council prior to submitting a Development Application for this type of development. Expert agronomic and water quality advice may be required to develop the WSDS. As a minimum, the WSDS is to include the following details:

1. **Site context** - identify sub-catchments, surface and subsurface hydrology, soil type and nutrient status, topography and receiving environments (both within and downstream of the site). Include any relevant previous studies.
2. **Proposed development** - describe the proposed development at the site, including site boundaries, land uses, livestock densities (where relevant), nutrient application rates (where relevant), operational strategies (e.g. paddock rotation) and infrastructure.
3. **Stormwater management** - this section should demonstrate how the Water Quality Targets will be met. Depending on the scale and nature of the development the following details are to be submitted;
 - a. a nutrient budget for the site based on the soil type and nutrient status;
 - b. a description of the proposal land management practices and stormwater treatment measures and their location;
 - c. justification for the proposed land management practices and stormwater treatment measures based on agronomic advice and stormwater quality results of MUSIC modelling (or similar). Details of all assumptions that have been used in the assessment must be included.

Application Requirements

Developments that require a WSDS will need to include the WSDS as part of a Development Application along with the completed checklist for intensive Livestock Agriculture or Intensive Plant Agriculture (available from Council's website).

11.4.4 Other Development - excluding Single Dwelling, Dual Occupancy, Subdivision and Intensive Livestock Agriculture or Intensive Plant Agriculture

11.4.4.1 Stormwater Quality Targets

Note: Sites that are part of a Council approved Stormwater Strategy or Management Plan may be required to meet different Stormwater Quality Targets. To check if your property is included in a Council approved Stormwater Strategy or Management Plan go to Council's online mapping.

Table 5: Stormwater Quality Targets Other Development - excluding Single Dwelling, Dual Occupancy, Subdivision and Intensive Livestock Agriculture or Intensive Plant Agriculture

Site Characteristics	Target Reduction Loads (based on increased pollution generated from development without treatment)			
	Gross pollutants	Total Suspended Solids	Total Phosphorus	Total Nitrogen
<p>Lots over 2,500m² in size where the percentage of existing impervious surface is less than 10% of the area.</p> <p>➤ Lot size is calculated over the parent lot prior to subdivision. This means development cannot be broken down into stages for the purposes of measuring the 2,500m² threshold.</p>	90%	Neutral or Beneficial Effect on Water Quality - meaning loads of pollutants from future development must be equivalent to or less than that from the existing land use prior to development.		
<p>➤ Lots less than 2,500m² in size <u>or</u> where the percentage of existing impervious surface is <u>greater</u> than 10% of the area (regardless of lot size).</p> <p>➤ Development located within the Coastal Drainage Areas (refer to Coastal Drainage Maps in Appendix A). Where development is partially located within a Coastal Drainage Area, targets are to be determined in consultation with Council Staff.</p>	90%	80%	60%	45%

Water Sensitive Design Assessment Method

1. Properties that have a lot size of 2,500m² or less (as defined by the legal property description) are generally assessed using the Small Scale Stormwater Quality Model (S3QM).
2. Properties that have a lot size that is greater than 2,500m² in area (as defined by the legal property description) are generally required to submit a WSD Strategy based on MUSIC modelling.
3. Instances where Council considers the development density or location to pose an increased risk of environmental impacts may be required to submit a WSD Strategy based on MUSIC modelling regardless of lot size.

11.4.4.2 Lots less than 2,500m² in size

The Small Scale Stormwater Quality Model (S3QM)

The S3QM is an online tool that uses the characteristics of the site and proposed development to calculate the required water quality treatments to meet the Stormwater Quality Targets. A link to the tool and user guide is available at www.S3QM.com.au.

Council's preferred options for water quality treatments within the S3QM are:

- Biofiltration (raingarden for clay soils or infiltrating raingarden for sandy soils);
- Swales;
- Buffers; and
- Rainwater tanks.

Other water quality treatment options within the S3QM are not generally supported by Council, however if applicants are unable to make the preferred options work for a given development, other treatments may be considered on a case-by-case basis.

The S3QM tool will indicate whether the selected measures comply with applicable stormwater targets. If the proposed measures do not comply, the tool allows the user to adjust the treatment options until an acceptable solution is found and the stormwater targets are met.

Once an acceptable complying solution is identified, the S3QM allows the user to print a WSD Certificate, which should be attached to the Development Application or Complying Development Application for submission to the certifying authority. The commitments made using the S3QM, if approved, then form part of the conditions of any Development Approval issued.

Further information on the S3QM, an example of how to apply the tool and guidance on how to assess the soil type of a property is available from Council.

Application Requirements

Developments that are using the Small Scale Stormwater Quality Model (S3QM) will need to submit the following information along with the completed small scale development checklist (available from Council's website) as part of a Development Application. All applications will need to include detailed engineering drawings of the proposed treatment measures.

Water Sensitive Design Information required:

- Site plan showing roofed and other impervious areas, treatment measure locations and drainage layouts including lines and connections.
- Calculation of roof area, driveway and other impervious areas on site plan.
- BASIX certificate for residential developments.
- For commercial and industrial sites which are not covered by BASIX, a summary of water conservation measures to be applied on site, including an estimate of total water demands and expected savings associated with water conservation measures, as well as detail on how water demands will be managed and monitored.
- When the Small Scale Stormwater Quality Model is used, a 'Certificate' issued by the model must be provided. **Note:** Where more than one catchment has been selected in the model, the location and total area of each catchment is to be identified on the site plan.
- Plans and cross-sectional drawings of stormwater treatment systems, showing inlets, outlets and overflow points (these may be prepared from standard drawings, with site-specific levels and dimensions included).

Notes: Where Council considers the development density, complexity of the site, site constraints or location which may result in an increased risk to the environment, the applicant may be requested to submit a WSD Strategy based on MUSIC modelling regardless of lot size.

11.4.4.3 Lots over 2,500m² in size

Water Sensitive Design Strategy

A WSD Strategy (WSDS) is a written report detailing management of water quality during and after development. It also outlines the stormwater quantity and integrated water cycle management measures that are to be implemented on the development site. At a minimum, the WSDS is to include the following details:

1. **Background information** - including any relevant previous studies, concurrent studies and mapping data.
2. **Site context** - identify sub-catchments, surface and subsurface hydrology, soil type, topography and receiving environments (both within and downstream of the site). This should also include characteristics of the ecological values of the site and receiving environments.
3. **Hydrological requirements** - identify the hydrological requirements needed to maintain the existing flow regimes of receiving environments.
4. **Proposed development** – a description of the proposed development, including site boundaries, proposed land uses, densities, population, infrastructure, development staging (if applicable).
5. **Water Quality Targets** - include the applicable water quality targets that apply to the proposed development.
6. **Constraints and opportunities** - identify the key constraints and opportunities for water management on the site, including flooding. This should include the identification of natural watercourses and other sensitive environments within the site that should be preserved and/or remediated by the development.
7. **Best planning practices** - the capital and life-cycle costs of infrastructure required to meet the Water Quality Targets can be minimised by considering site planning opportunities early in the planning process, such as development layouts, integration with open space, riparian zones etc. If left to the end of the planning process, it can be far more difficult and costly to incorporate the required treatments. The applicant should therefore show how the planning of the development has considered the WSD measures at all stages of the process. Opportunities for multiple use of stormwater infrastructure should be investigated for example the water quality benefits of modified detention basins and unlined, vegetated channels.
8. **Soil and water management plan** - a conceptual soil and water management plan (SWMP) for the construction stage prepared in accordance with the 'Blue Book Volume 1' (Landcom 2004) and the 'Blue Book Volume 2' (DECC 2008).
9. **Integrated Water Cycle Management** - this section should demonstrate how the potable water will be supplemented with roof water, treated stormwater and / or wastewater. Source control rainwater and capture and reuse should be considered for all developments in the first instance, followed by large scale infrastructure.
10. **Stormwater management** - this section should demonstrate how the Water Quality Targets and applicable flow regimes for receiving environments will be met. The following details are required to be submitted;
 - a. A description of the proposed stormwater treatment measures and their location and, where relevant, the size of the sub-catchment that will drain to the treatment measure.
 - b. Specific design elements including the hydraulic basis for sizing, dimensions of the stormwater treatment measures and access arrangement for maintenance.
 - c. Stormwater quality and flow modelling results and identify the location, size and configuration of stormwater treatment measures proposed for the development. Consideration should be given to quality and quantity across the frequency spectrum from quarterly (0.25 year ARI) treatment flows up to the safe control of 100 year ARI discharges to ensure appropriate levels of risk in relation to flooding (probability of damage).
 - d. Assessment of the frequency of discharge from the site pre and post development taking into consideration the sensitivities of the receiving surface or ground water systems and the acceptable limits for altering the hydrological regime.
11. **MUSIC Water Quality Model** -

- a. Modelling for the determination of the size and configuration of WSD elements must utilise MUSIC modelling. Modelling must be calibrated and in accordance with the Draft NSW MUSIC Modelling Guidelines - August 2010 (or later version) and any specific MidCoast Council Guidelines;
 - b. Where the Water Quality Targets are neutral or beneficial effect, the model should accurately represent site conditions, i.e. before and after development using appropriate source and treatment nodes. It is recommended for major subdivision that discussions are held with Council to determine pre-existing site conditions prior to undertaking the MUSIC modelling;
 - c. Details of all assumptions that have been adopted in the MUSIC model such as proportion of impervious surfaces, notional dwelling sizes and landscaped areas; and
 - d. An electronic copy of the MUSIC model must accompany the Development Application.
12. **Integration with the urban design** - demonstrate how WSD elements will integrate with the urban design.
 13. **Costs** - prepare operation and maintenance cost estimates of proposed water cycle management measures. Both typical annual maintenance costs and corrective maintenance or renewal / adaptation costs should be included.
 14. **Operation and Maintenance Plan** - this will outline inspection and maintenance requirements to ensure proposed measures remain effective. The Operation and Maintenance Plan should be provided at the Construction Certificate Stage. Examples of maintenance check lists are also available from Council.

Note: All WSDS and Development Applications containing WSD elements must comply with Australian Standard 3500:2003, 'Plumbing and Drainage,' Standards Australia, 2003 and any other applicable standard pertaining to the relevant discipline for example Landscaping, Civil Design, Road Construction etc.

Additional assistance in the preparation of a WSDS is available on Council's website along with examples of how to apply the development requirements from this section to large scale developments.

Application Requirements

Developments that require a WSDS will need to include the WSDS and MUSIC modelling as part of a Development Application along with the completed checklist for large scale developments (available from Council's website).

11.5 Design of Water Quality Treatments

11.5.1 Water Sensitive Design Strategy and MUSIC Modelling

Sites that have a WSDS based on MUSIC modelling generally employ a broad range of water quality treatments and the design of the water quality treatments are developed as part of a strategy. A stormwater plan, detailing the design and location of the proposed treatments will need to be submitted to Council with the Development Application.

11.5.2 Raingarden - Clay Soils

Controls

1. Water quality treatments are to be designed and constructed in accordance with Council's WSD Standard Plans. The Standard Plans are available from Council's website.
2. Raingardens should be located at the lowest point on the property to allow as much of the site as possible to drain into the raingarden, including the overflow from the rainwater tank.
3. 100% of the roof area is to be directed to the raingarden either via the rainwater tank or direct connection of the roof to the raingarden. The proportion of the roof area directed to the tank is to be calculated either in S3QM or using a deemed to comply solution.
4. Raingardens are required to be connected to the existing stormwater network. Where this cannot be achieved, for example if the property has no inter-allotment drainage, an alternative approach to disposing of the stormwater that has no negative impacts on current or future infrastructure is required (refer to Council's website for further guidance).
5. The structural root zone and tree protection zone of trees that will be retained in the development should be avoided when locating the raingarden. Details on distances required are outlined in the Australian Standard AS4970-2009, 'Protection of trees on development sites'. As a rule of thumb, the area required to avoid both of these zones is the diameter of the tree at breast height (1.4m) x 12. If there is any excavation within either of these zones further input from an arborist is required.
6. A minimum of 50% of the surface area of a raingarden is required to be planted with a minimum of two species from Council's approved plant list which is available from Council's website.
7. The area of the raingarden is based on the surface area of the filter medium of the raingarden.
8. The driveway must be directed to flow into the raingarden. Where site constraints prevent this, Council may accept the driveway being directed to an adjoining landscaped area within the property and the addition of 1m² to the applicable raingarden area, or the S3QM Model may be used to demonstrate compliance with the relevant Water Quality Targets.
9. The separation distance between a raingarden and existing or future building is a minimum of 5m. A raingarden that is proposed to be located closer than 5m will be required to be sealed by lining the base and sides with an impermeable liner (0.75mm HDPE or equivalent). In instances where there is no separation between a raingarden and an existing or future building, certification will be required by a suitably qualified Engineer or equivalent to ensure measures are in place to prevent any damage to the building.
10. Where a raingarden is located within an area of high groundwater, i.e. groundwater is within 700mm of the ground surface, all assets are to be lined to prevent contamination of local groundwater sources unless it can be demonstrated, to Council's satisfaction, that unlined systems will sufficiently protect groundwater quality.
11. Where the slope between the raingarden inlet and the tank overflow, downpipes, and driveway exceeds 10%, energy dissipation is required at the inlet to the raingarden (refer to Council's Standard Plans).

Figure 2: Cross-section of a Raingarden - Clay Soils

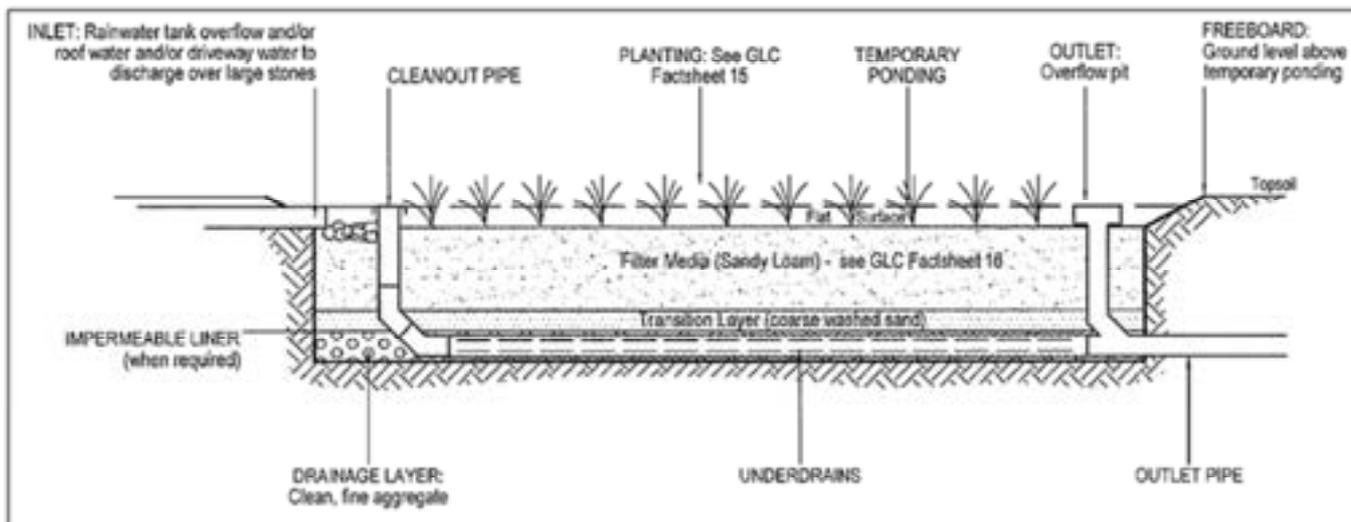
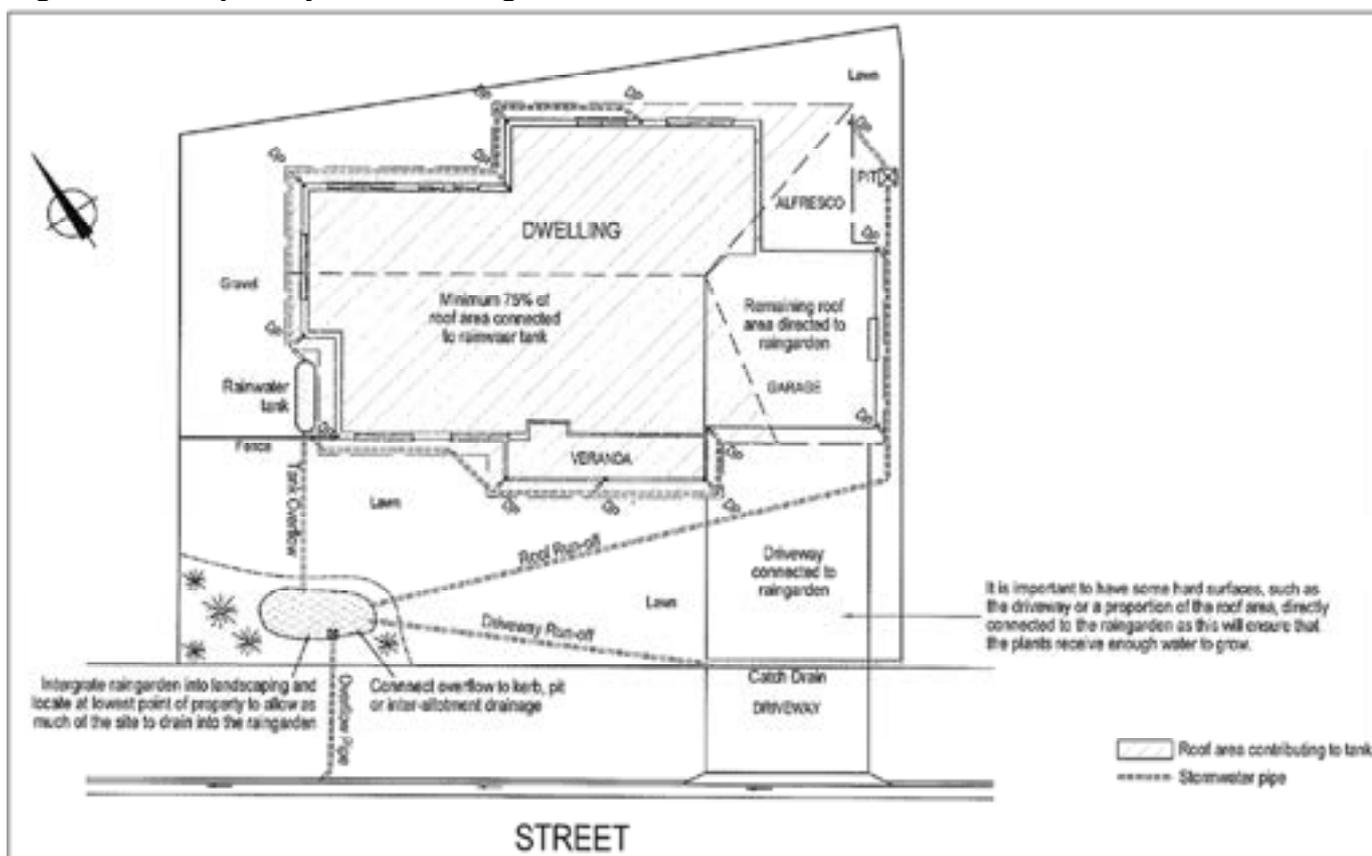


Figure 3: Example Layout of a Raingarden



11.5.3 Infiltrating Raingarden - Sandy Soils

Controls

1. Water quality treatments are to be designed and constructed in accordance with Council's WSD Standard Plans. The Standard Plans are available from Council's website.
2. Raingardens should be located at the lowest point on the property to allow as much of the site as possible to drain into the raingarden, including the overflow from the rainwater tank.
3. 100% of the roof area is to be directed to the raingarden either via the rainwater tank or direct connection of the roof to the raingarden. The proportion of the roof area directed to the tank is to be calculated either in S3QM or using a deemed to comply solution.
4. Raingardens are required to be connected to the existing stormwater network. Where this cannot be achieved, for example if the property has no inter-allotment drainage, an alternative approach to disposing of the stormwater that has no negative impacts on current or future infrastructure is required (refer to Council's website for further guidance)
5. The structural root zone and tree protection zone of trees that will be retained in the development should be avoided when locating the raingarden. Details on distances required are outlined in the Australian Standard AS4970-2009, 'Protection of trees on development sites'. As a rule of thumb, the area required to avoid both of these zones is the diameter of the tree at breast height (1.4m) x12. If there is any excavation within either of these zones further input from an arborist is required.
6. A minimum of 50% of the surface area of a raingarden is required to be planted with a minimum of two species from Council's approved plant list which is available from Council's website. The remaining 50% can be planted with species of the owners choosing provided the plants can tolerate both wet and dry conditions.
7. The area of the raingarden is based on the surface area of the filter material used.
8. The driveway must be directed to flow into the raingarden. Where site constraints prevent this, Council may accept the driveway being directed to an adjoining landscaped area within the property and the addition of 1m² to the applicable raingarden area, or the S3QM Model may be used to demonstrate compliance with the relevant Water Quality Targets.
9. Infiltrating raingardens are only appropriate on sandy soils. Evidence that the development will be constructed on sandy soils must be provided with any application.
10. Infiltrating raingardens cannot be used in areas of high groundwater, i.e. groundwater within 700mm of the ground surface and alternative water quality treatments will be required. If there is a potential for high groundwater, this will need to be investigated further through a geotechnical report.
11. Where the infiltrating raingarden is located along a property boundary, additional protection is required, a kerb or similar permanent water tight structure is to be constructed along the same boundary to ensure stormwater does not flow into adjacent properties.
12. In instances where there is no separation between the infiltrating raingarden and existing or future buildings, certification will be required by a suitably qualified Engineer or equivalent to ensure measures are in place to prevent any damage to the adjoining building.
13. Where the slope between the raingarden inlet and the tank overflow, downpipes, and driveway exceeds 10%, energy dissipation is required at the inlet to the raingarden (refer to Council's Standard Plans).

14. Infiltrating raingardens must be lined with an impermeable liner (0.75mm HDPE or equivalent) so that stormwater travels down through the filter material and not out the sides into surrounding sands. The following controls also apply to infiltrating raingardens:
- sides are required to be lined to a total depth of 600mm, sitting 200mm below the filter material.
 - the bottom of the infiltrating raingarden is left free draining into the sandy sub-soils.
 - Where the infiltrating raingarden is located along a property boundary or less than 2m from a building, driveway or other infrastructure, the liner is to be extended to a total depth of 1m sitting 600mm below the depth of the filter media.
 - where the infiltrating raingarden is located 1m or closer to a building, a certificate from a Geotechnical Engineer or Structural Engineer is to be submitted to the Certifying Authority demonstrating that the location of the poses no risk to existing or future buildings or that particular controls can be put in place to protect the building.

Figure 4: Cross-section of an Infiltrating Raingarden - Sandy Soils

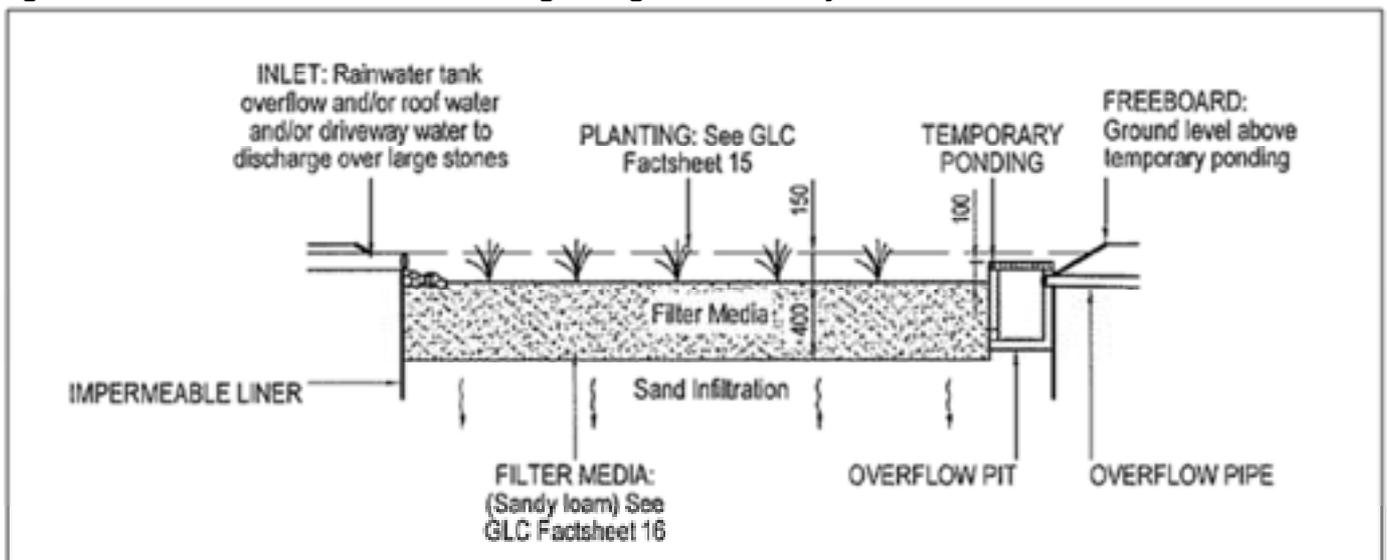
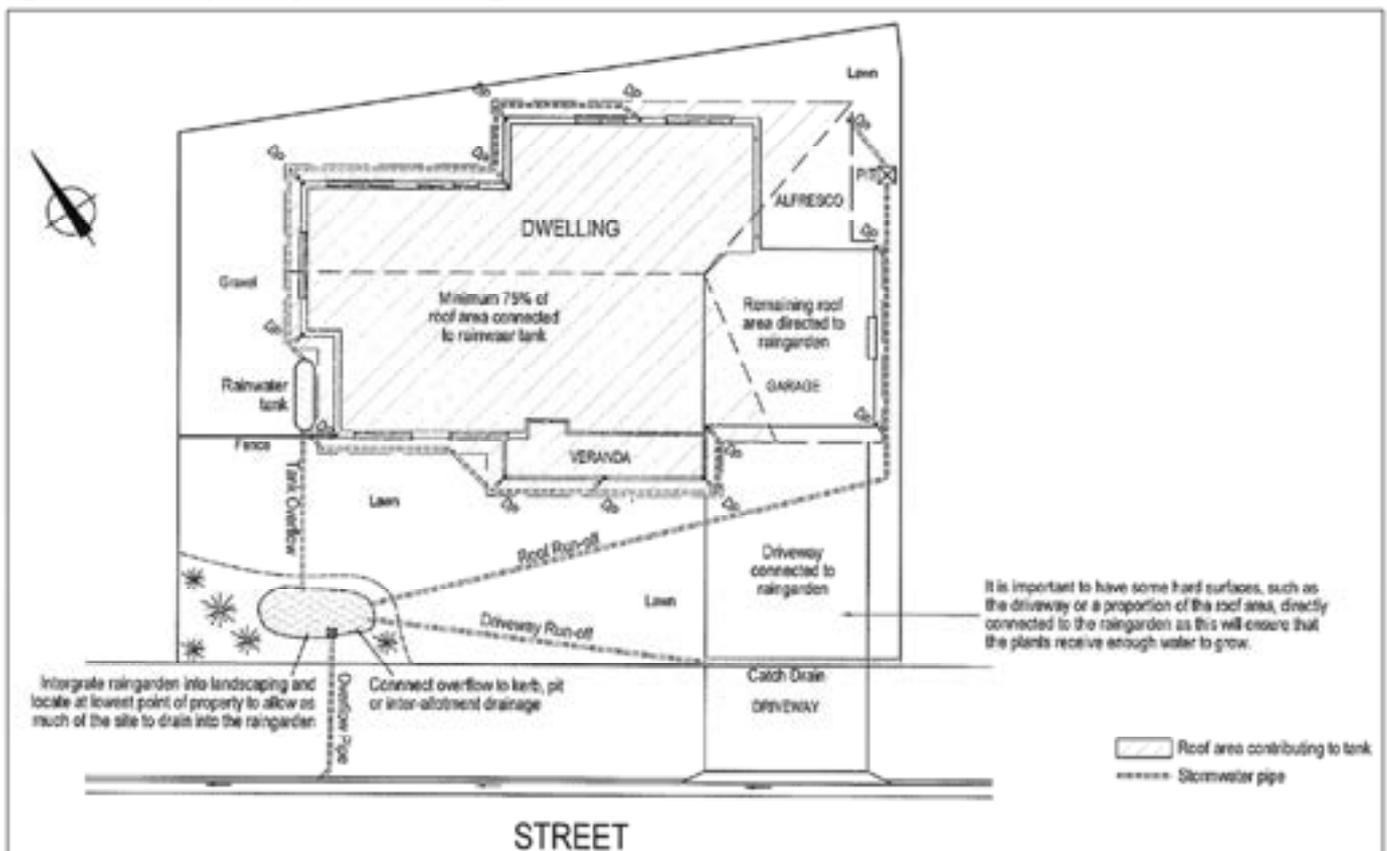


Figure 5: Example Layout of a Raingarden



11.5.4 Swale

Controls

1. A swale must be:
 - a. constructed with a 1-5% fall.
 - b. situated to prevent overflow towards existing or future infrastructure including any neighbouring properties.
2. Depending on the site conditions and proximity to existing or future infrastructure a swale will need to be discharged into one of the following:
 - a. existing stormwater network;
 - b. landscaped area; or
 - c. an infiltration trench.

Note: A swale width is measured at the base as shown in Figure 6.

Figure 6: Cross-section of a Swale

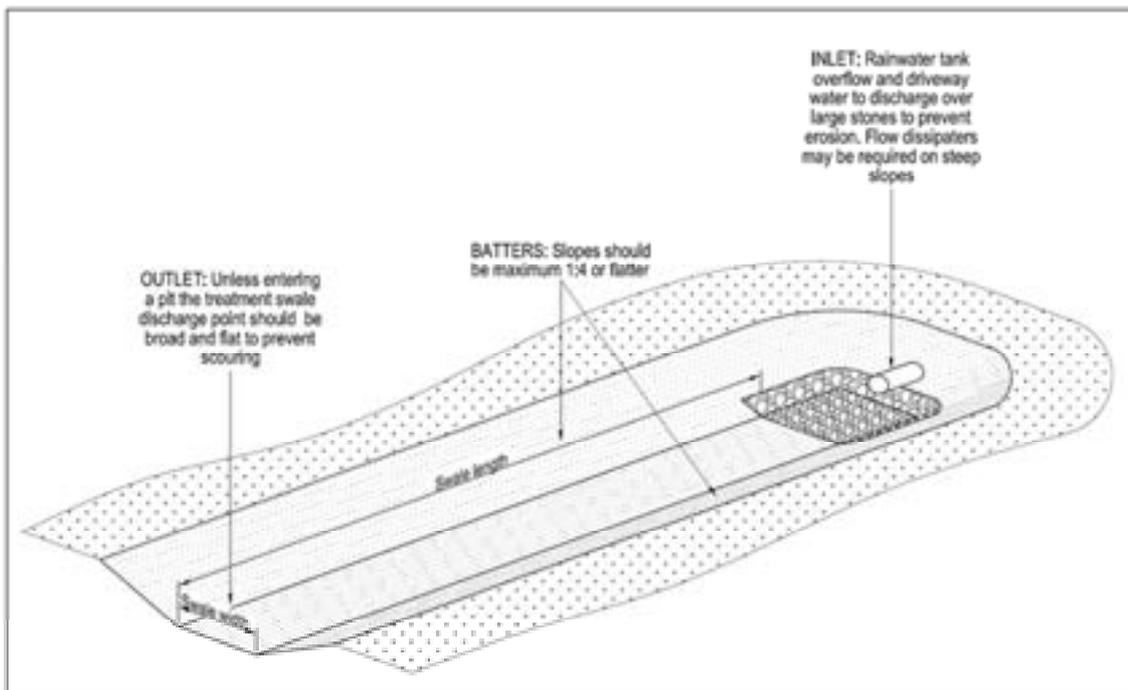


Figure 7: Example Layout of a Swale

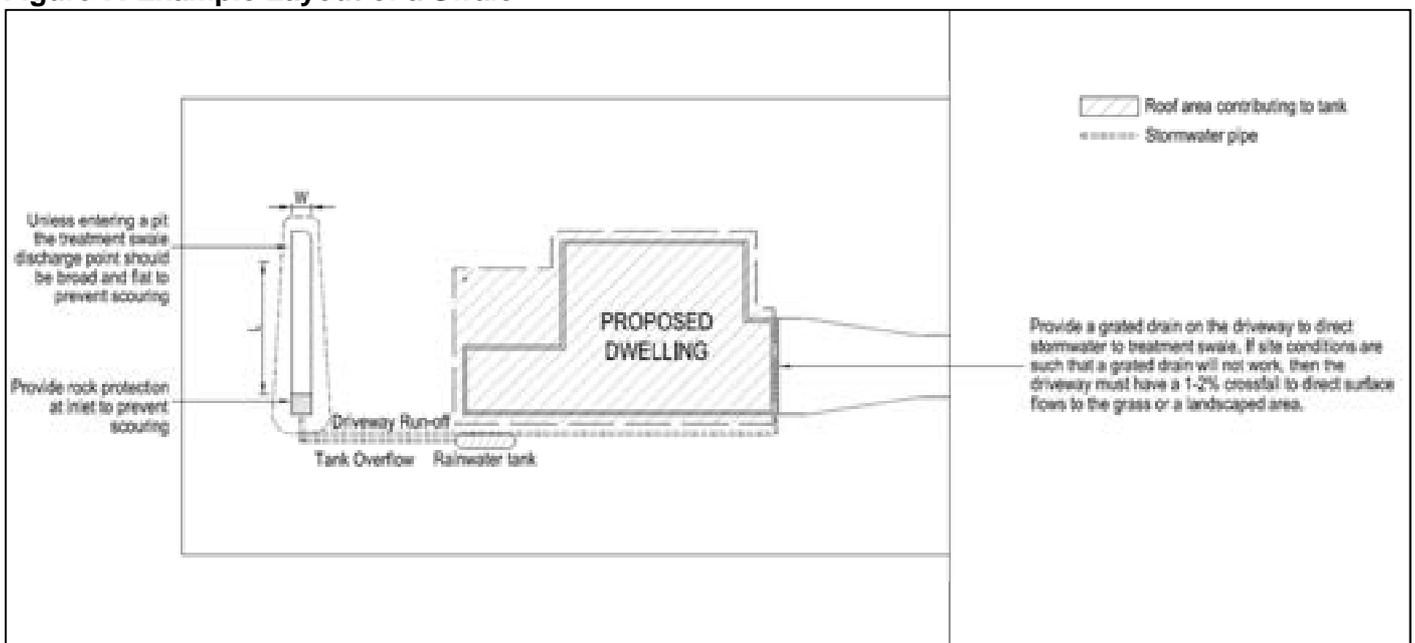


Figure A.2: Tuncurry & Forster Coastal Drainage Catchment Area (Map Sheet 2)



Figure A.3: Seven Mile Beach Coastal Drainage Catchment Area (Map Sheet 3)



Figure A.4: Pacific Palms Coastal Drainage Catchment Area (Map Sheet 4)

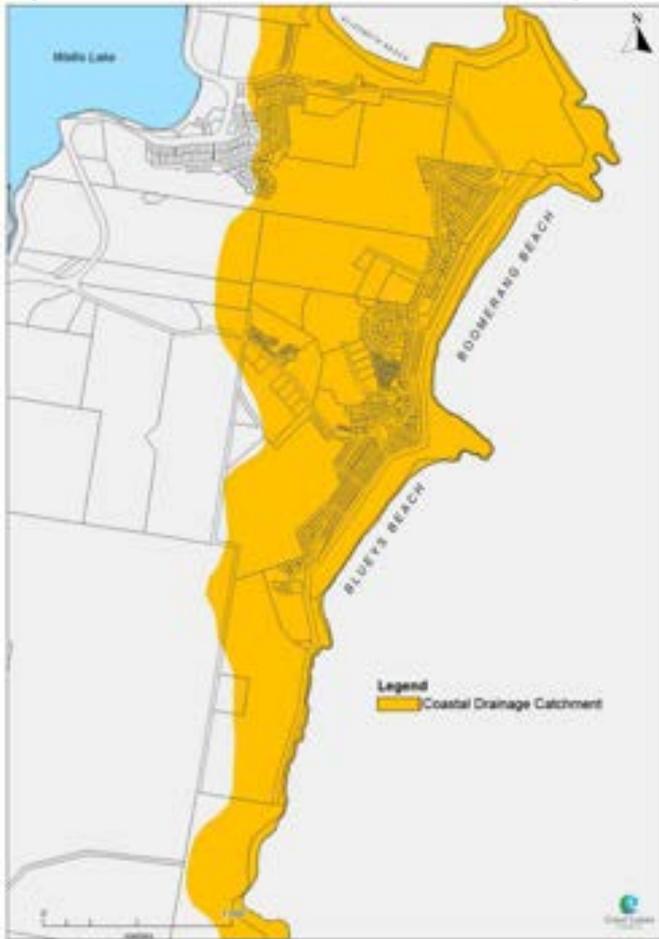


Figure A.5: Hawks Nest Coastal Drainage Catchment Area (Map Sheet 5)



Appendix B - Guidance on Assessing Soil Texture

In applying the water quality requirements of this section, applicants will be required to determine the soil texture of the property in question. A simple field based technique can be used to determine soil texture shown in the table below.

Table B.1: Soil Texture Guide

Field soil texture classes

Texture Class	Coherence	Bolus Characteristics	Ribbon Length	Other Remarks
Sand	Nil to slight	Sandy to touch	Cannot be moulded	Single sand grains adhere to fingers
Sandy Loam	Slight	Sandy to touch	15 to 25mm	Medium and grains (dominant size) readily visible
Sandy Clay	Strong	Plastic to touch; fine to medium sand seen, felt or heard in a clayey matrix	50 to 75mm	
Clay	Strong	Plastic and smooth to touch, handles like plasticine	75mm and greater	Moulded into rods without fracture; moderate shearing resistance

Adapted from: Soil Conservation Commission of NSW, (1991), Soils Their Properties and Management, Sydney University Press in Association with Oxford University Press, Melbourne, Vic, (page 151).

Appendix C – Bushland Hydrology

Urban developments that drain to areas of natural bushland can cause significant erosion if the flows from those developments are not properly managed. The erosion hazard associated with such discharges is a function primarily of soil erodibility, slope and flow velocities. Stormwater systems proposed for developments adjacent to urban bushland areas should be designed to prevent or minimise the establishment of new discharge points and stormwater flow paths. Urban development proposals which drain to areas of natural bushland should also incorporate WSD and stormwater treatment elements aimed at preventing or minimising erosion at or downstream of the discharge point. No specific targets have been set at this stage as the configuration of the outlets and the soil types requiring management vary considerably across the region.

Frequency of soil wetting within (i.e. discharge into) bushland areas has been identified as an additional significant hydrologic parameter relating to the provision of environmental conditions contributing to weed growth in areas of natural bushland. Stormwater treatment measures likely to minimise the discharge of weed propagules into bushland areas (through filtration provided by bioretention measures, for example) are therefore encouraged.

Appendix D – Priority Area Maps Single Dwelling and Dual Occupancy

Figure D.1 – Karuah & North Arm Cove Priority Area Map

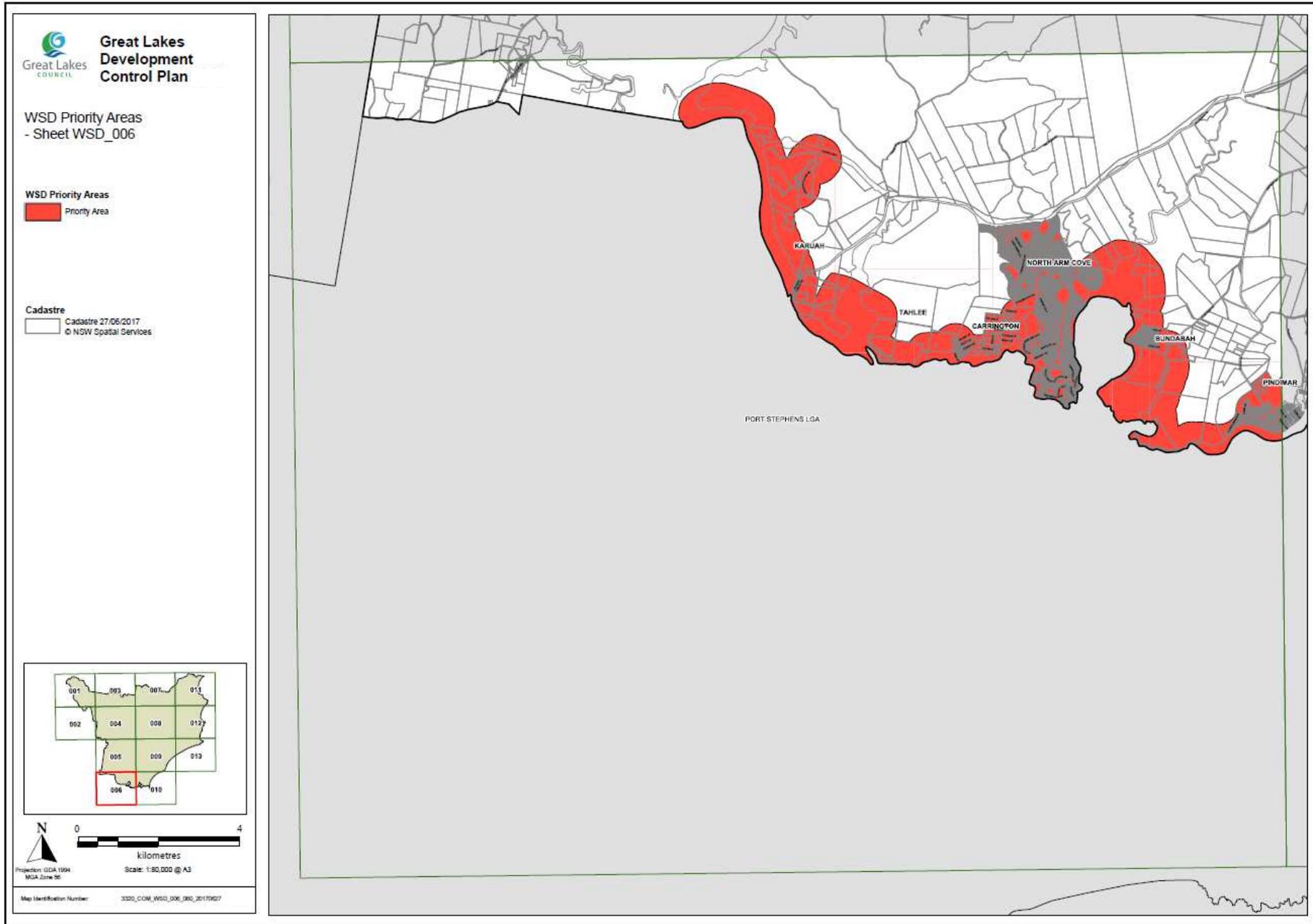


Figure D.2 – Coolongolook Priority Area Map

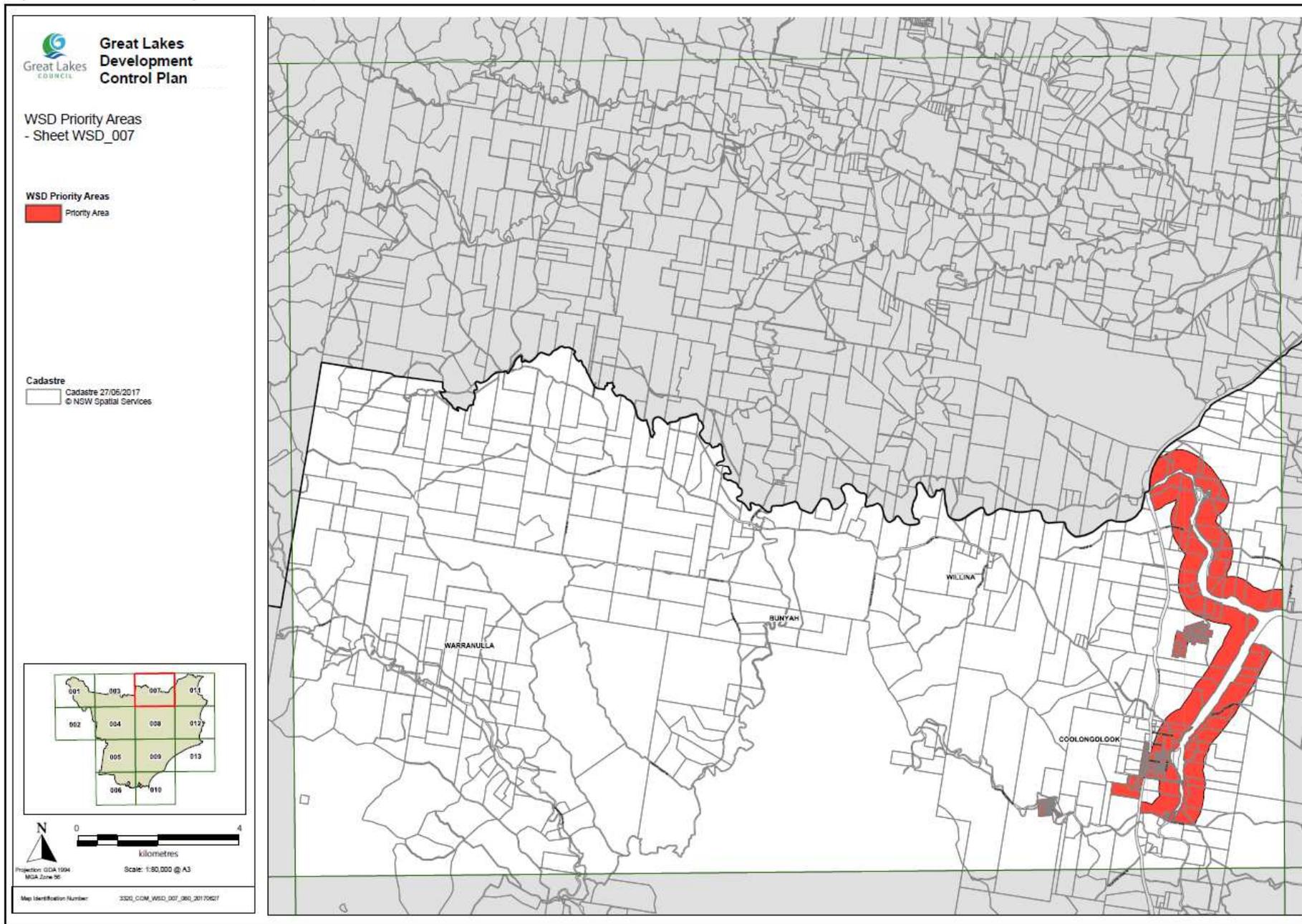


Figure D.3 – Bulahdelah Priority Area Map

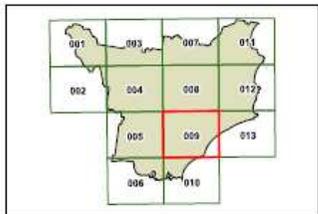


Figure D.4 – Nerong Priority Area Map

WSD Priority Areas
- Sheet WSD_009

WSD Priority Areas
 Priority Area

Cadastral
 Cadastral 27/06/2017
© NSW Spatial Services



Projection: GDA 1994
MGA Zone 56
Scale: 1:80,000 @ A3

Map Identification Number: 3320_CDM_WSD_009_000_20170627

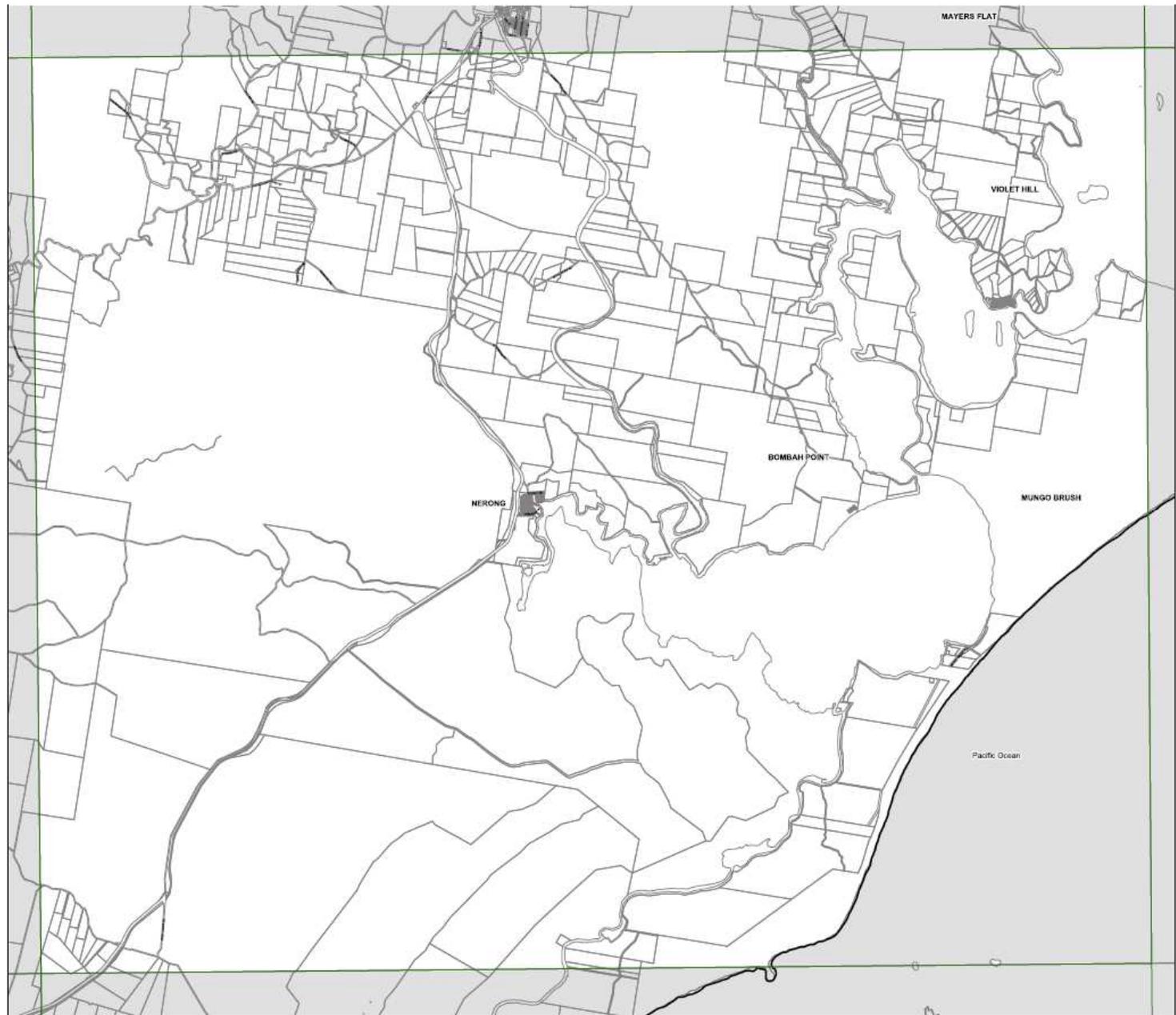


Figure D.5 – Tea Gardens & Hawks Nest Priority Area Map

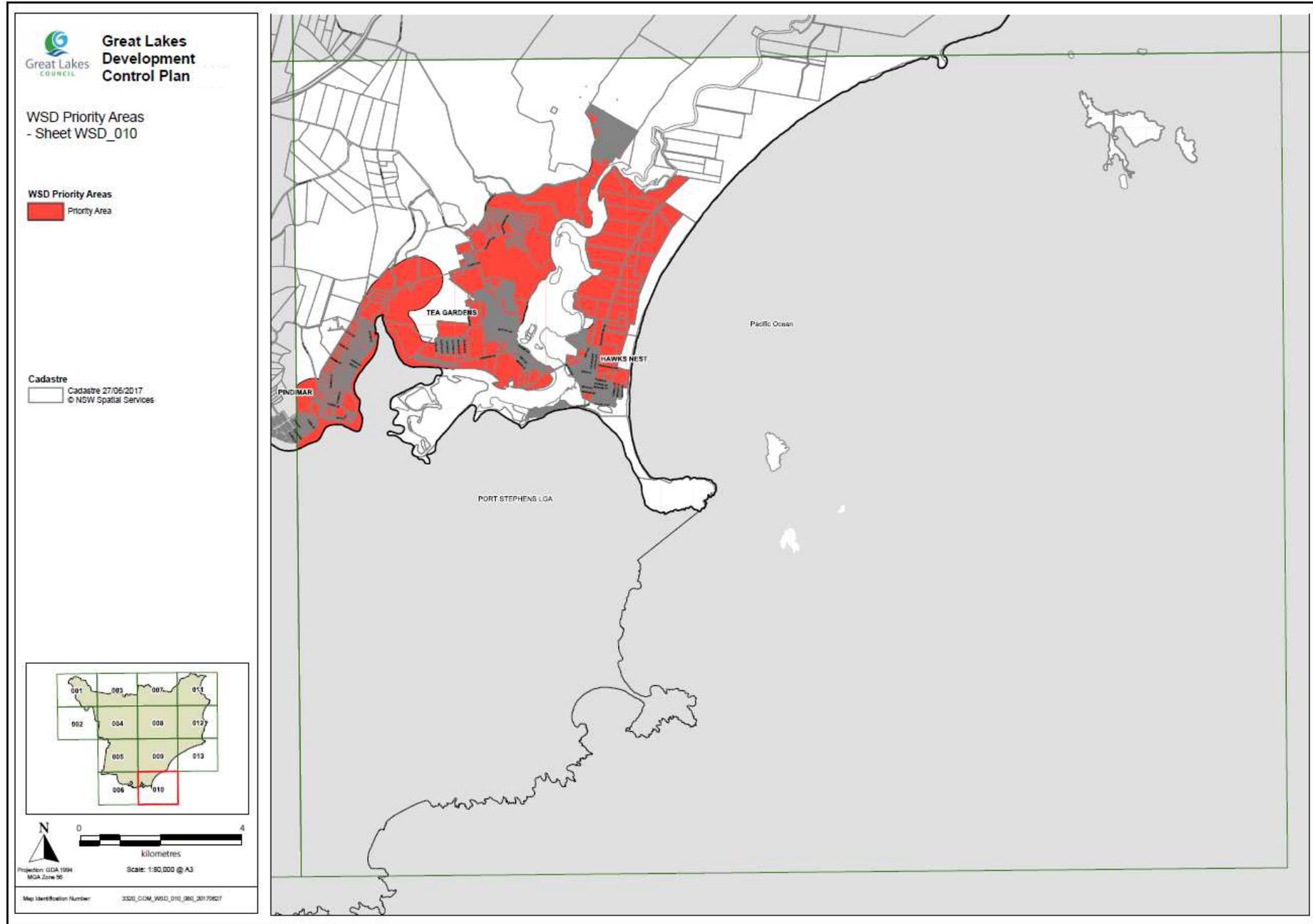


Figure D.6 – Tuncurry & Forster District Priority Area Map

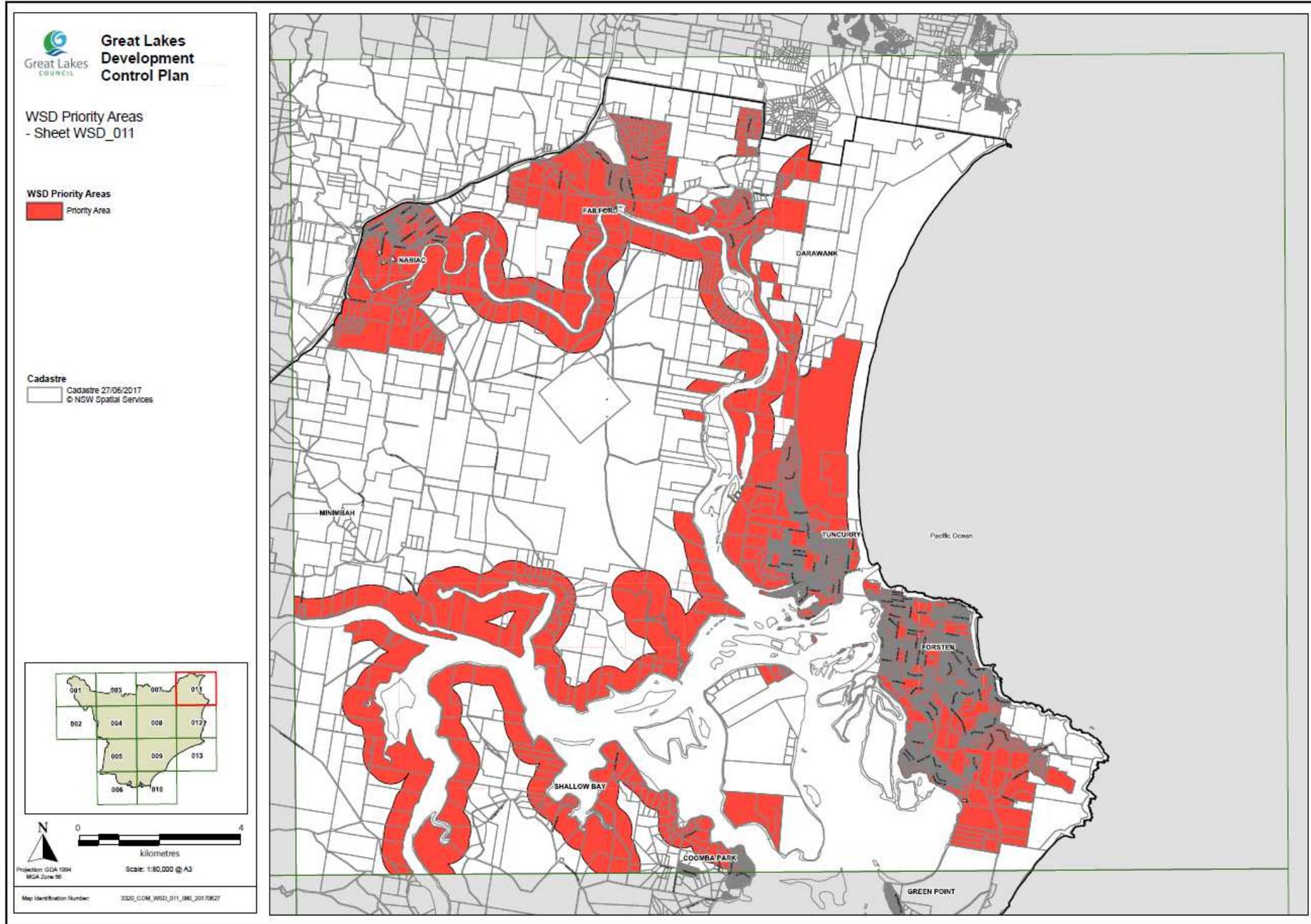


Figure D.7 – Pacific Palms & District Priority Area Map

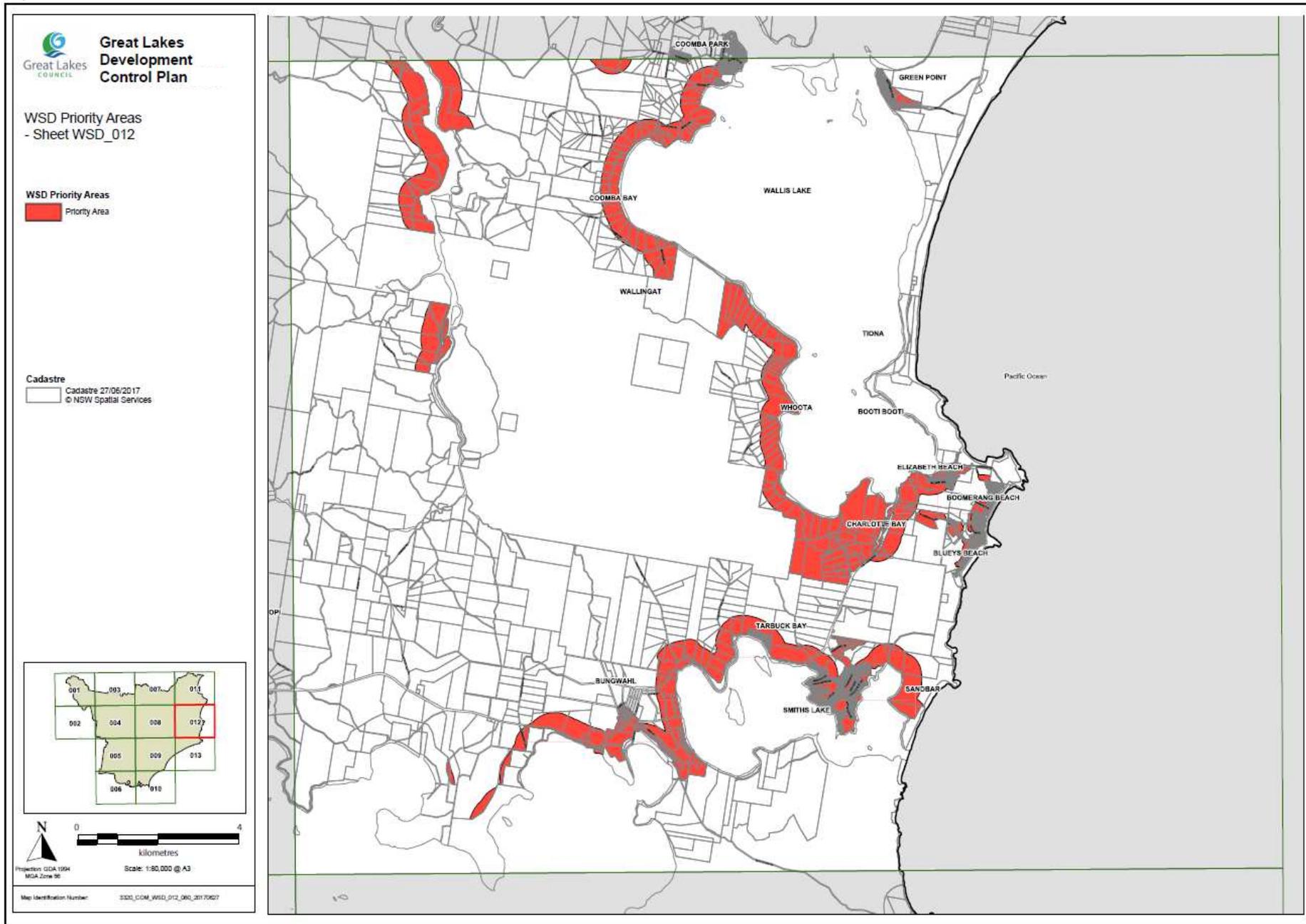
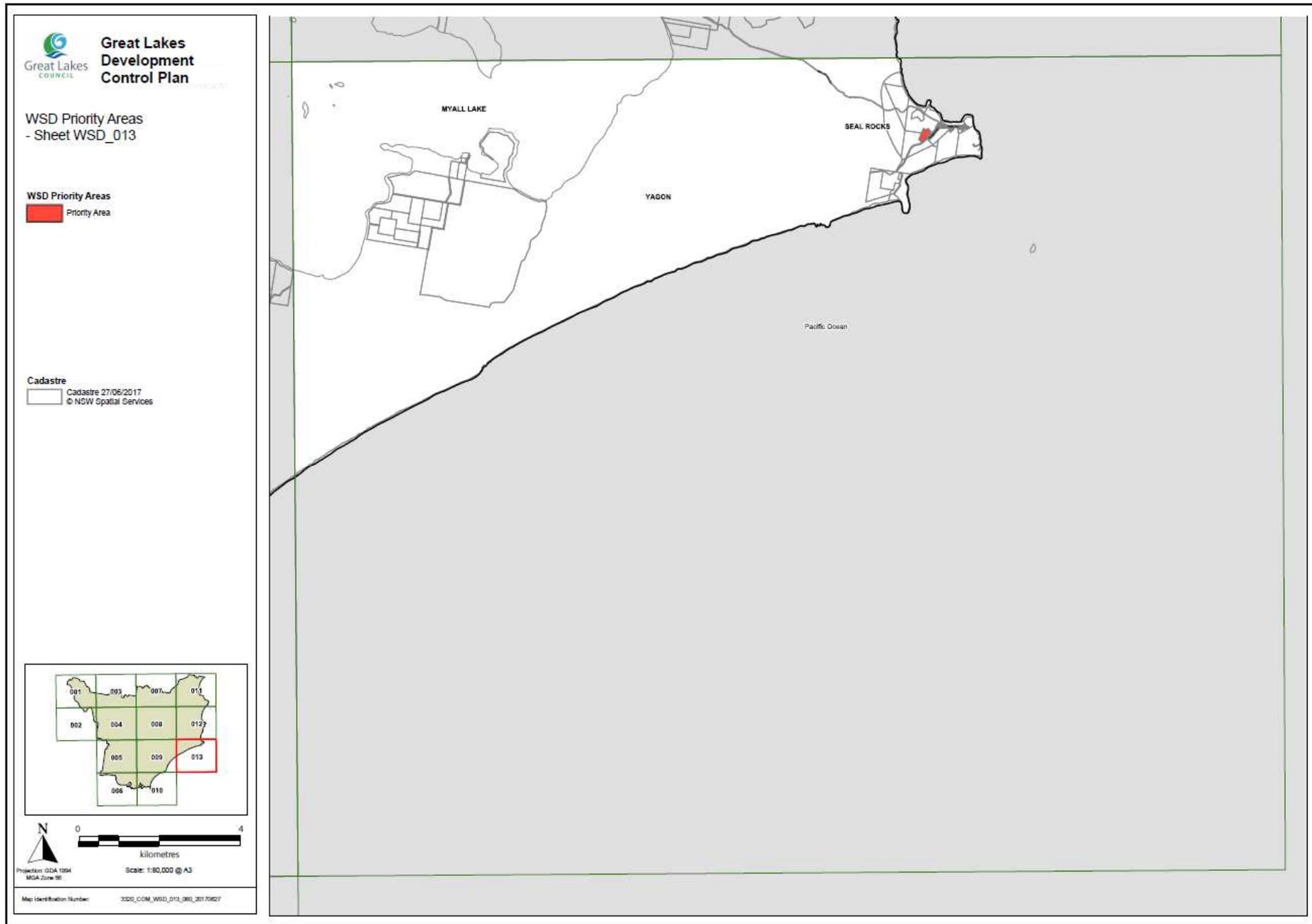


Figure D.8 – Seal Rocks Priority Area Map



12 Vegetation Management

12.1 Introduction

The MidCoast Vegetation Management Policy has been prepared pursuant to Part 3 of the *State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017* (the SEPP). This DCP chapter facilitates the implementation of the MidCoast Vegetation Management Policy (the Policy).

The Policy and this DCP chapter help to achieve the aims of the SEPP to protect the biodiversity values and to preserve the amenity through the preservation of trees and vegetation.

12.2 Objectives

The objective is to identify vegetation for protection for the purposes of the *State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017* and to provide a trigger for assessment under the Vegetation Management Policy.

12.3 Land to which this chapter applies

This DCP chapter applies to private land identified by the mapping referenced in the MidCoast Vegetation Management Policy.

12.4 Controls

Removal or pruning of vegetation on land to which the *State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017* applies, must comply with the process outlined in the Vegetation Management Policy.

13 Landscaping and Open Space

This part of the Development Control Plan provides requirements for landscaping for all forms of development.

13.1 Single Dwellings, Dual Occupancies, Villas and Townhouses

13.1.1 Objectives

- To encourage development design which responds to the topography of the site and provides for the retention of mature native tree species.

Low Density Residential Zones - Additional Landscaping and Open Space Objectives

- To maintain a low density setting and open character derived from the spaces and landscaping between buildings and street.

Large Lot Residential, Rural and Environmental Zones - Additional Landscaping and Open Space Objectives

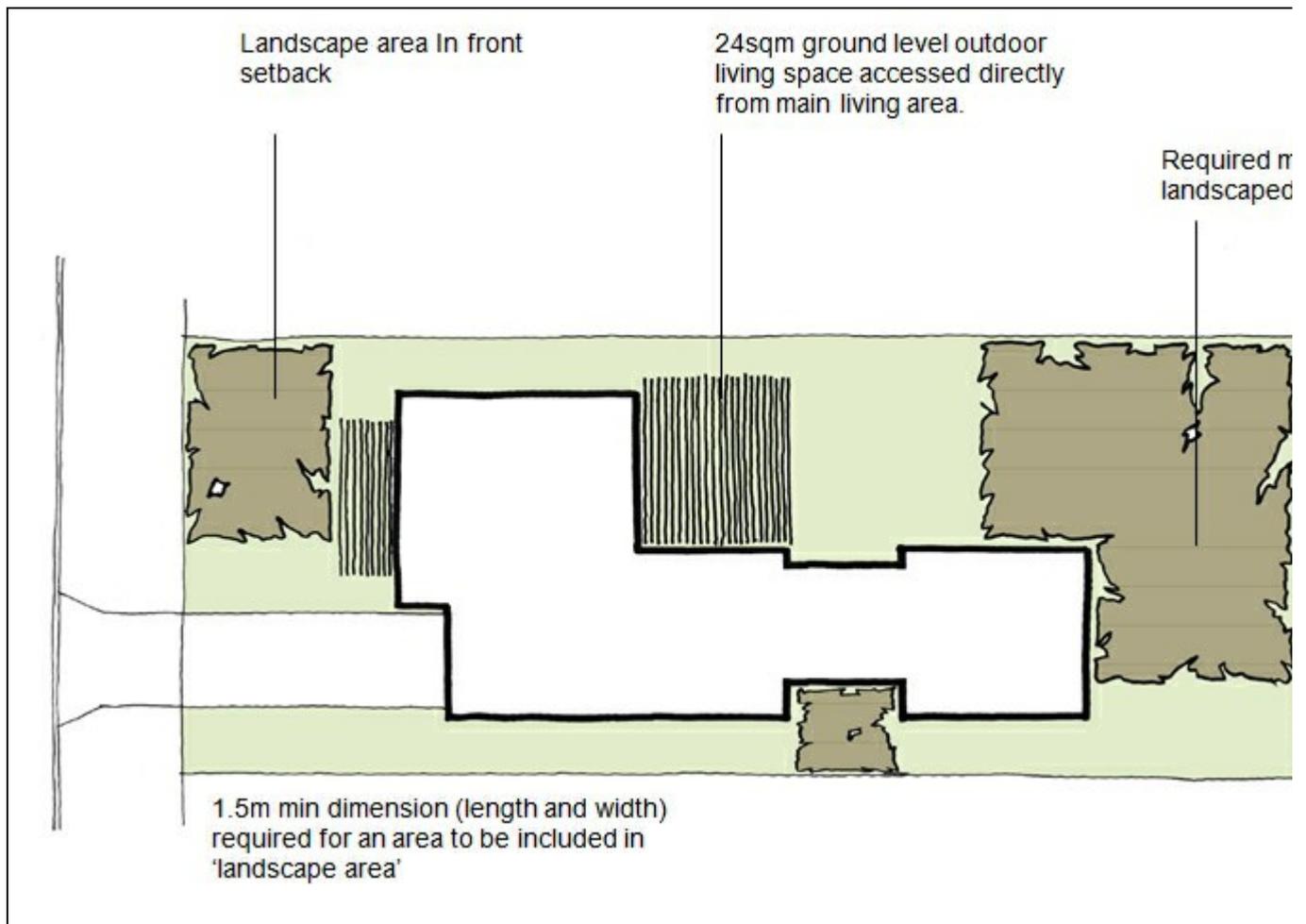
- To ensure that existing vegetation on steep slopes and near watercourses are maintained and protected.

13.1.2 Controls

- (1) A minimum of 30% of the site area is to be set aside for landscaping preferably with native vegetation at existing natural ground level and a deep soil zone. The landscaped area does not include any building, garage, or impervious surface such as a driveway or swimming pool.
- (2) The deep soil zone is that part of the site that is not built on, paved or otherwise sealed, where the soil is of sufficient depth to support the growth of trees and shrubs. At least 50% of the landscape area is to include deep soil zones.
- (3) Landscaping is to be provided both behind and in front of the building line. Landscaping of less than 1.5m in length and width shall not be included in landscape area calculations.
- (4) All sites are to be provided with a minimum of 1.5m wide landscape strip adjacent to any driveway and an adjoining property.
- (5) Where removal of locally important koala food trees is unavoidable as part of the proposed development, replacement plantings may be required.
- (6) Council will consider requests to plant replacement locally important koala food trees on other council-owned or privately-owned land within the locality (with the owners consent) with a development application at time of lodgement where it can be demonstrated that no suitable areas exist on the development site
- (7) Landscaping proposals should give preference to the retention of native plants (including trees, shrubs and ground covers) that exist on the land, where such retention is reasonable, safe and does not conflict with bush fire hazard protection requirements. Refer to the [Landscaping Schedule](#) for indicative plant lists.

Low Density Residential Zones - Additional Landscaping and Open Space Controls

- (1) Predominantly native flora from the local area should be used in landscaping. Exotic species should be limited to a maximum of 10% of the landscaped area.



Landscaping design (click here to view [original image](#))

Large Lot residential, Rural and Environmental Zones - Additional Landscaping and Open Space Cor

- (1) It is recommended that wherever possible, development is designed and located to retain:
 - (a) Trees and under storey shrubs on slopes greater than 1:6;
 - (b) Trees growing within 30m of the centreline of any intermittent or permanent watercourse.
 - (c) Understorey shrubs to provide shelter and a food source for native fauna.

13.2 Residential Apartment Buildings, Mixed Use Development and Business Premises

13.2.1 Open Space

Open space is the outdoor recreational and breathing space for development. It may be communal (shared by all residents of a development) or private (associated with a single dwelling and for the exclusive use of the occupants).

Private open space may take the form of a courtyard at ground level or at the podium level, or in the form of a terrace or balcony. These spaces enhance the amenity and lifestyle choices of residents in providing recreational space, extending living areas and assist in capitalising on the temperate coastal environment of the Great Lakes area. Balconies and terraces are also important architectural elements, contributing to the form and articulation of residential and mixed use buildings.

The primary function of open space is to provide amenity in the form of:

- opportunities for recreation and social activities;
- landscape design;
- solar access to residential dwellings;

- visual privacy;
- watercycle management.

Objectives

- To provide residents and other users with passive and active recreational opportunities.
- To provide areas on site for soft landscaping and deep soil planting.
- To ensure communal and private open space is consolidated, configured and designed to be accessible, useable and attractive.
- To ensure balconies and terraces are functional and responsive to the environment thereby promoting the enjoyment of outdoor living for unit residents.
- To ensure that balconies and terraces are integrated into the overall architectural form and detail of a building.
- To provide a pleasant outlook, both from internal spaces and from streets and other areas of the public domain.
- To contribute to the safety and liveliness of the street by allowing passive surveillance and street address.

Controls

(1) Communal Open Space

- (a) Developments with more than 6 dwellings must incorporate communal open space. The minimum size of this open space is to be calculated at 10m² per dwelling. Any area to be included in the communal open space calculations must have minimum dimensions of 5m.
- (b) The communal open space must be easily accessible and within a reasonable distance from all apartments.
- (c) Combined use of a maximum 30% of the deep soil zone as communal open space may occur. The combined communal open space/deep soil area may be grassed and must contain significant shade trees.
- (d) Areas of the communal open space which are to be paved or which will contain shade structures, swimming pools or the like cannot be located within the deep soil zone.
- (e) The communal open space area must receive at least 3 hours of direct sunlight between 9.00am and 3.00pm on June 21.

(2) Private Open Space

- (a) Private open space must be provided for each dwelling within a development in the form of a balcony, courtyard, terrace and/or roof garden.
- (b) Private open space for ground level dwellings, or on a structure such as a podium or a carpark, must have a minimum area of 30m² and minimum dimensions of 4m. This area must be separated from boundaries by at least 1.5m with a vegetated landscaping bed and must not encroach upon deep soil zone landscaping areas.
- (c) Private open space for upper level dwellings (except with direct access to a podium) must have a minimum area of 12m² and minimum dimensions of 2.5m.
- (d) Private open space for all dwellings shall be directly accessible from main living areas, such as living room, dining room or kitchen to extend the dwelling living space.
- (e) Balustrades are to be designed to allow views and passive surveillance of the street while providing for safety and visual privacy. Design considerations should include:
 - (i) detailing balustrades using a proportion of solid to transparent materials to address sight lines from the street, public domain and adjacent development.
 - (ii) restrict the use of full glass balustrades to ensure adequate privacy for the balcony and interior of the dwelling.
 - (iii) detailing balustrades and providing screening from the public for clothes drying areas, downpipes and air conditioning units.
- (f) The primary private open space area of at least 70% of the dwellings within a development must receive a

minimum of three hours of direct sunlight between 9.00am and 3.00pm on June 21.

13.2.2 Landscape Design

Landscape design is a fundamental component to the design of development and includes the planning, design, construction and maintenance of all open space, garden and utility areas. Together, landscape and buildings operate as an integrated and sustainable system, resulting in greater aesthetic quality and amenity for occupants and the adjoining public domain. The landscape qualities of residential areas are an important influence on its future image, comfort, public and private amenity.

Landscaping within the public domain will be implemented within the framework established by Council as part of its civic improvement program and/or through the collection of developer contributions. In the private domain, it is important that a strong and consistent approach to landscaping is achieved in order to contribute to both a high level of amenity and a cohesive image for the town or development or both.

Landscape design should have regard to the requirements of residents and visitors who may have a disability, optimise usability, privacy and social opportunity, respect for neighbour's amenity and provide for practical establishment and long term management.

Objectives

- To enhance defined setback areas and minimise apparent building bulk on a site to improve the streetscape quality and amenity of development.
- To add value and quality of life for residents and occupants within a development in terms of privacy, outlook, views and recreational opportunities.
- To ensure that the use of potable water for landscaping irrigation is minimised.
- To ensure landscaping is integrated into the design of development.
- To improve stormwater quality and control run-off.
- To improve the microclimate and solar performance within the development.
- To improve urban air quality and contribute to biodiversity.

Controls

- (1) Developments must provide for high quality landscape design by:
 - (a) providing appropriate shade from trees or structures
 - (b) screening parking areas, driveways, communal drying areas, and private open space associated with ground floor dwellings.
- (2) Contribute to streetscape character and public domain amenity by:
 - (a) matching landscape design to street proportions and character
 - (b) incorporating planting and landscape elements appropriate to the scale of the development
 - (c) selecting indigenous species in accordance with Council's preferred species list.
- (3) Improve the energy efficiency of dwellings and the microclimate of private open space by:
 - (a) incorporating trees for shading during summer
 - (b) varying heights and species of trees or shrubs to maximise solar access during winter
 - (c) locating plants appropriately in relation to their size at maturity.
- (4) Site landscaping shall comprise no less than:

- (a) 20% of the site area in Business Zones;
 - (b) 30% of the site area in the High Density Residential Zone;
 - (c) 40% of the site area in the Medium Density Residential Zone
 - (d) 40% of the site area in the Mixed Use Zone.
- (5) Any landscaped area on the site which has dimensions less than 1.5 metres is not included in the landscaped area calculations.
 - (6) Landscaping is to be designed in conjunction with the stormwater drainage system proposed as part of the development.
 - (7) Landscaped areas are to be irrigated with water collected on the site.
 - (8) Street tree planting is to be incorporated into the landscape plan and provided as part of any development proposal.
 - (9) Where a riparian buffer zone is required, a Riparian Corridor Revegetation Plan must be prepared in accordance with the requirements of the relevant state agency. This plan must be prepared by an appropriately qualified consultant in conjunction with the Landscape Plan and must detail the width of the proposed riparian corridor and the intentions for rehabilitation, revegetation and management.
 - (10) The riparian buffer zone may serve as the dense planting area, which is required in a deep soil zone associated with development of the land, providing the buffer is contained within the development site. The proposed planting must allow for Council's ongoing maintenance of public creek/drainage areas.

13.2.3 Deep Soil Zones

Deep soil zones are areas of natural ground with relatively natural soil profiles within a development site. Deep soil zones have important environmental benefits, which include protection of existing mature trees, promoting the introduction of significant vegetation and allowing infiltration of rain water to the water table and reduction of stormwater runoff.

Deep soil zones are related to the provision of open space and may be constrained by the density or location and context of a proposed development site, particularly within the commercial centre.

The siting of the deep soil zone must be determined following a site analysis to investigate whether this area should be located:

- Centrally within the site to allow overlooking from dwellings within the development;
- At the rear of the site to allow for separation from adjacent dwellings and to provide continuous corridor of vegetation of native fauna; or
- Elsewhere within a site to allow for the retention of significant trees and attain maximum access to sunlight.

Objectives

- To protect existing mature trees and encourage the planting of additional significant vegetation.
- To increase the capacity of the site and locality for water infiltration.
- To assist with the management of water quality and the water table.
- To provide landscaping in scale and proportion with the proposed development.

Controls

- (1) The deep soil zone shall comprise no less than:
 - (a) 10% of the site area in Business Zones;
 - (b) 15% of the site area in the High Density Residential Zone;

- (c) 20% of the site area in the Medium Density Residential Zone
- (d) 20% of the site area in the Mixed Use Zone.
- (2) The deep soil zone must have minimum dimensions of 4.5m.
- (3) No structures, basement car parks, driveways, hardpaving, decks, balconies or drying areas are permitted within the deep soil zone.
- (4) The deep soil zone shall be densely planted with trees and shrubs. Where a development is to be strata titled, the deep soil zone must be retained within the common property.
- (5) Lots with the following sizes are required to support a minimum number of tall trees capable of attaining a mature height of at least 13m:
 - (a) less than 1000m² - 1 per 400m² of site area or part thereof
 - (b) 1000sqm to 1500m² - 1 per 350m² of site area or part thereof
 - (c) greater than 1500m² - 1 per 300m² of site area or part thereof

13.2.4 Planting on Structures

Planting on top of basement car parks, podiums and roof tops is becoming an increasingly common scenario in urban areas. This requires appropriate consideration of the quality and health of plants located above such structures as the plants are grown in total containment with artificial soils, drainage and irrigation.

The following controls apply to development incorporating planting on roof tops, podiums or over car park structures for the provision of communal and private open space.

Objectives

- To contribute to the quality and amenity of open space where provided over built structures.
- To encourage the establishment and healthy growth of trees and shrubs in urban areas.
- To minimise the use of potable water for irrigating planting on structures.

Controls

- (1) Areas with planting on structures are to be irrigated with harvested water.
- (2) Design for optimum conditions for plant growth by:
 - (a) providing soil depth, soil volume and soil area appropriate to the size of the plants to be established,
 - (b) providing appropriate soil conditions and irrigation methods, and
 - (c) providing appropriate drainage.
- (3) Increase minimum soil depths to accommodate:
 - (a) the mix of species and plant sizes at maturity
 - (b) the level of landscape management, particularly the frequency of irrigation, and
 - (c) anchorage requirements of large and medium tree soil type and quality.

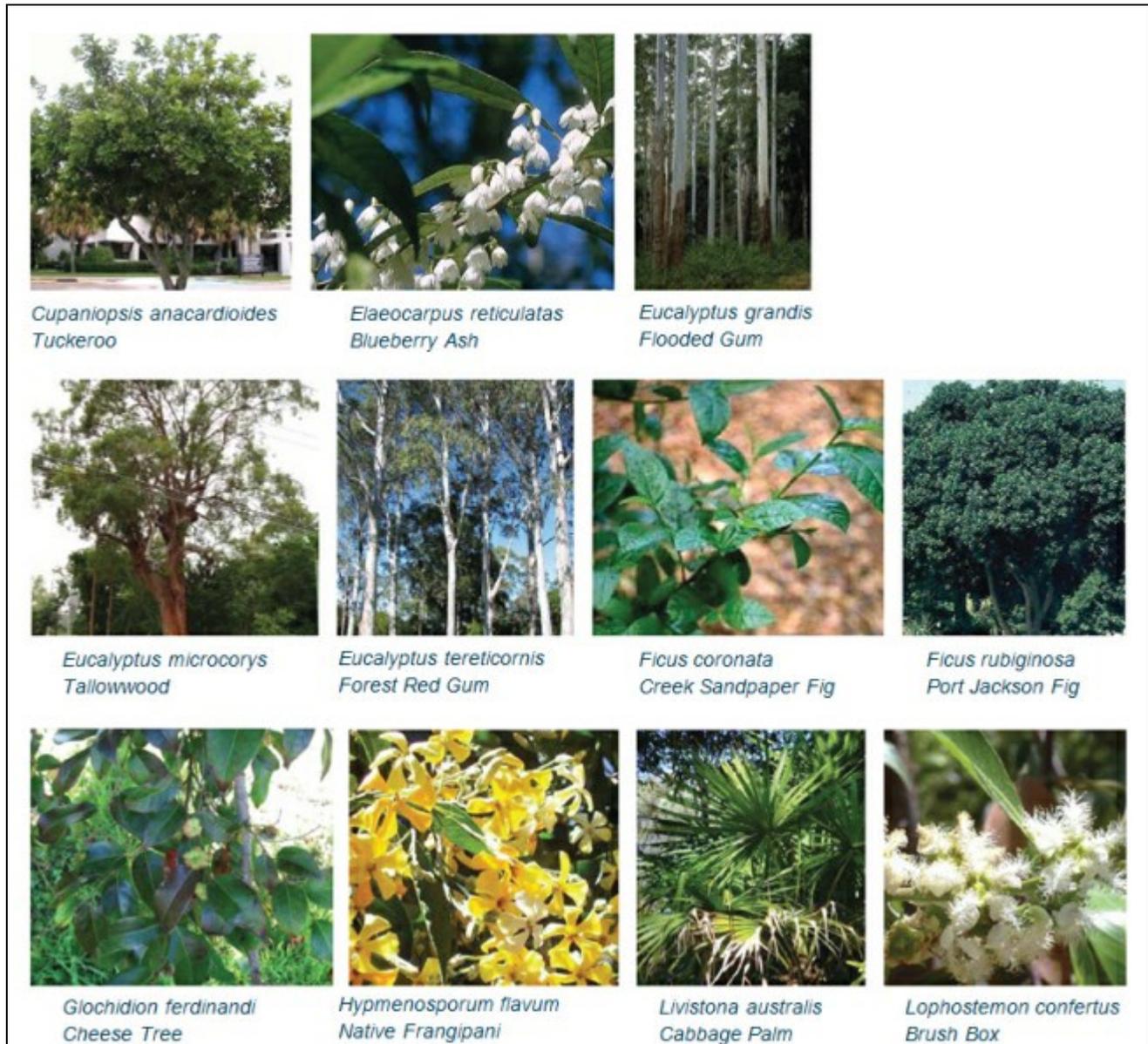
13.3 Landscaping Schedule

13.3.1 Trees & Palms

Indicative Plant Species (LF = Low Flammability) (K = Koala)

Code	Botanical Name	Common Name
ACM smi	<i>Acmena smithii</i>	Lilly Pilly (LF)

ALP exc	<i>Alphitonia excelsa</i>	Red Ash (LF)
BAN int	<i>Banksia integrifolia</i>	Coast Banksia
BAN ser	<i>Banksia serrata</i>	Old Man Banksia
CAS gla	<i>Casuarina glauca</i>	Swamp Oak
CAS tor	<i>Casuarina torulosa</i>	Forest She Oak
CUP ana	<i>Cupaniopsis anacardioides</i>	Tuckeroo (LF)
ELA ret	<i>Elaeocarpus reticulatus</i>	Blueberry Ash (LF)
EUC amp	<i>Eucalyptus amplifolia</i>	Cabbage Gum (K)
EUC eug	<i>Eucalyptus eugenioides</i>	Thin-leaved Stringybark (K)
EUC rob	<i>Eucalyptus robusta</i>	Swamp Mahogany (K)
EUC mic	<i>Eucalyptus microcorys</i>	Tallowwood (K)
EUC ter	<i>Eucalyptus tereticornis</i>	Forest Red Gum (K)
EUC bot	<i>Eucalyptus botryoides</i>	Bangalay (K)
EUC gra	<i>Eucalyptus grandis</i>	Flooded Gum (K)
EUC glo	<i>Eucalyptus globoidea</i>	White Stringybark (K)
EUC sal E	<i>Eucalyptus saligna</i>	Sydney Blue Gum (K)
EUC cap	<i>Eucalyptus capitellata</i>	Brown Stringybark (K)
EUC par	<i>Eucalyptus parramattensis</i> subsp <i>decadens</i>	Drooping Red Gum (K)
EUC pat	<i>Eucalyptus patentinervis</i>	Swamp Mahogany x Forest Red Gum (K)
EUC pun	<i>Eucalyptus punctata</i>	Grey Gum (K)
EUC pro	<i>Eucalyptus propinqua</i>	Grey Gum (K)
EUC ter	<i>Eucalyptus tereticornis</i>	Forest Red Gum (K)
EUC can	<i>Eucalyptus canaliculata</i>	Grey Gum (K)
EUC nic	<i>Eucalyptus nicholii</i> (not endemic)	Narrow-leaved Black Peppermint (K)
FIC cor	<i>Ficus coronata</i>	Creek Sandpaper Fig (LF)
FIC rub	<i>Ficus rubiginosa</i>	Port Jackson Fig (LF)
GLO fer	<i>Glochidion ferdinandi</i>	Cheese Tree (LF)
HYM fla	<i>Hymenosporum flavum</i>	Native Frangipani (LF)
LIV aus	<i>Livistona australis</i>	Cabbage Palm
LOP con	<i>Lophostemon confertus</i>	Brush Box (LF)
MEL qui	<i>Melaleuca quinquenervia</i>	Broad-leaved Paperbark (K)
SYN gla	<i>Synoum glandulosum</i>	Scentless Rosewood (LF)



Suggested tree and palm species Note: Use fire resistant species in bushfire prone areas ([click here to view original image](#))

13.3.2 Shrubs

Indicative Plant Species (LF = Low Flammability)

Code	Botanical Name	Common Name
ACA lon	<i>Acacia longifolia</i>	Sydney Golden Wattle
ACA sop	<i>Acacia longifolia</i> var. <i>sophorae</i>	Coastal Wattle
BAC myr	<i>Backhousia myrtifolia</i>	Grey Myrtle
BAN rob	<i>Banksia robur</i>	Swamp Banksia
CAL pac	<i>Callistemon pachyphyllus</i>	Wallum Bottlebrush
CAL sal	<i>Callistemon salignus</i>	Willow Bottlebrush
COR str	<i>Cordyline stricta</i>	Cordyline (LF)
HAK dac	<i>Hakea dactyloides</i>	Broad-leaved Hakea
LEP lae	<i>Leptospermum laevigatum</i>	Coastal Tea Tree
LEP pol	<i>Leptospermum polygalifolium</i>	Lemon Scented Tea Tree
CER ape	<i>Ceratopetalum apetulum</i>	NSW Christmas Bush

OMA pop	<i>Omalanthus populifolius</i>	Bleeding Heart (LF)
PER lev	<i>Persoonia levis</i>	Broad leaved Geebung
SYZ aus	<i>Syzygium australe</i>	Brush Cherry (LF)
SYZ AS	<i>Syzygium "Aussie Southern"</i>	Lilly Pilly cultivar (LF)
SYZ cas	<i>Syzygium "Cascade"</i>	Lilly Pilly cultivar (LF)
WES fru	<i>Westringia fruticosa</i>	Coastal Rosemary (LF)

			
<i>Acacia longifolia var. sophorae</i> Coastal Wattle	<i>Blackhousia myrtifolia</i> Grey Myrtle	<i>Callistemon pachyphyllus</i> Wallum Bottlebrush	<i>Callistemon salignus</i> Pink Tips
			
<i>Cordyline stricta</i> Cordyline	<i>Leptospermum polygalifolium</i> Lemon Scented Tea Tree	<i>Ceraopatalum apetulum</i> NSW Christmas Bush	<i>Syzygium australe</i> Scrub Cherry
			
<i>Syzygium Aussie Southern</i> Lilly Pilly	<i>Syzygium "Cascade"</i> Lilly Pilly cultivar	<i>Westringia fruticosa</i> Coastal Rosemary	

Suggested shrub species Note: Use fire resistant species in bushfire prone areas (click here to view [original image](#))

13.3.3 Groundcovers & Vines

Code	Botanical Name	Common Name
ALP cae	<i>Alpinia caerulea</i>	Native Ginger
CRI ped	<i>Crinum pedunculatum</i>	Swamp Lily
DIA cae	<i>Dianella caerulea</i>	Flax Lily
HAR vio	<i>Hardenbergia violacea</i>	False Sarsaparilla
HIB den	<i>Hibbertia dentata</i>	Twining Guinea Flower

HIB sca	Hibbertia scandens	Snake Vine
LOM lon	Lomandra longifolia	Mat Rush
MEL thy	Melaleuca thymifolia	Giant Mondo
LOM hys	Lomandra hystrix	Thyme Honey Myrtle
LOM tan	Lomandra Tanika	Mat Rush cultivar
PAN por	Pandorea pandorana	Wonga Vine
POA lab	Poa labillardieri	Poa
SCA alb	Scaevola albida	Fan Flower
THE aus	Themeda australis	Kangaroo Grass

Note: Use fire resistant species in bushfire prone areas



13.3.4 Tuncurry Preferred Landscaping Schedule

Schedule of preferred trees

Botanical Name
Local Native (indigenous species)

Acacia elata
Acacia floribunda
Acacia glaucescens
Acmena hemilampra
Acmena smithii
Alphitonia excelsa
Argyrodendron trifoliatum
Banksia integrifolia
Brachychiton acerifolium
Callicoma serratifolia
Callistemon citrinus
Callistemon viminalis
Castanospermum australe
Casuarina glauca
Casuarina torulosa
Corymbia maculata
Cupaniopsis anacardioides
Euodia elleryana
Harpullia pendula
Liphostemon confertus
Melaleuca quinquenervia
Melaleuca styphelioides
Syzygium paniculatum
Tristaniopsis laurina

Common Name

Cedar Wattle
 White Sally Wattle

 Broad-leaved Lilly Pilly
 Lilly Pilly
 Red Ash
 Brown Tulip Oak
 Coastal Banksia
 Illawarra Flame Tree
 Black Wattle
 Lemon-scented Bottlebrush
 Weeping Bottlebrush
 Black Bean
 Swamp Oak
 Forest Oak
 Spotted Gum
 Tuckeroo
 Pink Eudodia
 Tulipwood
 Brush Box
 Broad-leaf Paperbark
 Pricky-leaf Paperbark
 Magenta Lilly Pilly
 Water Gum

Exotic Plants and Introduced Native Plants

Bachhousia citriodora
Elaeocarpus reticulatus 'Primma Donna'
Glochidion ferdinandi
Hymenoporum flavum
Lepiderema pulchella
Melaleuca quinquenervia
Metrosideros excelsa
Syzygium australe
Waterhousia floribunda
Waterhouse unipunctata

Lemon-scented Myrtle
 Blueberry Ash
 Cheese Tree
 Native Frangipani
 Fine-leaved Tuckeroo
 Broad-leaf Paperbark
 New Zealand Christmas Bush
 Brush Cherry
 NSW Christmas Bush
 Roly Poly Satin Ash

14 Waste Management

This section contains the controls for the design of waste management facilities for all forms of development. It also provides guidelines for the preparation of a Waste Management Plan, which must be submitted with all development applications for building or demolition works.

Objectives

- To plan for sustainable waste management.
- To develop systems for waste management to ensure waste is transported and disposed of in a lawful manner.
- To provide guidance in regards to space, storage amenity and management of building site waste management facilities.
- To ensure waste management systems are compatible with collection services.
- To minimise risks associated with waste management at all stages of development.
- To maximise reuse and recycling of household, industrial and commercial waste.

14.1 Demolition

Objectives

- To minimise resource requirements and construction waste through reuse and recycling and the efficient selection and use of resources.
- To minimise demolition waste by promoting adaptability in building design and focussing upon end of life deconstruction.
- To encourage building designs, construction and demolition techniques in general which minimise waste generation.

Controls

- (1) A completed Site Waste Minimisation and Management Plan (SWMMP) shall be prepared and lodged with the development application for demolition. As a minimum it shall include:
 - (a) Adaptive reuse opportunities for buildings/structures.
 - (b) All waste likely to result from the demolition and opportunities for reuse of materials.
 - (c) Facilitate reuse/recycling by using the process of 'deconstruction' where various materials are carefully dismantled and sorted.
 - (d) Reuse or recycle salvaged materials onsite where possible.
 - (e) An area shall be allocated on site for the storage of materials for use, recycling and disposal (giving consideration to slope, drainage, location of waterways, stormwater outlets, vegetation and access and handling requirements).
 - (f) Separate collection bins or areas for the storage of residual waste shall be provided on site and clearly 'signposted' for the purpose and content of the bins and storage.
 - (g) Measures shall be implemented on site to prevent damage by the elements, odour and health risks and windborne litter.
 - (h) A Declaration of Waste Confirmation shall be provided to Council at the completion of the works.

14.2 Development

Objectives

- To ensure that waste and recyclables storage areas within the property are designed for suitable ease of use, amenity and the movement and handling of waste for the life of the development.
- To encourage source separation of waste, reuse and recycling by ensuring appropriate storage and collection

facilities for waste and quality design of waste facilities.

- To maximise reuse and recycling of materials.
- To minimise waste generation.
- To ensure appropriate collection and storage of waste.
- To minimise the environmental impacts associated with waste management.
- To encourage appropriate waste disposal and avoid illegal dumping.

14.2.1 Single Dwellings and Dual Occupancies

Controls

- (1) A completed Site Waste Minimisation and Management Plan (SWMMP) shall be prepared and submitted with the development application for Indicative Waste/Recycling Generation Rates.
- (2) Plans submitted with the application must show:
 - (a) The location of an onsite waste/recycling storage area for each dwelling that is sufficient size to accommodate Councils waste, recycling and garden waste bins.
The waste storage area is to be located in the rear yard where possible and in a suitable location to avoid vandalism, nuisance, adverse visual impacts and odour for neighbours.
 - (b) An identified onsite location for a compost container that does not impact on adjoining properties.
 - (c) The waste storage area is to be easily accessible and have unobstructed access to Councils usual collection point.
 - (d) There should be sufficient space within the kitchen (or an alternate location) for the interim storage of waste and recyclables.
- (3) A Declaration of Waste Confirmation shall be provided to Council at the completion of the works.

14.2.2 All Other Development

Controls

- (1) A completed Site Waste Minimisation and Management Plan shall be prepared and submitted with the development application. The plan should address the following matters as relevant:
 - (a) Indicative Bin Sizes
 - (b) Waste/Recycling Storage Rooms
 - (c) Garbage Truck Dimensions
 - (d) Garbage Chutes.
- (2) Architectural plans submitted with the development application must show:
 - (a) The location of individual waste/recycling storage areas (such as for townhouses and villas) or a communal waste/recycling storage room(s) able to accommodate Councils waste, recycling and gardens waste bins.
 - (b) The location of any garbage chute(s) and interim storage facilities for recyclable materials that promotes and ease of recycling for each unit and on each floor.
 - (c) The location of any service rooms (for accessing a garbage chute) on each floor of the building.
 - (d) The location of any waste compaction equipment.
 - (e) An identified collection point for the collection and emptying of Councils waste, recycling and garden waste bins.
 - (f) The path of travel for moving bins from the storage area to the identified collection point (if collection is to occur away from the storage area).
 - (g) The onsite path of travel for collection vehicles (if collection is to occur onsite) taking into account accessibility, width, height and grade.

- (3) Systems should be designed to maximise source separation and recovery of recyclables for each unit and on each floor.
- (4) Waste management systems should be designed and operated to prevent the potential risk, injury or illness associated with the collection, storage and disposal of wastes.
- (5) A [Declaration of Waste Confirmation](#) shall be provided to Council at the completion of the works.

Multi-unit Residential Development - Additional Controls

- (1) The “[Better Practice Guide for Waste Management in Multi-Unit Dwellings](#)” should be used to inform design of multi-unit dwellings for waste recycling/storage rooms and facilities.
- (2) The following minimum collection and storage facilities shall be provided:
 - (a) Residential flat buildings must include communal waste/recycling storage facilities in the form of a waste/recycling storage room (or rooms) designed in accordance with the “[Better Practice Guide for Waste Management in Multi-Unit Dwellings](#)”.
 - (b) Multi-unit housing in the form of townhouses and villas must include either individual waste/recycling storage areas for each dwelling or a communal facility in the form of a waste/recycling storage room (or rooms) designed in accordance with the “[Better Practice Guide for Waste Management in Multi-Unit Dwellings](#)”.
 - (c) The waste/recycling storage area(s) or room(s) must be of a size that can comfortably accommodate separate garbage, recycling and garden waste containers at the rate of Council provision.
 - (d) For multi-storey developments that include ten or more dwellings, a dedicated room or caged area must be provided for the temporary storage of discarded bulky items which are awaiting removal. The storage area must be readily accessible to all residents and must be located close to the main waste storage room or area.
- (3) The following location and design criteria shall apply to collection and storage facilities:
 - (a) In townhouse and villa developments with individual waste/recycling storage areas, such areas should be located and designed in a manner which reduces adverse impacts upon neighbouring properties and upon the appearance of the premises.
 - (b) There must be an unobstructed and continuous accessible path of travel (as per Australian Standard AS 1428: Design for Access and Mobility) from the waste/recycling storage areas or rooms to:
 - (i) The entry to any adaptable housing (As per Australian Standard 4299: Adaptable Housing);
 - (ii) The principle entrance to each residential flat building;
 - (iii) The point at which bins are collected/emptied;
 - (iv) In instances where a proposal does not comply with these requirements, Council will consider alternate proposal to achieve a reasonable level of access to waste/recycling storage areas or rooms.
 - (c) Communal waste storage areas should have adequate space to accommodate and manoeuvre the required number of waste and recycling containers.
 - (d) Each service room and storage area must be located for convenient access by users and must be well ventilated and well lit.
 - (e) Where bins cannot be collected from a kerbside location or from a temporary holding area located immediately inside the property boundary, the development must be designed to allow for on-site access by garbage collection vehicles in accordance with Garbage Truck Dimensions for Residential Waste Collection. In these instances, the site must be configured so as to allow collection vehicles to enter and exit the site in a forward direction and so that collection vehicles do not impede general access to, from or within the site. Access driveways to be used by collection vehicles must be of sufficient strength to support such vehicles with the collection contractor and Council indemnified against damage to driveways.

- (f) Should a collection vehicle be required to enter a property, access driveways and internal roads must be designed in accordance with Australian Standard As 2890.2: Parking Facilities - Off Street Commercial Vehicle Facilities.
- (g) Residents should have access to a cold water supply for the cleaning of bins and the waste storage areas. Storage areas should be constructed and designed to be weatherproof and easy to clean, with wastewater discharged to the sewer.
- (h) The design and location of waste storage areas/facilities should be such that they compliment the design of both the development and the surrounding streetscape.
- (i) Developments containing four or more storeys should be provided with a suitable system for the transportation of waste and recyclables from each storey to waste storage/collection areas.
- (j) Garbage chutes must be designed in accordance with the Building Code of Australia and "Better Practice Guide for Waste Management in Multi-Unit Dwellings". Garbage shutes are not suitable for recyclable material and must be clearly labelled to discourage improper use. Alternate interim disposal facilities for recyclables should be provided at each point of access to the garbage chute system.

Commercial, Industrial and Mixed Use Development - Additional Controls

- (1) Commercial, Industrial and Mixed-Use development must be designed to maximise resource recovery through waste avoidance, source separation and recycling and to ensure appropriate well-designed storage and collection facilities are accessible to occupants and service providers.
- (2) Industrial development waste products may be hazardous and require compliance with established laws/protocols that are additional to this section.

14.3 Design Guidelines

14.3.1 Indicative Bin Sizes

Bin Type	Height	Depth	Width
140 Litre Bin	1065mm	540mm	500mm
240 Litre Bin	1080mm	735mm	580mm
0.75m ³ Bulk Bin	1260mm	890mm	1400mm
1.5m ³ Bulk Bin	1260mm	1030mm	2010mm

These dimensions are only a guide and differ slightly according to manufacturer; if the bins have flat or dome lids and are used with different lifting devices.

14.3.2 Garbage Truck Dimensions

This page includes information regarding the dimensions of garbage trucks that are typically used for the collection of residential waste. Developments that require Council garbage trucks to enter the site for the collection of residential waste must be designed to accommodate on-site truck movements.

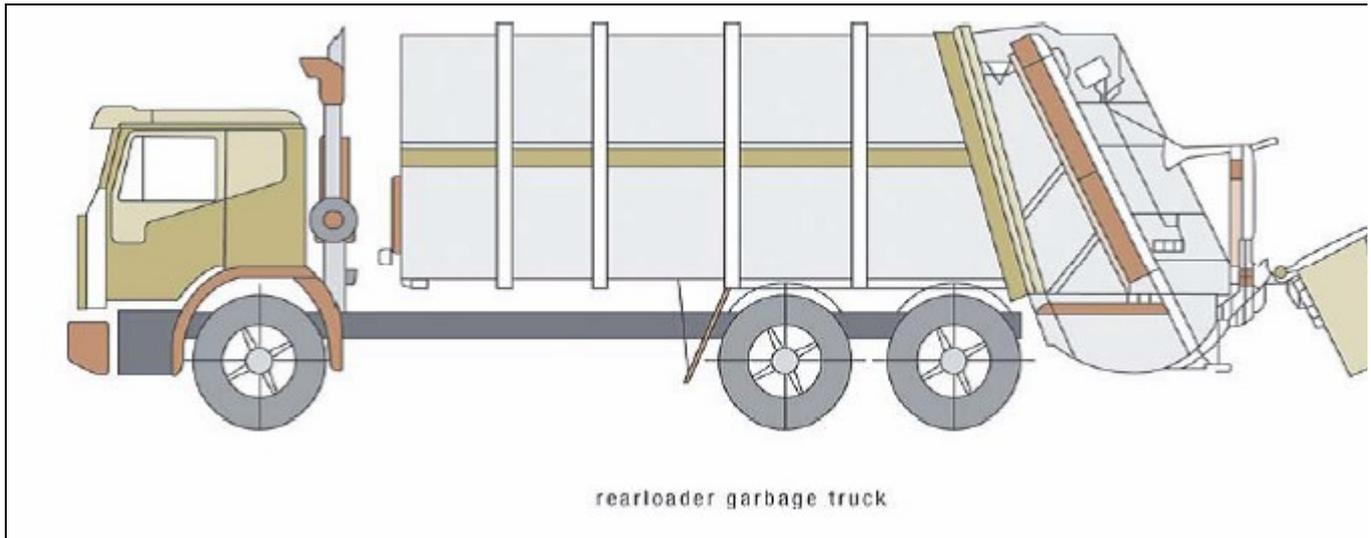
Requirements regarding vehicle turning circles and driveway width/gradient are contained in Australian Standard 2800.2 2002: Planning Facilities - off street commercial vehicles.

It is recommended that an applicant speak with Council's Waste Services Coordinator in regards to the design of development proposals that involve garbage trucks entering the site. Services will not be provided where there are undue risks.

Typical Council Garbage Truck used for Domestic Waste Collection	
Length overall	8.0 metres

Width overall	2.5 metres
Operational Height	4.3 metres
Travel Height	4.3 metres
Weight (vehicle and load)	22.5 tonnes
Weight (vehicle only)	13 tonnes
Turning circle	25.0 metres

Garbage truck dimensions for residential collection



Source of diagram: "Better Practice Guide for Waste Management in Multi-Unit Dwellings, DECC 2008.

14.3.3 Garbage Chutes

Garbage chute design controls

- (1) Garbage chutes must be constructed in accordance with the requirements of the Building Code of Australia (BCA).
- (2) Garbage chutes must be located and insulated in a manner that reduces noise impacts.
- (3) Chutes, service openings and charging devices must be constructed of material (such as metal) that is smooth, durable, impervious, non corrosive and fire resistant.
- (4) Chutes, service openings and charging devices must be capable of being easily cleaned.
- (5) Chutes must be cylindrical and should have a diameter of at least 500mm.
- (6) There must not be any bends (or sections of reduced diameter) in the main shaft of the chute.
- (7) Internal overlaps in the chute must follow the direction of waste flow.
- (8) Chutes must deposit rubbish directly into a bin or compactor located within a waste/recycling storage room.
- (9) A cut-off device must be located at or near the base of the chute so that the bottom of the chute can be closed when the bin or compacting device at the bottom of the chute is withdrawn or being replaced.
- (10) The upper end of a chute should extend above the roofline of the building.
- (11) The upper end of a chute should be weather protected in a manner that doesn't impede the upward movement of air out of the chute.

Garbage chute service room design controls

- (1) The service opening (for depositing rubbish into the main chute) on each floor of the building must be located in a dedicated service room.
- (2) The charging device for each service opening must be self-closing and must not project into the main chute.
- (3) Branches connecting service openings to the main chute are to be no more than 1m long.
- (4) Each service room must include containers for the storage of recyclable materials.
- (5) Signage regarding the materials that can be recycled should be displayed near these containers.
- (6) Each service room must be located for convenient access by users and must be well ventilated and well lit.
- (7) The floors, walls and ceilings of service rooms must be finished with smooth, durable materials that are capable of being easily cleaned.
- (8) Service rooms must include signage that clearly describes the types of materials that can be deposited into the garbage chute and the types of materials which should be deposited into recycling bins.

Garbage chute service room management controls

- (1) Garbage chutes are not to be used for the disposal of recyclable materials. Signage to this effect should be displayed near service openings.
- (2) Arrangements must be in place for the regular maintenance and cleaning of garbage chutes and any associated service rooms, service openings and charging devices.
- (3) Arrangements must be in place for the regular transferral of recyclable materials (which are sorted in service rooms) to the main waste/recycling storage room.
- (4) Garbage chutes are not to be used for the disposal of recyclable materials. Signage to this effect should be displayed near service openings.
- (5) Arrangements must be in place for the regular maintenance and cleaning of garbage chutes and any associated service rooms, service openings and charging devices.
- (6) Arrangements must be in place for the regular transferral of recyclable materials (which are sorted in service rooms) to the main waste/recycling storage room.

14.3.4 Commercial, Industrial and Mixed Use Development

Waste and Recycling Storage Areas Design Controls

- (1) Waste/recycling storage areas must be constructed in accordance with the requirements of the Building Code of Australia (BCA).
- (2) Waste/recycling storage areas must be integrated into the design of the overall development. Materials and finishes that are visible from the outside should be similar in style and quality to the external materials used in the rest of the development.
- (3) Waste/recycling storage areas must be located and designed in a manner that reduces adverse impacts upon neighbouring properties and the streetscape. The location and design of the areas should minimise adverse impacts associated with:
 - (a) The proximity of the area to dwellings;
 - (b) The visibility of the area;
 - (c) Noise generated by any equipment located within the area;
 - (d) Noise generated by the movement of bins into and out of the area;
 - (e) Noise generated by collection vehicles accessing the site; and
 - (f) Odours emanating from the area.
- (4) Waste/recycling storage areas must be of adequate size to comfortably accommodate all waste and recycling bins associated with the development.
- (5) Waste/recycling storage areas must be able to accommodate separate general waste bins and recycling bins

which are of sufficient volume to contain the quantity of waste generated (at the rate described in Appendix B) between collections.

- (6) The gradient of waste/recycling storage area floors and the gradient of any associated access ramps must be sufficiently level so that access for the purpose of emptying containers can occur in accordance with WorkCover NSW Occupational Health and Safety requirements.
- (7) Within waste/recycling storage areas, containers used for the storage of recyclable materials should be kept separate from (but close to) general waste containers, so that the potential for contamination of recyclable materials is minimised.
- (8) The development must be designed to allow access by collection vehicles used by the nominated waste contractor. Wherever possible, the site must be configured to allow collection vehicles to enter and exit the site in a forward direction and so collection vehicles do not impede general access to, from and within the site. Access driveways to be used by collection vehicles must be of sufficient strength to support such vehicles.
- (9) Servicing arrangements for the emptying of bins must be compatible with the operation of any other loading/unloading facilities on-site.
- (10) Access for the purpose of emptying waste/recycling storage containers must be able to occur in accordance with WorkCover NSW Occupational Health and Safety requirements.
- (11) In commercial development, public buildings and industrial development, there must be convenient access from each tenancy to the waste/recycling storage area(s). There must be step-free access between the point at which bins are collected/emptied and the waste/recycling storage area(s).
- (12) Arrangements must be in place so that the waste/recycling storage area is not accessible to the general public.
- (13) Vermin must be prevented from entering the waste/recycling storage area.
- (14) Waste/recycling storage areas must have a smooth, durable floor and must be enclosed with durable walls/fences that extend to the height of any containers which are kept within.
- (15) Doors/gates to waste/recycling storage areas must be durable. There must be a sign adjacent to the door/gate that indicates that the door/gate is to remain closed when not in use. All doors/gates are to be opened from both inside and outside the storage area and must be wide enough to allow for the easy passage of waste/recycling containers.
- (16) Waste/recycling storage areas must be serviced by hot and cold water provided through a centralised mixing valve. The hose cock must be protected from the waste containers and must be located in a position that is easily accessible when the area is filled with waste containers.
- (17) The floor must be graded so that any water is directed to a sewer authority approved drainage connection located upon the site.
- (18) Waste/recycling storage areas must include signage that clearly describes the types of materials that can be deposited into recycling bins and general garbage bins.
- (19) Arrangements must be in place for the regular maintenance and cleaning of waste/recycling storage areas. Waste/recycling containers must only be washed in an area which drains to a sewer authority approved drainage connection.
- (20) The "Better Practice Guide for Waste Management in Multi-Unit Dwellings" gives detailed information about waste recycling/storage rooms and facilities. The Guide was substantially reviewed in 2007 and is available on the Department of Environment and Climate Change NSW website (www.environment.nsw.gov.au).

14.3.5 Indicative Waste & Recycling Generation Rates

Construction waste 'Rule of Thumb' for renovations and small home building

- Timber: 5 -7% of material ordered
- Plasterboard: 5 - 20% of material ordered
- Concrete: 3 - 5% of material ordered

- Bricks: 5 - 10% of material ordered
- Tiles: 2 - 5% of material ordered

Source: *Waste Planning Guide for Development Application*, Inner Sydney Waste Board, 1995)

Ongoing Operation

Premises Type	Waste Generation	Recyclable Material Generation
Backpackers Hostel	40L occupant space/week	20L occupant space/week
Boarding House	60L occupant space/week	20L occupant space/week
Food premises:		
Butcher	80L/100m ² floor area/day	Variable
Delicatessen		Variable
Fish Shop	80L/100m ² floor area/day	Variable
Greengrocer	80L/100m ² floor area/day	120L/100m ² floor area/day
Restaurant, Cafe		2L/1.5m ² floor area/day
Supermarket	240L/100m ² floor area/day	240L/100m ² floor area/day
Takeaway food shop	10L/1.5m ² floor area/day	Variable
	240L/100m ² floor area/day	
	80L/100m ² floor area/day	
Hairdresser, Beauty Salon	60L/100m ² floor area/day	Variable
Hotel, Licensed Club, Motel	5L/bed space/day	1l/bed space/day
	50L/100m ² bar area/day	50L/100m ² bar area/day
	10L/1.5m ² dining area/day	50L/100m ² dining area/day
Offices	10L/100m ² floor area/day	10L/100m ² floor area/day
Shop less than 100m ² floor area	50L/100m ² floor area/day	25L/100m ² floor area/day
Shop greater than 100m ² floor area	50L/100m ² floor area/day	50L/100m ² floor area/day

Showroom	40L/100m ² floor area/day	10L/100m ² floor area/day
Multi-unit Dwellings	80L/unit/week	40L/unit/week

Sources: Adapted from Waverley Council Code for the Storage and Handling of Waste.

14.3.6 Waste / Recycling Storage Rooms

Design controls

- (1) Waste/recycling storage rooms must be constructed in accordance with the requirements of the Building Code of Australia (BCA).
- (2) Waste/recycling storage rooms must be integrated into the design of the overall development. It is preferable that such rooms be located behind the front building line.
- (3) Where possible, the room should be in a basement location within the main building envelope (rather than a separate stand-alone structure). Materials and finishes visible from outside should be similar in style and quality to the external materials used in the rest of the development.
- (4) Waste/recycling storage rooms must be located and designed in a manner that reduces adverse impacts upon the inhabitants of any dwellings on the site and upon neighbouring properties.
- (5) The location and design of the room should minimise adverse impacts associated with:
 - (a) the proximity of the room to any dwellings;
 - (b) the visibility of the room;
 - (c) noise generated by any equipment located within the room;
 - (d) noise generated by the movement of bins into and out of the room;
 - (e) noise generated by collection vehicles accessing the site; and
 - (f) odours emanating from the room.
- (6) Waste/recycling storage rooms must be of adequate size to comfortably accommodate all waste and recycling bins associated with the development.
- (7) The gradient of waste/recycling storage room floors and the gradient of any associated access ramps must be sufficiently level so that access for the purpose of emptying containers can occur in accordance with WorkCover NSW Occupational Health and Safety requirements.
- (8) Within waste/recycling storage rooms, containers used for the storage of recyclable materials should be kept separate from (but close to) general waste containers, so that the potential for contamination of recyclable materials is minimised.

15 Advertising and Signage

15.1 Application of Design Guidelines

This section outlines the design guidelines and controls for outdoor advertising within the Great Lakes local government area when:

- the erection of an advertising sign is proposed; or
- where a change in the structure, size, location, illumination or type of sign is proposed to an existing sign.

15.1.1 Objectives

- To provide opportunities for businesses, facilities and services to effectively and equitably communicate with the general public;
- To provide for directional signs to meet the needs of visitors and residents in finding facilities, places and services;
- To provide for effective advertising for the area's tourist attractions, commercial facilities and services;
- To ensure that advertising signs do not detract from the visual environment;
- To ensure that advertising signs do not have any adverse effects on road safety;
- To provide for an orderly display of advertising;
- To ensure that business performance is not detrimentally affected by inappropriate advertising signs which create visually chaotic environments; and
- To ensure that businesses and sign manufacturers have a clear understanding of Council's objectives and policies in relation to advertising signs.

15.1.2 Glossary

Advertisement area

Means:

- for a sign with only one side used for advertising, the area within the outline of that sign;
- for a sign with two sides used for advertising, the area within the outline of that sign; or where one sign is larger than the other, the area within the outline of the largest side;
- for any other signs, one third of the total surface area of the sign.

Commercial Sign

means an advertisement which contains only:

- (1) a reference to:
 - (a) the identification or description of the building or place;
 - (b) the identification or description of any person living or carrying on a lawfully established occupation in the building or place;
 - (c) particulars of any lawfully established occupation carried on or in the building or place; or
 - (d) any affiliation with a trade, professional or other association relevant to the lawfully established business carried out in the business or place, on which the advertisement is displayed; or
- (2) particulars relating to:
 - (a) any necessary or usual directions or cautions relating to the building or place or any lawfully established occupation carried on;
 - (b) goods, commodities or services dealt with or provided; or
 - (c) any lawful activities held or to be held;
at the building or place on which the advertisement is displayed; orinformation required or permitted to be displayed by or under any State or Commonwealth Act.

- (3) Signs which comprise product promotion only or as the major purpose of the sign will not be regarded as commercial signs.

Off-site Promotional Advertisement

means a sign that promotes goods, services or a special event. The goods or services need not be provided, produced or sold on the land or in the building, and the event need not take place on the land or in the building.

On-site Promotional Advertisement

means a sign that promotes goods, services, or a special event erected on the land or building upon which the goods or services are produced, sold or provided or where the events are to take place.

Temporary Sign

means an advertisement of a temporary nature which:

- announces any local event of a religious, educational, cultural, political, social, or recreational character or relates to any temporary matter in connection with such an event; and
- does not include advertising of a commercial nature (except for the name(s) of an event's sponsor(s)).

These signs may only be displayed for a period not exceeding 2 months in total in any one year.

(Temporary signs may include advertisements such as banners, bunting, posters, inflatable structures etc.)

15.2 Design Guidelines for Tourist Direction Signs

Objectives

- To provide clear and legible tourist direction signs in appropriate locations.

15.2.1 Town and Regional Tourism Promotion Sign

Definition:

Means a sign that advertises and directs the travelling public to a town or region.

Assessment Criteria:

- (1) There is opportunity for one Tourism Promotion sign on each major access road per town or village. In cases where more than one town or village wishes to advertise in the same location, only one structure is to be used.
- (2) The size of tourism promotion signs should relate to the population size as follows, signs advertising the region may be erected at each entrance point to that region. That is at either side of the local government area on the major highway.
- (3) Tourism Promotion signs must comply with the assessment criteria and performance measures for the particular zone and the design guidelines for the type of advertising structure(s) to be used.
- (4) Provisions of the Roads and Traffic Authority and Tourism New South Wales Tourist Signposting document (as amended) are to be applied when the proposed sign is to be located within a road reserve.

Population (no. of persons)	Sign size
Excess of 10,000	25 sqm
5,000 - 10,000	15 sqm

1,000 - 5,000	10 sqm
0 - 1,000	5 sqm

15.2.2 Tourist Facility Direction Sign

Definition:

Is a sign that directs the travelling public to tourist facilities. Tourist facilities in this category of sign primarily operate for the purpose of income generation.

Assessment Criteria:

- (1) A Tourist Facility Direction Sign provides direction to tourist facilities to assist the travelling public locate such facilities. These signs may contain commercial information but should principally be for the purpose of providing direction.
- (2) The maximum size of a Tourist Facility Direction Sign relates to the visitation rate of the facility. Two classifications of Tourist facility are recognised under this DCP:
 - (a) Regional significance: facilities of this significance generally have a visitation of vehicles per day and are open a minimum of 5 days a including either Saturday or Sunday.
 - (b) Local significance: all other tourist facilities associated with the settlement of the area. This would include most forms of accommodation and small scale recreation facilities.
- (3) Tourist Facility Direction Signs for facilities of regional significance should not exceed 10m². Direction signs for facilities of local significance should not exceed 5m².
- (4) Tourist Facility Direction Signs must comply with the assessment criteria and performance measures for the particular zone and the design guidelines for the type of advertising structure(s) to be used.
- (5) Provisions of the Roads and Traffic Authority and Tourism New South Wales Tourist Signposting document (as amended) are to be applied when the proposed sign is to be located within a road reserve.

15.2.3 Signs For Buildings or Places of Tourist Interest

Definition:

Means a sign that advertises and directs the travelling public to a building or place having landscape, historic, educational or other unique qualities that may be of interest to tourists.

Assessment Criteria:

- (1) Tourist interest is defined as (a building or place) having landscape, historic, educational or other unique quality(s) that may be of interest to tourists.
- (2) These signs must not include any commercial references.
- (3) Provisions of the Roads and Traffic Authority and Tourism New South Wales Tourist Signposting document (as amended) are to be applied when the proposed sign is to be located within a road reserve.

15.3 Design Guidelines for Advertising Signs in Various Zones

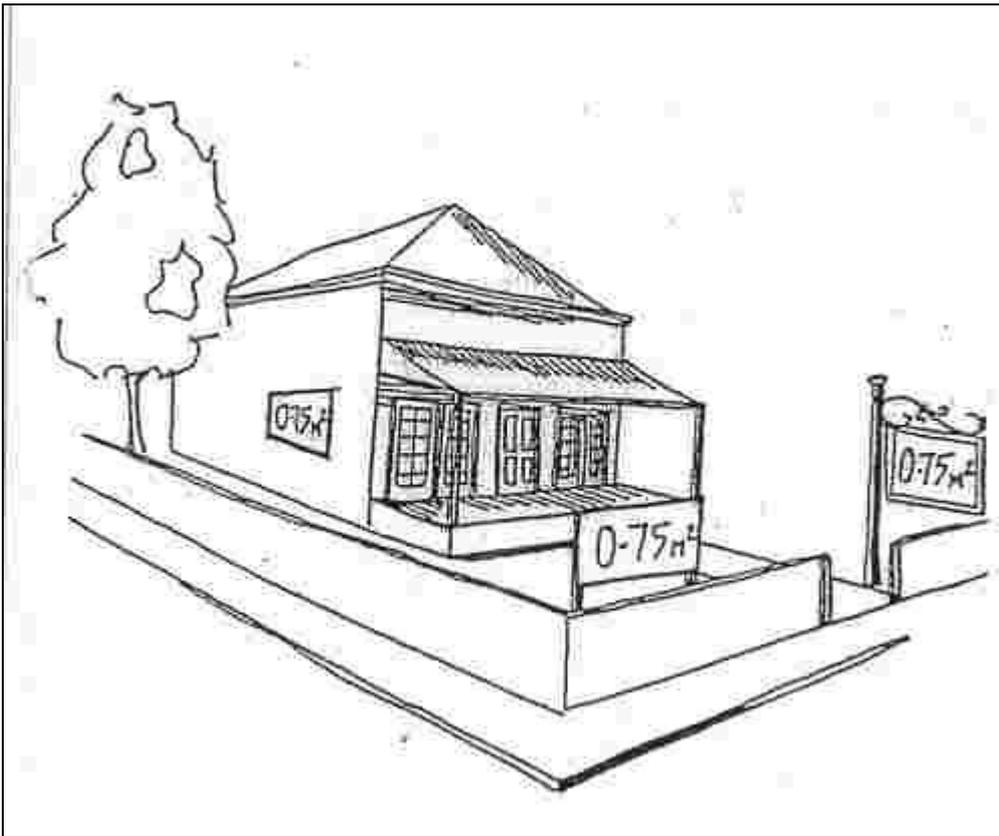
15.3.1 Residential Zones

Objectives

- The main aim of controls in residential areas is to minimise the visual impact of signs to preserve residential character.

Assessment Criteria:

- (1) There is a maximum of two (2) signs per premises.
- (2) The size, location and design of all signs must be compatible with the residential character of the surrounding area.
- (3) the size of signs must be related to the length of street frontage, the scale of development on the site, and the residential streetscape.
- (4) Illuminated signs must not be visible from residential properties and there must no spill of light beyond the site.
- (5) 'Free-Standing' signs shall only be permitted where it can be demonstrated that the sign will not be visually intrusive or contribute to sign clutter.
- (6) Signs must not be placed on walls facing adjoining dwellings.
- (7) Signs must be located wholly within the boundary of the subject property. In some cases consideration may be given to a sign on the fence fronting an arterial road.
- (8) Signs must not exceed 0.75sqm in area and must be located wholly within the boundary of the subject property. However, where there are legally established commercial premises, the maximum area of signs may be in excess of 0.75sqm, provided there is no detrimental impact into the surrounding residential area.
- (9) In general, signs within residential zones should be limited to commercial signs and tourist signs.
- (10) On-site promotional signs on buildings should be restricted to below the verandah level, where their impact on the appearance of buildings is not as great.



Advertising signs in residential zones (click here to view [original image](#))

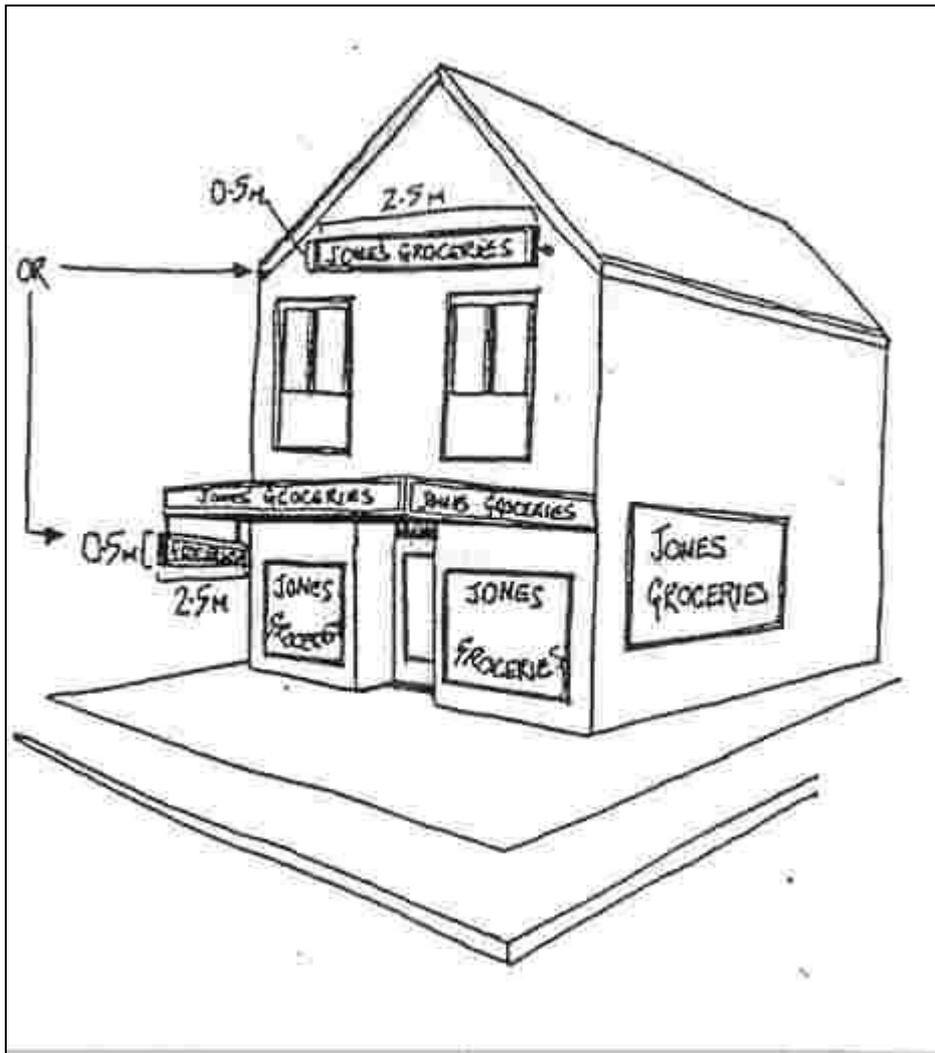
15.3.2 Business Zones

Objectives

Controls are generally aimed at reducing the unattractive appearance resulting from too many signs or ill-placed advertising.

Assessment Criteria:

- (1) Maximum area of a commercial sign in a commercial zone should not be in excess of 5.0m² unless otherwise specified in the Performance Measures of the zone in which the sign is proposed to be located.
- (2) In commercial zones, signs should be located below the level of the awning. Where there is no awning, signs located at a point less than 4.6m above ground level or below the level of the bottom of the first floor window, whichever is lower, and which cover no more than 50% of the area of the shopfront.
- (3) A maximum of four (4) signs are permissible per commercial premises which includes one awning sign, plus one suspended under-awning sign or projecting wall sign for every three (3) metres of shopfront length, not exceeding 2.5m in length and 0.5m in height and at no point less than 2.6m from ground level.
- (4) Signs must be compatible with the scale, character and design of the building on which they are displayed, and must not hide building detail.
- (5) The size and location of signs must generally be consistent with signs on adjoining buildings and must not reduce the visibility of other signs.
- (6) The size, location and design of signs must be compatible with the overall streetscape.
- (7) Signs should be related to the size of the shopping centre and must not be the dominant element.
- (8) Signs must not contribute to sign clutter in the area.
- (9) Repetitive signs should not be used.
- (10) There should only be limited use of signs above verandah level.
- (11) Sky signs will not be supported unless it can be demonstrated that the sign will be used in a positive way to create continuity of building form within the streetscape.
- (12) Pole signs must not be higher than the surrounding buildings.
- (13) Prominent display of street numbers on buildings is encouraged.
- (14) Use of sign themes in retail areas is encouraged as a means of providing a distinctive image for retail areas.
- (15) On-site promotional signs on buildings should be restricted to below the verandah level, where their impact on the appearance of buildings and the overall streetscape is not as great.
- (16) 'Free-Standing' signs shall only be permitted where it can be demonstrated that the sign will not be visually intrusive or contribute to sign clutter.



Advertising signs in business zones (click here to view [original image](#))

15.3.3 Industrial Zones

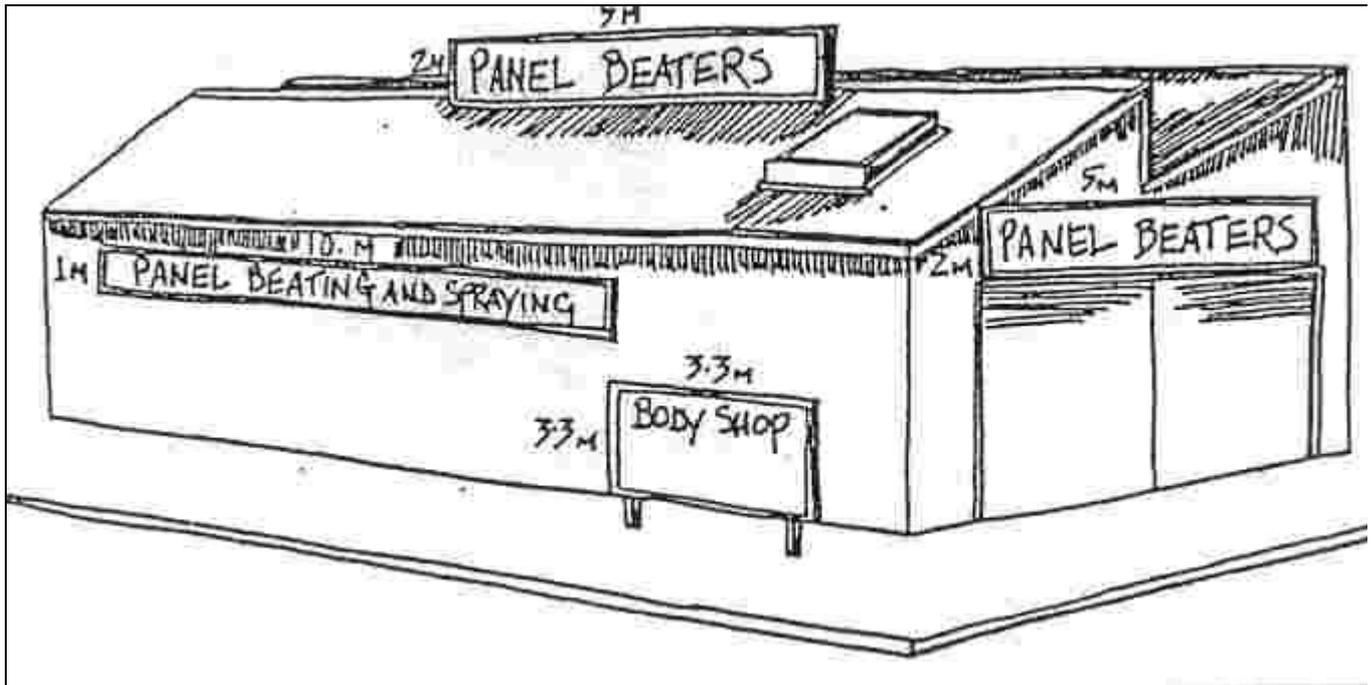
Objectives

- Controls are generally aimed at reducing the unattractive appearance resulting from too many signs or ill-placed advertising.

Assessment Criteria:

- (1) A maximum of four (4) signs are permissible per industrial premises, which do not exceed a total 10m² in area.
- (2) Directory boards should be provided at the entrance to self contained industrial estates, identifying the name of the estate and various occupants.
- (3) The number of signs must be limited to be four (4) per property.
- (4) The advertisement area of each sign must not exceed 10m².
- (5) Signs in multiple occupancy buildings should be of a uniform shape and size and should be located as close as possible to the occupancy to which they apply.
- (6) Where buildings are set back from the street frontage, pole signs or free-standing signs may be used close to the street frontage.
- (7) Off-site promotional signage on main roads should be limited to one sign which identifies and directs the travelling public to the industrial estate, rather than individual businesses.
- (8) 'Free-Standing' signs shall only be permitted where it can be demonstrated that the sign will not be visually

intrusive or contribute to sign clutter.



Advertising signs in industrial zones (click here to view [original image](#))

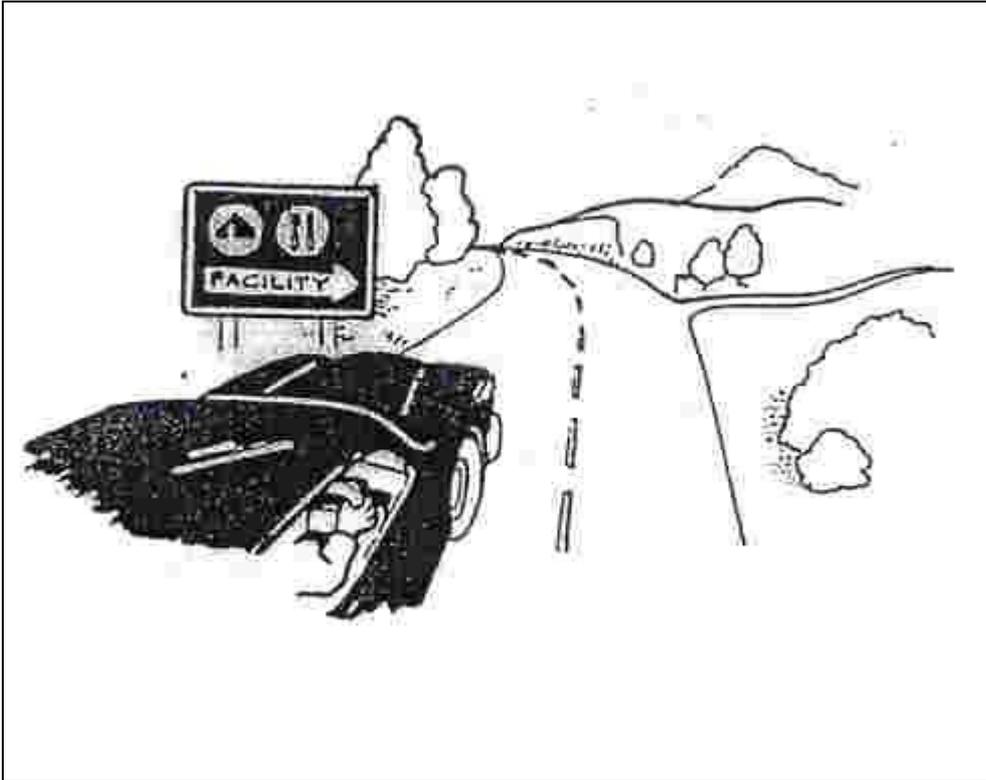
15.3.4 Rural Zones

Objectives

The major aim in rural areas is to minimise the impact of signs in order to preserve the rural or natural character whilst conveying only essential information to the travelling public.

Assessment Criteria:

- (1) Maximum area of a commercial sign in any other zone should not be in excess of 5.m² unless otherwise specified in the Performance Measures of the zone in which the sign is proposed to be located.
- (2) The number of signs must be limited to one sign per street frontage.
- (3) The letter size of signs should be formulated using the Australian Standards equation outlined in the '5. General Guidelines for Sign Design' in section of this document.
- (4) The location and design of signs must be compatible with the rural landscape character of the area.
- (5) Colours used in any signs must be unobtrusive and compatible with the surrounding landscape.
- (6) Signs must be designed so that they are clearly legible and do not cause any distraction to passing motorists.
- (7) 'Free-Standing' signs shall only be permitted where it can be demonstrated that the sign will not be visually intrusive or contribute to sign clutter.



Advertising signs in rural zones (click here to view [original image](#))

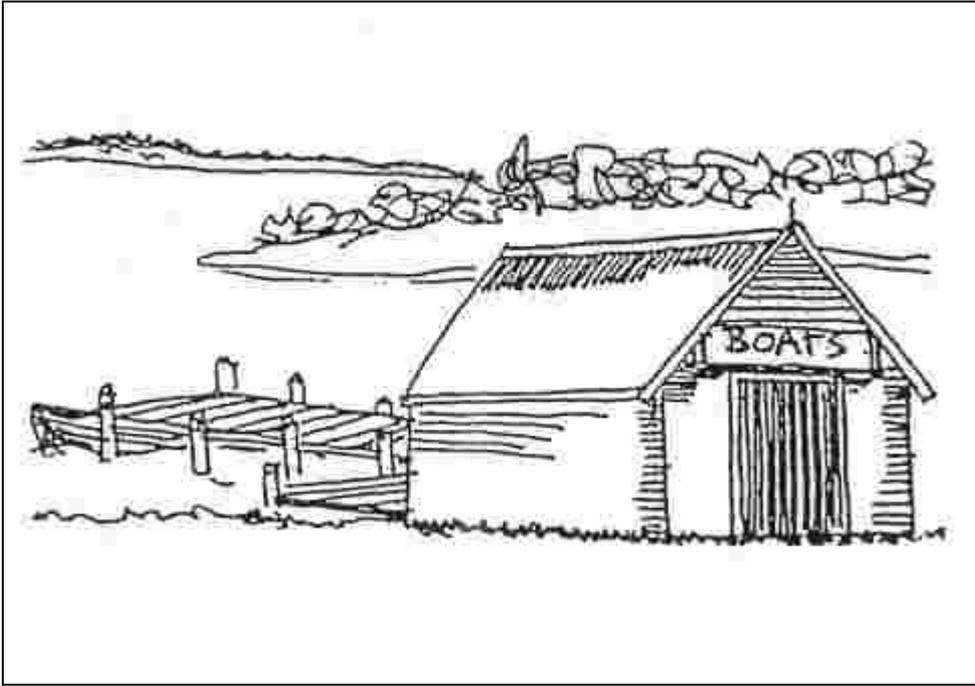
15.3.5 Special Use, Waterfront and all Remaining Zones

Objective

- Controls are generally aimed at providing only essential commercial signs in appropriate locations.

Controls

- (1) Maximum area of a commercial sign in any other zone should not be in excess of 5.0sqm unless otherwise specified in the Performance Measures of the zone in which the sign is proposed to be located.
- (2) Signs should generally be restricted to commercial signs and directional signs;
- (3) Signs must be limited to the minimum number necessary to adequately identify the premises;
- (4) the size of any sign should be related to the scale of the site and any building on which it is displayed;
- (5) the size, location and design of any sign should ensure that it will not detract from the surrounding streetscape, character or amenity of the surrounding area, and will not intrude into any adjoining residential area; and
- (6) commercial signs should be located and designed so that they are clearly legible from the street.
- (7) Signs must be compatible with the surrounding landscape without intruding on significant views, the environment or waterfront.



Advertising signs in special use, waterfront and all other unspecified areas (click here to view [original image](#))

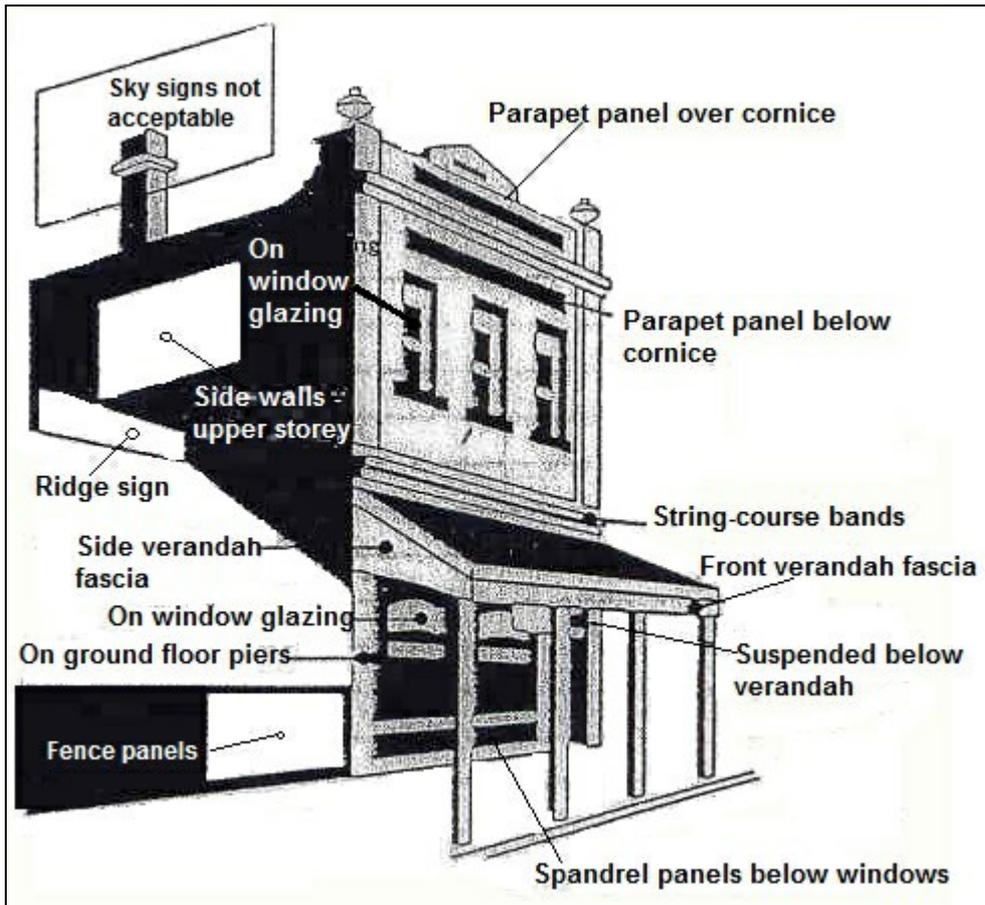
15.3.6 Heritage Conservation Areas and Items of Heritage Significance

Objectives

- Controls are generally aimed at providing only essential commercial signs in heritage conservation areas and on heritage items.

Assessment Criteria:

- (1) Maximum area of a commercial sign in any zone should not be in excess of 5.0sqm unless otherwise specified in the Performance Measures of the zone in which the sign is proposed to be located.
- (2) Only business identification and building identification signs are permissible on heritage items or on sites within conservation areas.
- (3) New signs must be capable of being moved or replaced without damaging the fabric of the building.
- (4) Signs should be placed in locations on buildings that were traditionally uses as advertising areas.
- (5) Neon signs and other internally illuminated signs, flashing signs and fluorescent and iridescent paints should not be used.
- (6) Appropriately placed and baffled external floodlights that illuminate the whole or part of the building facade (including signs) are encouraged.
- (7) Corporate image requirements should be adapted to suit specific requirements of the particular item or conservation area.
- (8) 'Free-Standing' signs shall only be permitted where it can be demonstrated that the sign will not be visually intrusive or contribute to sign clutter.



Advertising signs in heritage conservation areas and items of heritage significance (click here to view [original image](#))

15.4 Design Guidelines for Various Advertising Structures

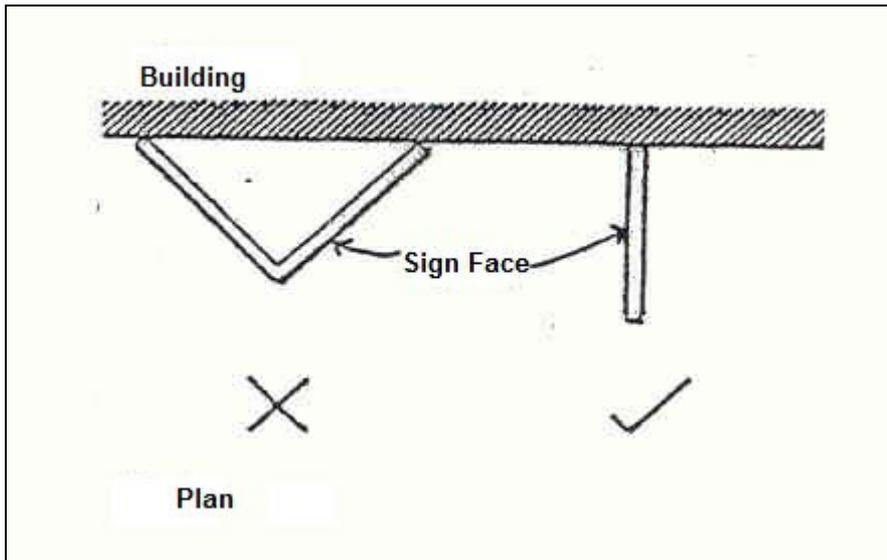
15.4.1 Above-Verandah Signs

Definition

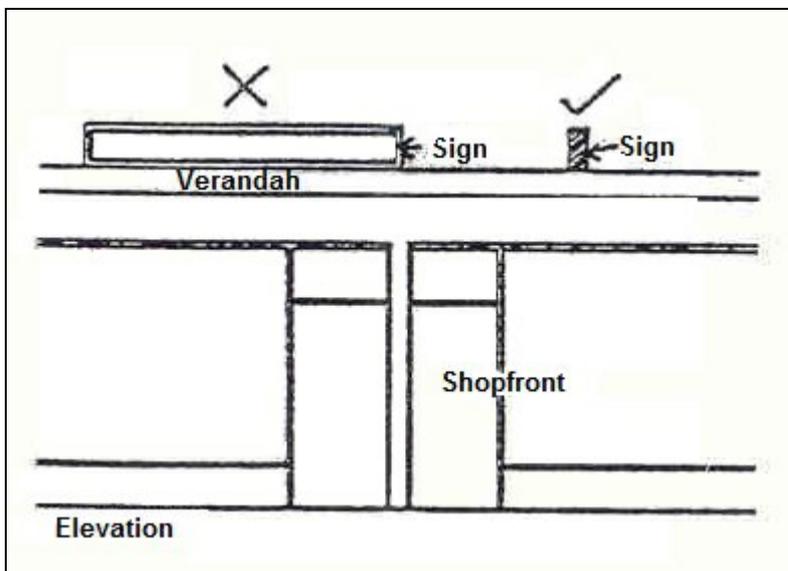
Means a sign above a verandah, and attached to or supported by a verandah.

Controls

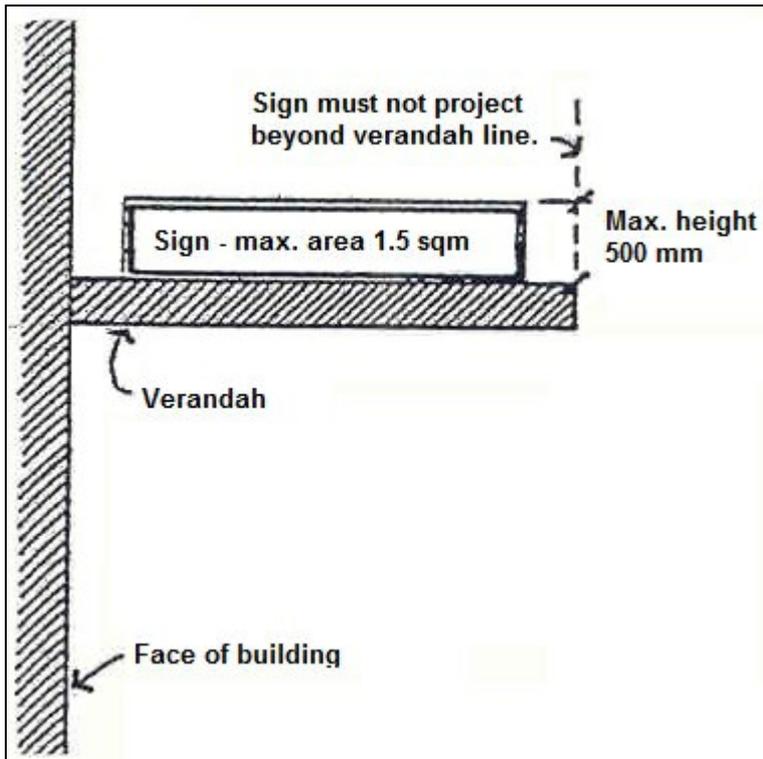
- (1) The sign must not project above the parapet of the building or top of the wall;
- (2) there must be no other signs on the building located on or above the verandah level, or where there is no verandah, more than 3.7m above the pavement;
- (3) the sign must have a maximum of two faces which must be parallel to each other;
- (4) the sign must not be greater than 1 m² in area, unless otherwise specified in the DCP for the Zone;
- (5) the sign must not project beyond the verandah line;
- (6) height of the sign must not exceed 0.5m above the verandah;
- (7) the sign must not be animated;
- (8) any supporting structure or electricity supply must not be visually intrusive or spoil the building's appearance; and
- (9) where there is a consistent theme, the sign must continue the theme.



Above verandah advertising sign location (click here to view [original image](#))



Above verandah advertising sign location (click here to view [original image](#))



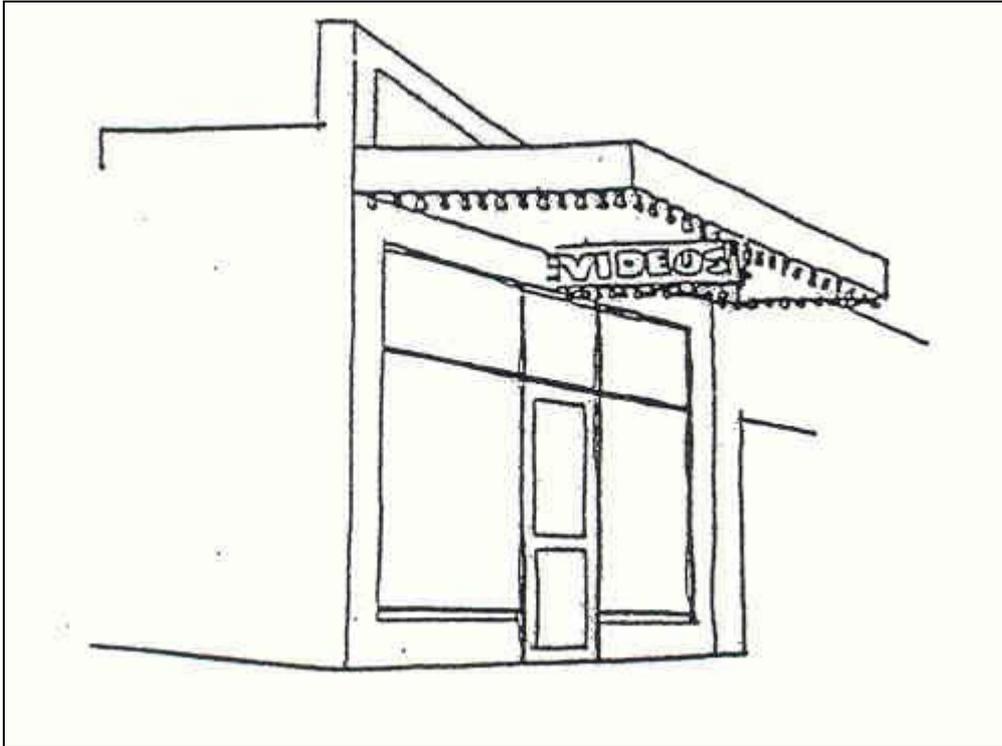
Above verandah advertising sign location (click here to view [original image](#))

15.4.2 Animated Signs

Controls

- (1) The sign must be located in an area where it will be compatible with the planned character for the area and will provide a positive contribution to that character;
- (2) the sign must not be visually intrusive;
- (3) the sign must be attractively and well designed;
- (4) the sign must not affect traffic safety by drawing motorists' attention away from road traffic conditions or traffic signs and signals, particularly in areas requiring high driver concentration, such as near signalised traffic intersections;
- (5) the sign must not be visible for any residential area; and
- (6) in the case of a commercial or promotional sign, the sign may only be animated when the business is open for trade.

Animated sign example



Example of an animated sign (click here to view [original image](#))

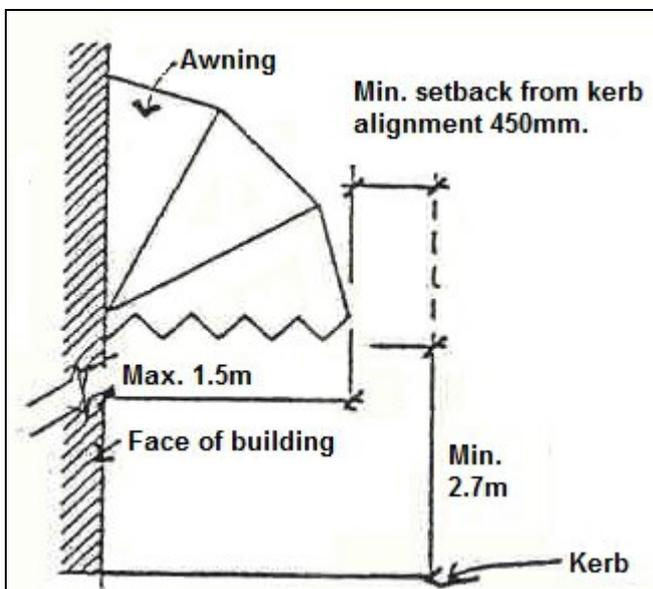
15.4.3 Awning Signs

Definition

Means a sign on an awning erected over a door or window of a building.

Controls

- (1) Any Awning:
 - (a) must have a minimum clearance of 2.7m from the pavement level;
 - (b) must project a maximum of 1.5m from the face of the building;
 - (c) must be setback at least 0.45m from the kerb alignment; and
 - (d) must have a size and profile that is compatible to the building design.



Awning sign location (click here to view [original image](#))

Controls

- (1) Any Awning Sign:
 - (a) must be painted onto or attached to the material of the awning, and must not project beyond the lines of the awning;
 - (b) the sign must not be animated or internally illuminated;
 - (c) the sign is restricted to a commercial sign only;
 - (d) must have a maximum height of 0.5m; and
 - (e) top of the awning sign must not be more than 3.7m above the pavement level.



Reproduced from City of Launceston Advertising Sign Guidelines

Example of an awning sign (click here to view [original image](#))

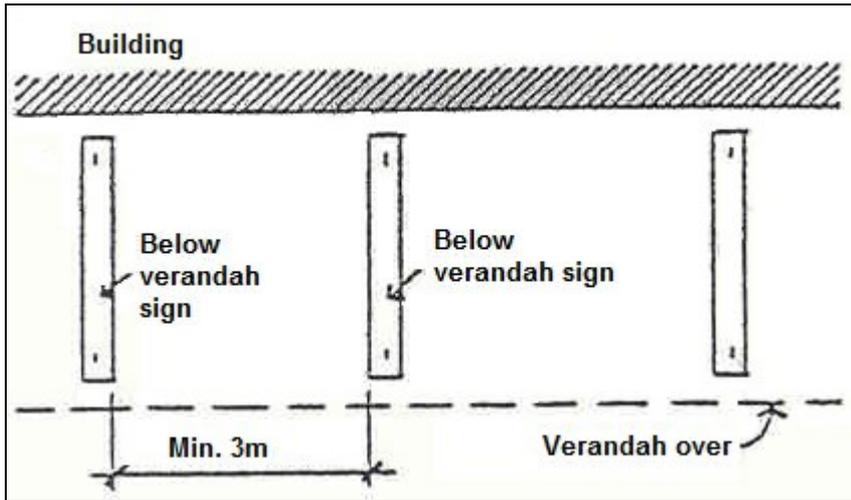
15.4.4 Below Verandah Signs

Definition

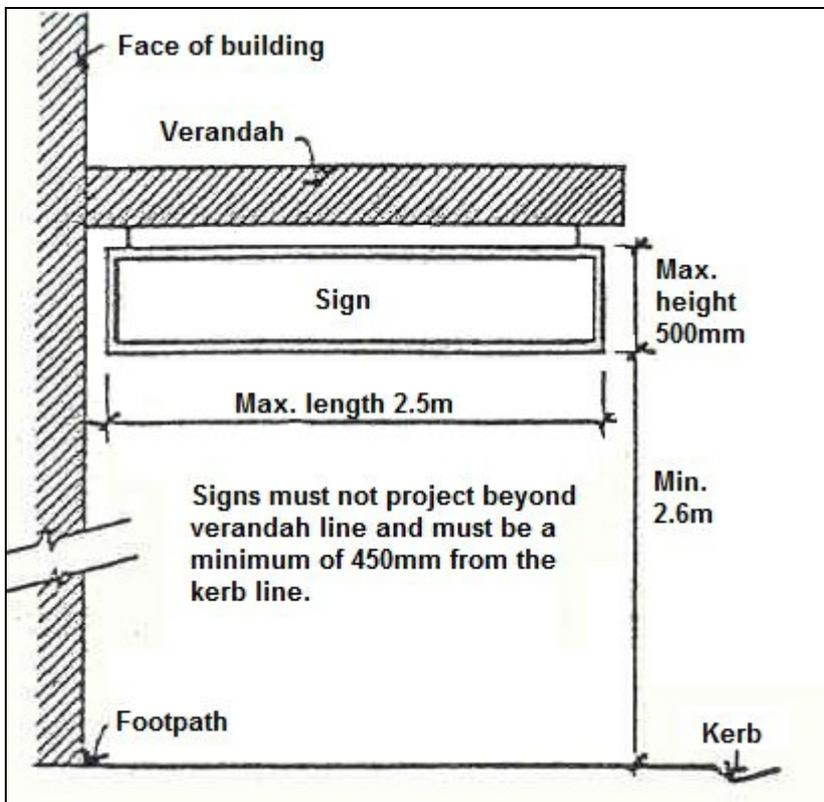
Means a sign below a verandah and attached to or suspended from the verandah.

Controls

- (1) The sign must have a minimum clearance of 2.6m from the pavement level;
- (2) the sign must have a maximum height of 0.5m;
- (3) the sign must not project beyond the verandah line, or exceed 2.5m in length, which is the shorter;
- (4) the sign must not be erected within 3m of any other below-verandah signs or projecting wall sign;
- (5) the sign must not be animated;
- (6) the sign must be securely suspended from the verandah;
- (7) any supporting structure or electricity supply must not be visually intrusive or spoil the building's appearance; and
- (8) the sign must only be a commercial sign.



Below verandah advertising sign location (click here to view [original image](#))



Below verandah advertising sign location (click here to view [original image](#))

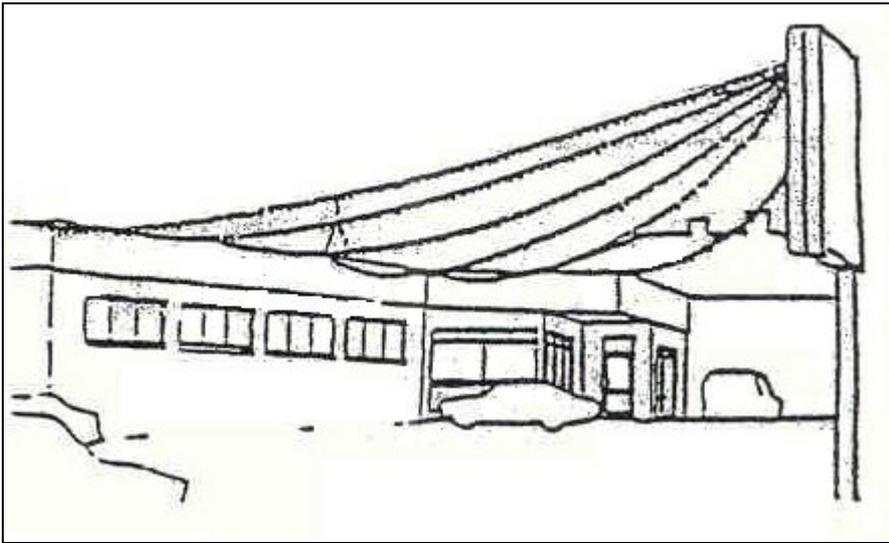
15.4.5 Bunting Signs

Definition

Means an advertisement that consists of bunting, streamers, windvanes or the like.

Controls

- (1) The sign may only be displayed for a period not exceeding 2 months in total in any one year;
- (2) the sign may only be used for the purposes of announcing a local event of a religious, educational, cultural, political, social, sporting or recreational character and relates to any temporary matter in conjunction with such an event; and
- (3) the sign must not include advertising of a commercial nature (except for the name(s) of an event's sponsor(s)).



Example of a bunting advertising sign (click here to view [original image](#))

15.4.6 Flag/Banner Signs

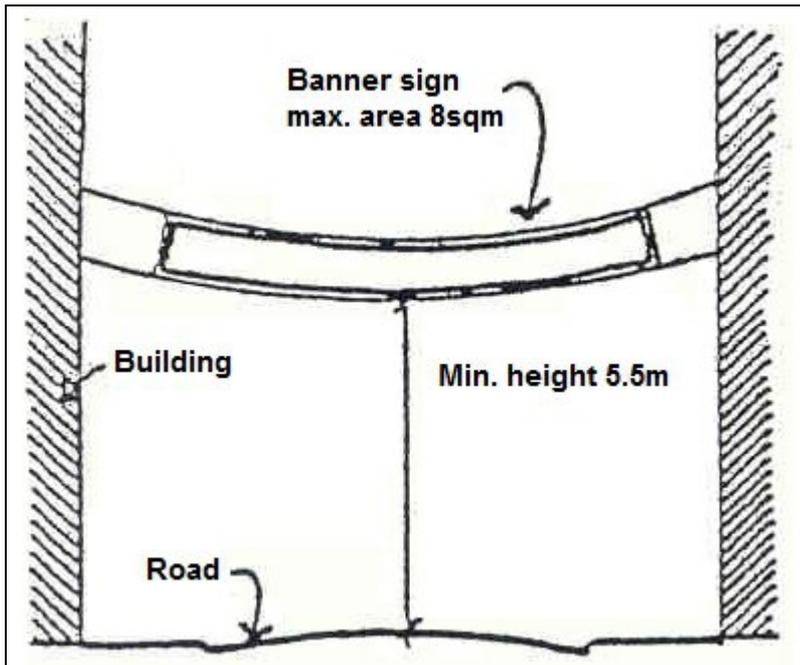
Definition

Means an advertisement that consists of flags/ banners or the like.

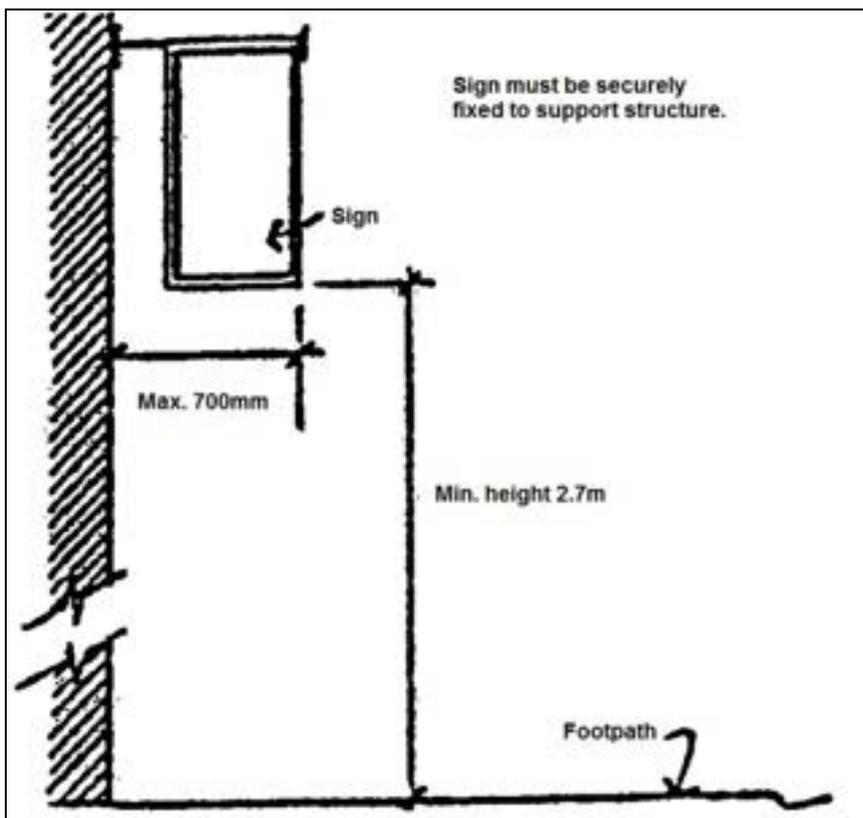
Controls

- (1) Rigidly Suspended Banner Sign:
 - (a) the sign must have a minimum clearance of 2.7m above the pavement level;
 - (b) the sign must have a maximum projection of 0.7m from the face of the building; and
 - (c) the sign must be securely fixed to the support structure.
- (2) Flag Signs:
 - (a) the sign must have a maximum area of 5m²;
 - (b) the sign must have a minimum clearance of 4.5m from the pavement level; and
 - (c) the sign must properly maintained and must be removed or replaced within 9 months from the time the sign was erected.
- (3) Suspended Banner Signs:
 - (a) the sign must have a maximum area of 8m²;
 - (b) where the sign is suspended over any road or public space, the sign must be a minimum of 5.5m above the pavement level;
 - (c) the method of supporting the sign must be approved by Council; and
 - (d) the sign must be removed within 8 weeks from the time the sign was erected.
- (4) Semi-rigidly Suspended Banner Sign:
 - (a) the sign must have a minimum clearance of 2.7m above the pavement level;
 - (b) the sign must have a maximum projection of 0.7m from the face of the building;
 - (c) the sign must be securely fixed to the support structure; and
 - (d) the sign must be properly maintained and must be removed or replaced within 9 months from the time the sign was erected.

Sign location



Suspended banner / flag advertising sign location (click here to view [original image](#))



Banner / flag advertising sign location (click here to view [original image](#))

15.4.7 Floodlit Signs

Definition

Means a sign illuminated by external lighting provided for that purpose.

Controls

- (1) Floodlights must be suitably located and baffled and the level of illumination controlled to ensure that there will

- be no spill of light onto any adjoining site;
- (2) floodlights must be suitably located and baffled and the level of illumination controlled, to ensure that motorists on any nearby road will not be distracted by the floodlighting;
 - (3) the area of any floodlit sign must not be more than 3m², unless otherwise specified;
 - (4) the total area of floodlit signs on any building may not exceed 5 m², unless otherwise specified;
 - (5) the sign must be at least 30m from pedestrian or traffic lights;
 - (6) in the case of commercial or promotional signs, the sign must only be illuminated during times when the business on the land is open for trade; and
 - (7) the floodlights must be located so that they do not detract from the appearance of the site or cause any obstruction to pedestrians.

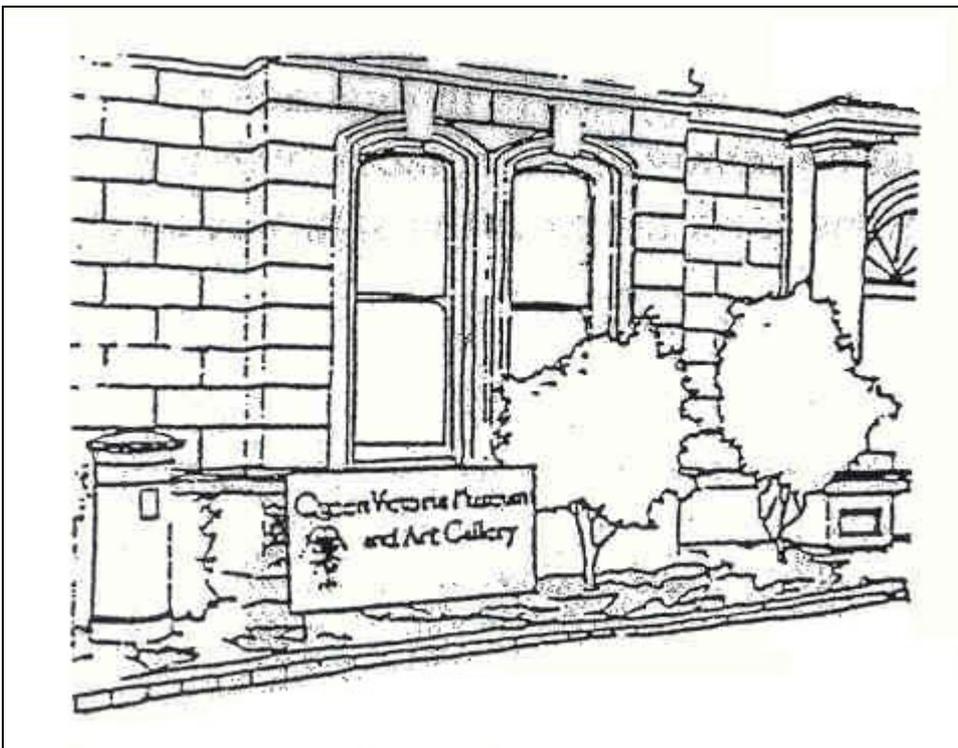
15.4.8 Free-Standing Signs

Definition

Means a low-level sign on a structure that is not part of any building and which is not a pole sign.

Controls

- (1) the area of a free-standing sign permissible without consent must not be more than 5 m², unless specified differently in any guideline relating to the zone;
- (2) a free-standing sign permitted without development consent must have a maximum of 1.5m above ground level;
- (3) the sign must be located entirely within the site;
- (4) there must only be one (1) free-standing sign on any street frontage to the site;
- (5) the sign must not be internally illuminated or animated; and
- (6) the support structure for the sign must not detract from the appearance of the sign and should either be incorporated into the sign design or, apart from the supports below the sign, hidden from view.



Example of a free-standing advertising sign [\(click here to view original image\)](#)

15.4.9 Internally Illuminated Signs

Definition

Means a sign illuminated by internal lighting or which contains lights or illuminated tubes arranged as an advertisement.

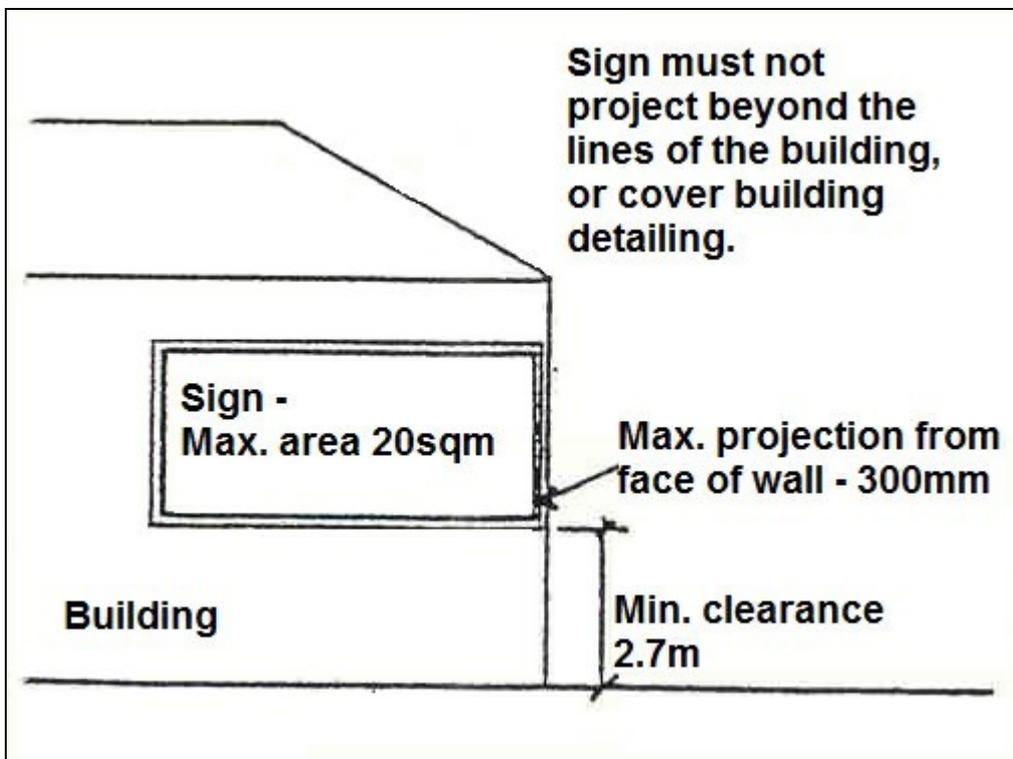
15.4.10 Panel Signs

Definition

Means a sign with an advertising area exceeding 10m² and which is not animated or internally illuminated.

Controls

- (1) Panel signs erected on a building:
 - (a) must not exceed 20m² in area;
 - (b) must be fixed flush with the wall of the building;
 - (c) must not project beyond the lines of the wall on which it is fixed, or cover any window or other building detail;
 - (d) must have a minimum clearance of 2.7m above the ground; and
 - (e) must not project more than 0.3m from the face of the wall.
- (2) Free-Standing panel signs:
 - (a) must have a maximum of two faces which must be parallel to each other; and
 - (b) shall only be permitted where it can be demonstrated that the sign will improve the appearance of the area, by obscuring unsightly view or other means.



Panel advertising sign location (click here to view [original image](#))

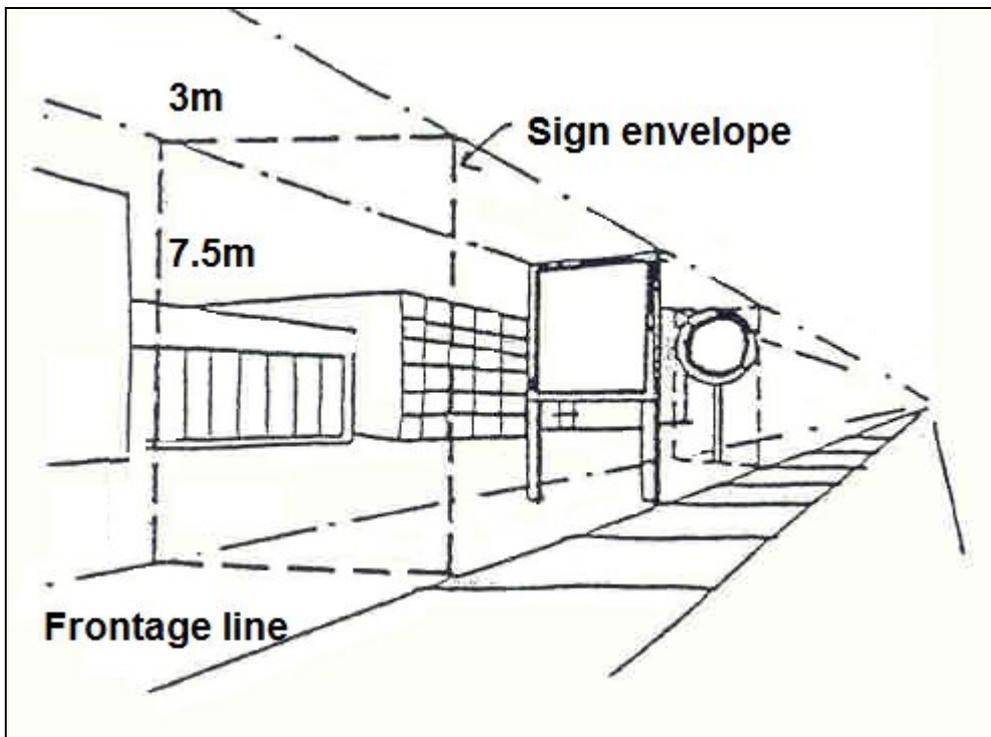
15.4.11 Pole Signs

Definition

Means a free standing sign on one or more vertical supports and which is more than two metres in height.

Controls

- (1) The sign must not exceed 7.5m in height (measured from the ground to the top of the sign), unless it can be demonstrated that the sign will not visually intrude into the surrounding streetscape/ landscape, and will not dominate other signs in the area;
- (2) the advertisement area of the sign must not exceed 5.0m², unless
 - (a) it can be demonstrated that the sign will not visually intrude into the surrounding streetscape/ landscape, and will not dominate other signs in the area; or
 - (b) the guidelines for the zone specify otherwise;
- (3) where the sign projects over a footpath or access road, the sign must have a minimum clearance of 2.7m from the pavement level;
- (4) there must only be one pole sign on any site, unless in the opinion of Council more than one sign is justified because of the size of the site, or because the site has frontages to two or more streets;
- (5) the sign must be located entirely within the site;
- (6) the sign must not be an animated sign;
- (7) where the sign is to be located in a shopping centre or other centre where there are adjacent buildings, the sign must not project above the ravelin of the adjacent buildings;
- (8) the sign must not obstruct views to other signs on the site or on adjoining land; and
- (9) where the sign is to be located in a building setback area from the street frontage, the sign should be contained within a 3m by 7.5m envelope located on the street frontage and at right angles to the frontage.



Pole advertising sign location (click here to view [original image](#))

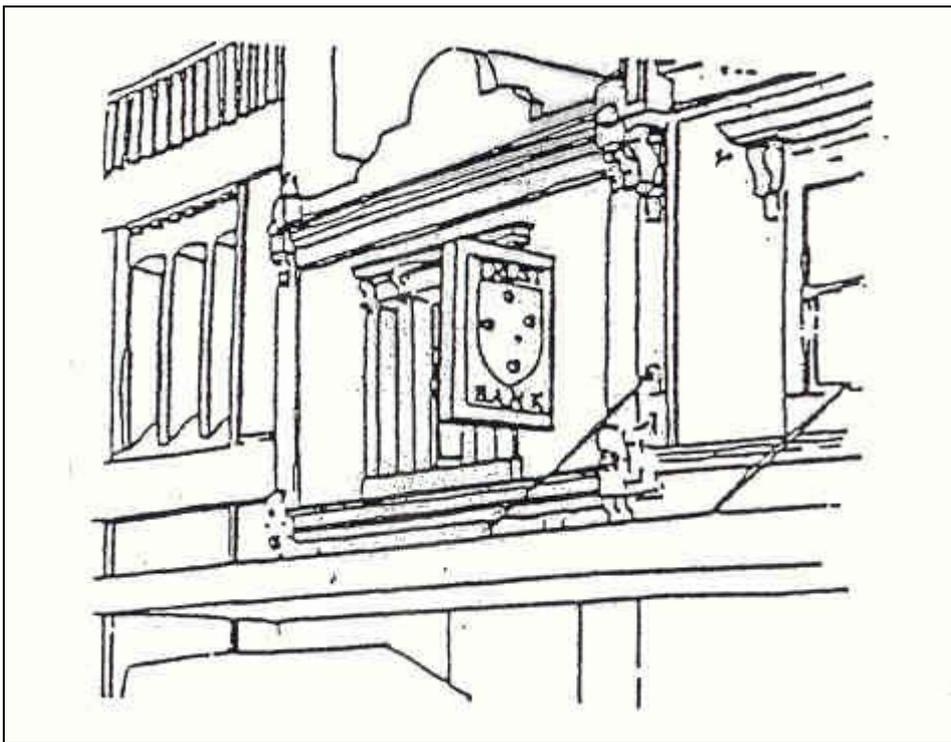
15.4.12 Projecting Wall Signs

Definition

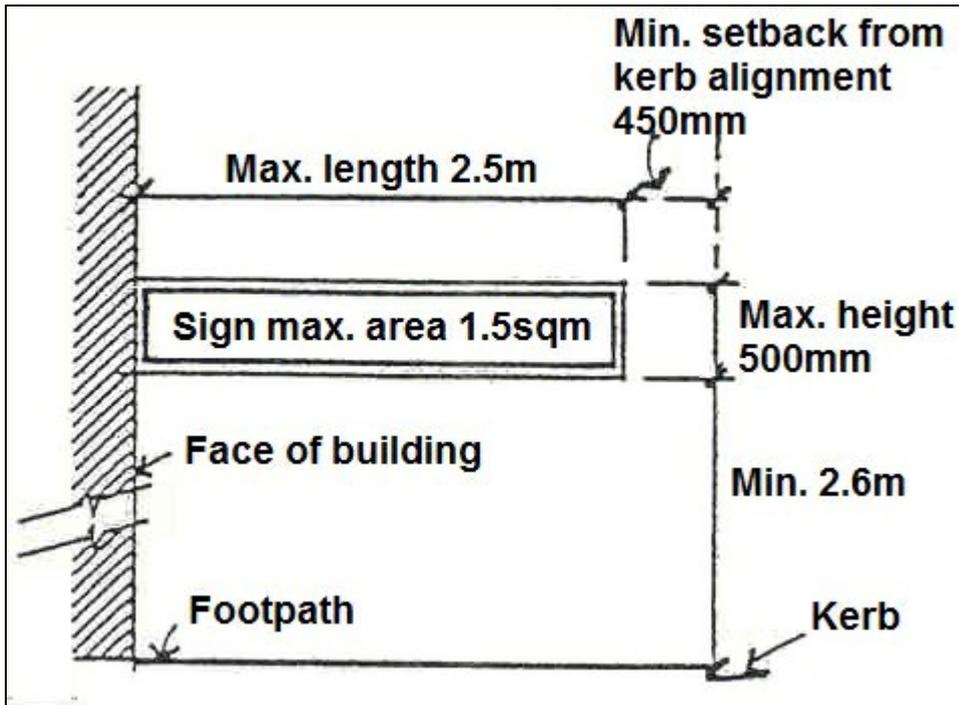
Means a sign attached to and projecting from the wall of a building and which is more than 2.6 metres above the pavement and projects more than 300mm from the face of the building.

Controls

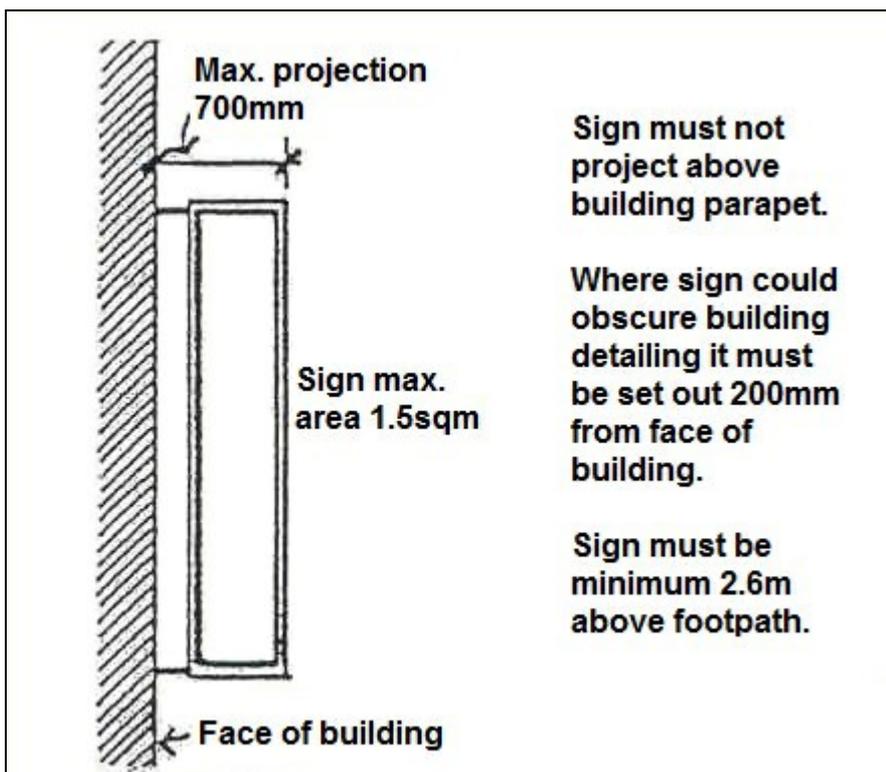
- (1) The sign must have a maximum of two faces which must be parallel to each other;
- (2) the sign must be at right angles to the face of the building on which it is located;
- (3) in those zones where projecting wall signs are 'as of right', the sign must not exceed 2.5m in length and 0.5m in height. Any differentiation of these measurements will require development consent;
- (4) where the sign has a vertical orientation, the sign must have a maximum projection of 0.7m from the face of the building, and where it could obscure building detailing, must set out 0.2m from the face of the building;
- (5) the sign must not project above the parapet of the building;
- (6) the sign must not be an animated sign;
- (7) the sign must be 3m apart (shopfront length) from any other projecting wall sign;
- (8) where there is a verandah, the sign must a maximum of 0.6m above the verandah, and must not project beyond the verandah line;
- (9) the sign must not have a supporting structure or electricity supply (if required) that is visually intrusive or spoils the building's appearance; and
- (10) where there is a consistent theme in sign orientation or location in the surrounding area, the sign must continue that theme.



Example of a projecting wall advertising sign (click here to view [original image](#))



Projecting advertising sign location (click here to view [original image](#))



Projecting wall advertising sign location (click here to view [original image](#))

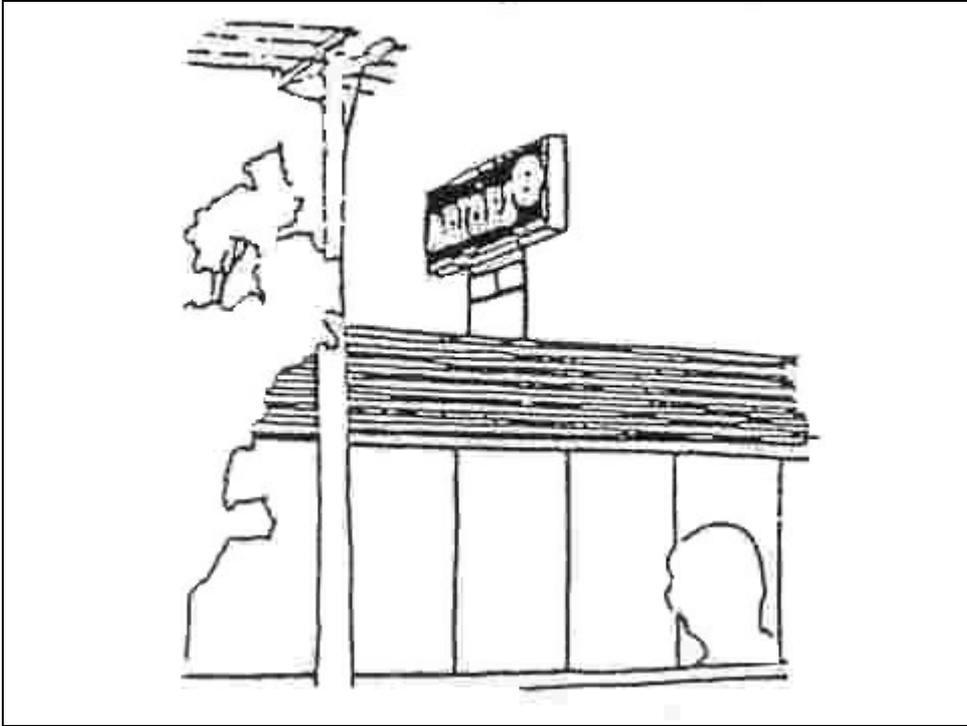
15.4.13 Sky Signs

Definition

Means a sign that is either on or above the roof of a building (but not on a verandah), or a sign that is fixed to the wall of a building and which projects above the wall.

Controls

- (1) The sign must not be animated or internally illuminated;
- (2) the sign must improve the surrounding streetscape by providing continuity of building line or other measures;
- (3) where the sign is permissible without consent the sign must be a commercial sign.



Example of a sky advertising sign (click here to view [original image](#))

15.4.14 Verandah Fascia Signs

Definition

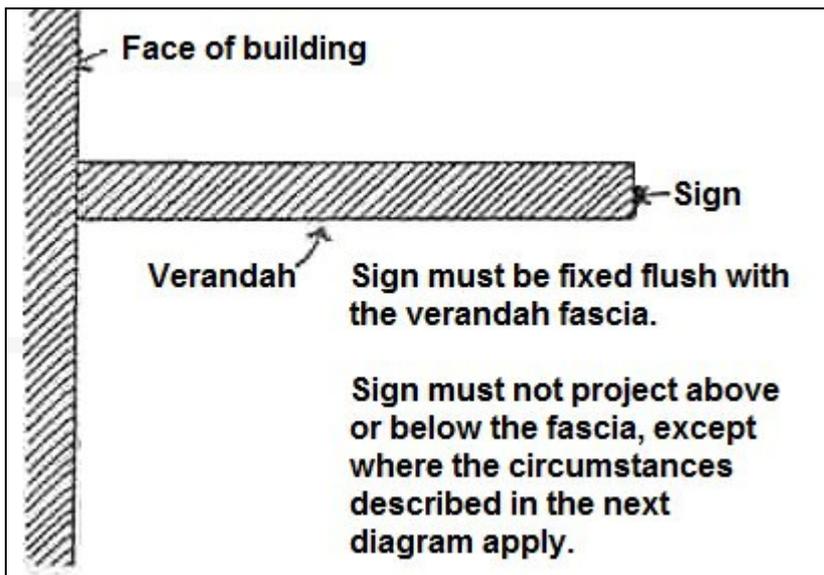
Means a sign on the front or side fascia of a verandah.

Controls

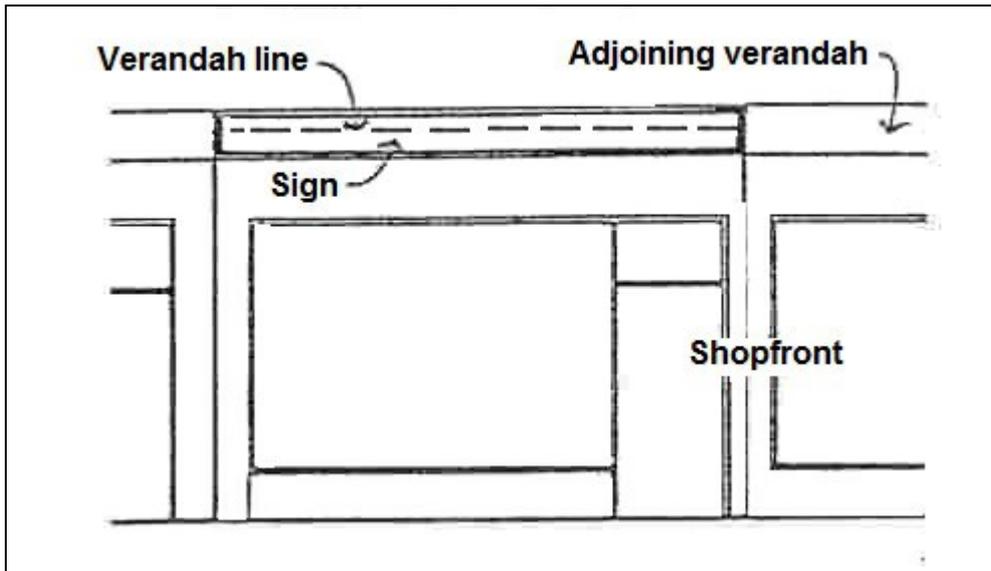
- (1) The sign must not be animated or internally illuminated;
- (2) the sign must be fixed flush with the verandah fascia; and
- (3) the sign must not project above or below the verandah to which it is attached, unless there is an opportunity to create continuity in the verandah line with the adjoining building.



Example of verandah fascia advertising sign (click here to view [original image](#))



Verandah fascia advertising sign location (click here to view [original image](#))



Verandah fascia advertising sign location (click here to view [original image](#))

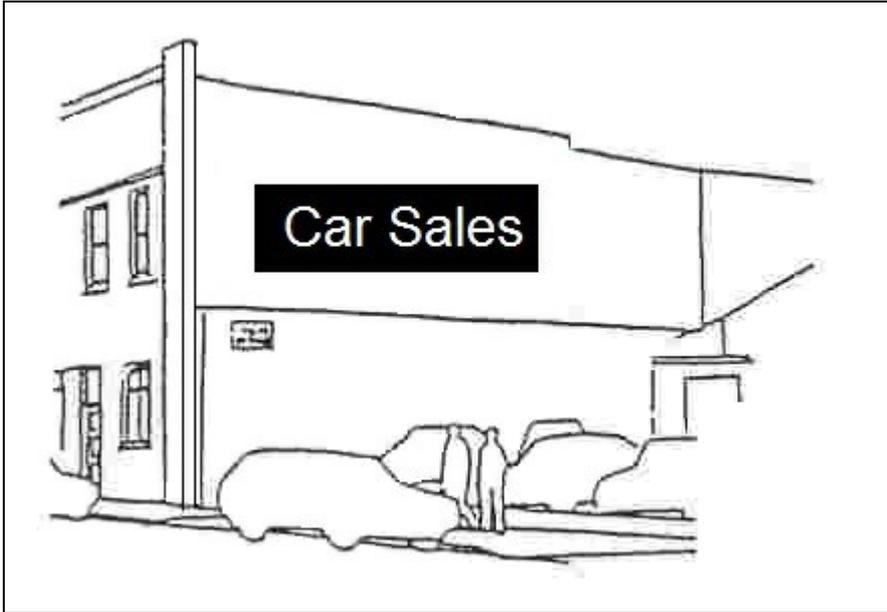
15.4.15 Wall Signs

Definition

Means a sign painted onto or attached to the wall of a building, and either.

Controls

- (1) located on the side or rear wall of a building; or
- (2) located on a wall facing onto a street, and above the verandah (or where there is no verandah, more than 3.7 metres above the pavement).
- (3) the sign must be fixed flush with the wall of the building;
- (4) the sign must not project beyond the lines of the building;
- (5) the sign must not be animated.
- (6) In the case of a wall sign on the side or rear wall of a building:
 - (a) the number of signs on the wall must be no more than two (2);
 - (b) the area of the sign must not be more than 10m² unless otherwise specified in the advertising sign guideline for the zone in which the sign is to be located.
- (7) In the case of a wall sign on the wall facing onto a street, on or above the verandah level, there may be no other signs on the building, on or above the verandah level.



Example of wall advertising sign (click here to view [original image](#))

15.5 Matters for Consideration in the Assessment of Applications

15.5.1 Development Assessment

In addition to the [Environmental Planning & Assessment Act 1979](#), Council is to also required to consider the following matters when determining an application for advertising:

- (1) The need for appropriate and effective identification of businesses.
- (2) The need to reduce sign clutter in order to maximise the effectiveness of business identification signs.
- (3) The need to encourage signs that are effective and legible.
- (4) The effect of the proposed sign on existing signs in the area.
- (5) The need to avoid visual disorder and sign clutter.
- (6) The effect of the proposed sign on the amenity and landscape character of the area.
- (7) The effect of the proposed sign on the architecture of the building on which it will be displayed and the surrounding streetscape.
- (8) The relationship of the area and height of the proposed sign to the scale of the building on which it will be displayed; the surrounding buildings; the space in which it will be located; the size of other signs in the area; and the surrounding townscape/ streetscape.
- (9) Any advertising pattern or theme that has been developed for the area.
- (10) The effect of the proposed sign on road traffic signs and signals, through the creation of background clutter.
- (11) The distraction that could be caused by the proposed sign in an area requiring high driver concentration.
- (12) The views of the Roads Traffic Authority if the sign is an animated, floodlit, internally-illuminated, panel, reflective or sky sign to be displayed within 60 metres of a main road that is a freeway, state highway or other road declared under the [Roads Act 1993](#).
- (13) Whether the proposed sign complies with the guidelines that have been prepared for the zone in which it is to be located, and specifications for the particular type of sign.

15.5.2 Construction Approval

Certain advertising structures may require construction approval. Applicants should consult with the Great Lakes Council Planning and Environmental Services section to ascertain whether a Construction Certificate is required for the proposed advertising structure.

15.5.3 Existing Signs

Signs given development consent prior to the date of this Development Control Plan (DCP) coming into effect are not subject to the advertising design guidelines this DCP. However, any changes to the structure, size, location, illumination or type of an existing sign (with development consent) would be subject to the design guidelines of this DCP.

15.5.4 Maintenance of Signs

Advertisements and advertising structures shall be maintained to a high quality finish. That is, advertisements are to be kept clean or freshly painted and be of a professional standard.

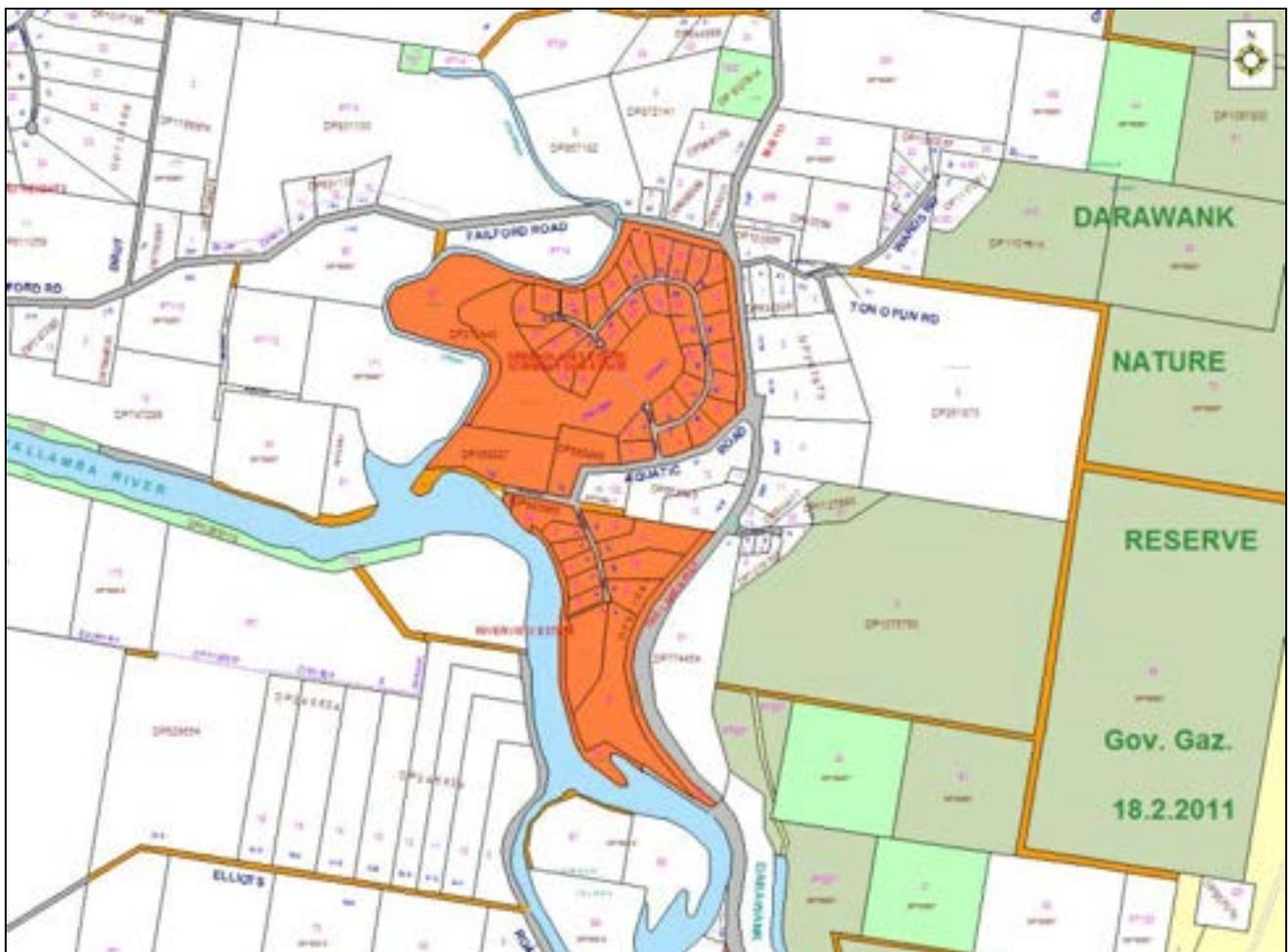
16 Site Specific Development Controls

The following site specific controls are in addition to the general and specific controls contained in previous sections of this Plan. These controls have been developed as a result of the preparation of a master plan for the nominated sites which have been adopted by Council.

Where a local area plan exists, the key objectives of such plans are to:

- Provided additional detailed guidelines to specific local areas.
- Ensure that future development within the specific local area is consistent with the broad site planning principles and any local environmental study findings and recommendations.
- Ensure that the unique features and environment of the site is considered when planning for future development.
- Ensure a balance between reasonable development, standard provisions, protection of amenity of adjoining lands and unique site opportunities.
- To protect the amenity of residents within new and existing buildings and ensure that built form is complementary to the scenic values of the landscape and environment.

16.1 Aquatic Road, Riverview Place and Glider Avenue, Failford



Site location plan ([click here to view original image](#))

16.1.1 Development Controls

Access

- (1) All access to development subject to this part shall be via Aquatic Road.
- (2) All public reserves which front a public road are to be fenced in order to restrict vehicles gaining direct access onto Tuncurry or Failford Roads.

- (3) Any costs associated with improvements to Aquatic Road, including the intersection with Tuncurry Road are to be shared on a per allotment basis over the land the subject of this plan.
- (4) An erosion and sediment control plan for the road works should be prepared and lodged with the development application.

Flooding

- (1) A development application for subdivision of the land must identify a flood free building site with height of no less than 3m AHD. This site must be behind the building lines/s and have a minimum area of 1000m².
- (2) The floor level of all dwellings erected on the land shall be a minimum of 0.5m above the 1% flood level of 3m AHD.
- (3) The finished surface of all roads on the land shall be above 2.72m AHD.

Setbacks

- (1) No building shall be erected closer than 18metres to a road.
- (2) No building shall be erected closer than 30 metres from a public reserve.

Public Reserves

- (1) A public reserve of 30m width shall be provided along the full frontage of Tuncurry and Failford Roads.
- (2) A public reserve of 20m width shall be provided along full frontage of Bungwahl Creek.
- (3) A public reserve of 20m shall be provided along the full frontage of Wallamba River.
- (4) A public boat launching ramp together with provisions for the parking of cars and boat trailers is to be provided adjacent to the Wallamba River [to be built by the applicant to detailed plan and specifications approved by Council and Public Works Department].
- (5) Pedestrian access of 4m width is to be provided between the road network and Bungwahl Creek public reserve.

Landscape Plan and Tree Clearing

- (1) A landscape plan is to be prepared for that part of the land within Lot 52 DP 774454, including the areas set aside as public reserve. The landscaping should substantially comprise tree species which are native to the area.
- (2) It will be a condition of development consent that the landscaping be carried out in accordance with the landscape plan prior to the endorsement of the plan of subdivision.
- (3) Existing vegetation should be retained wherever possible. Clearing of trees must be approved by Council. On forested lots up to 1.5ha, no more than 2000sqm should be cleared. On larger lots, some additional areas may be considered on merit.

16.2 Aquatic Road and The Lakes Way, Failford



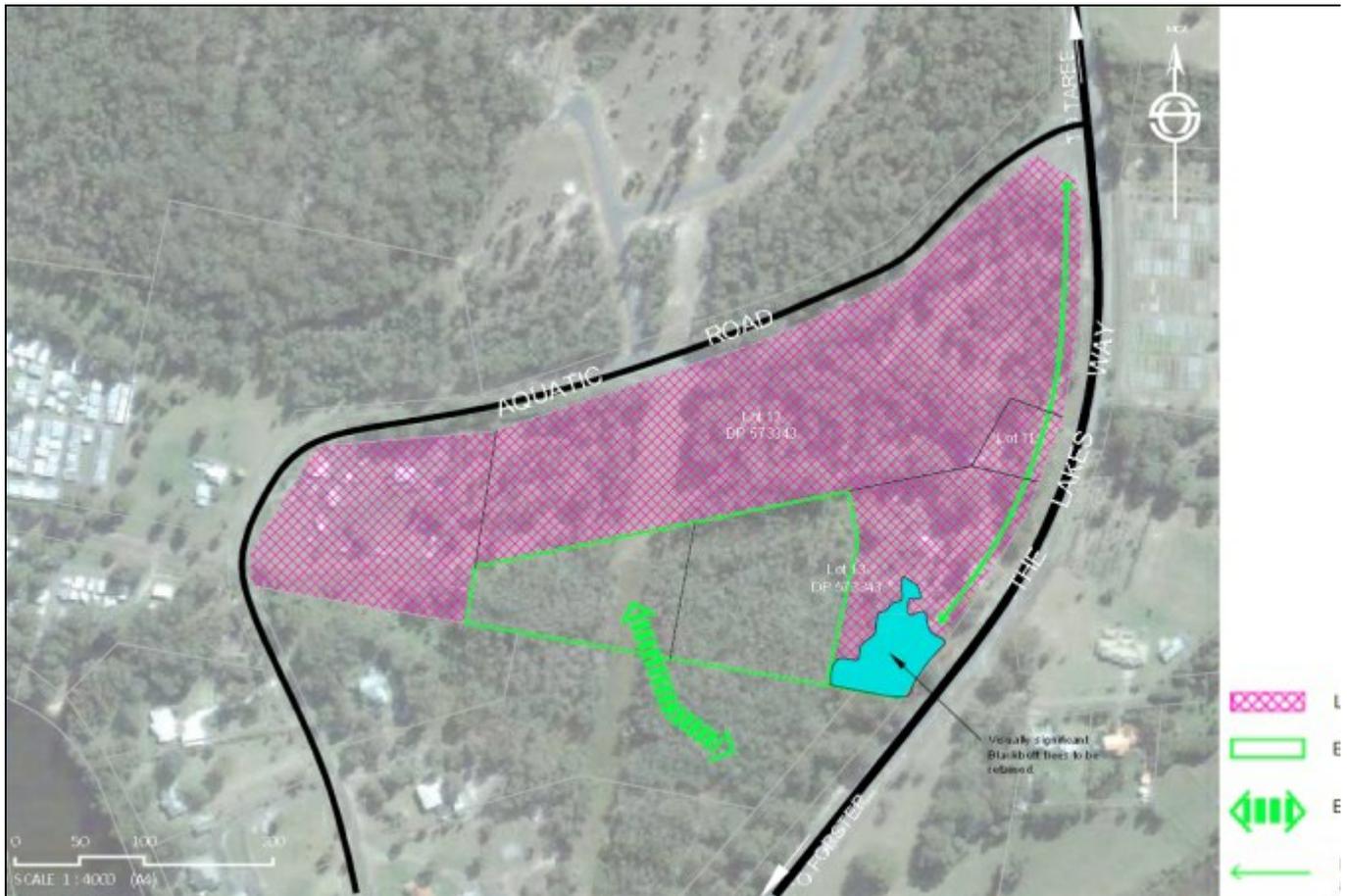
Site location plan (click here to view [original image](#))

16.2.1 Desired Future Character

The desired future character of the rural residential lands within the Aquatic Road Precinct is to reflect the relaxed rural character of large lot residential development to the north, whilst encouraging sustainable development of the land.

The Precinct Structure Plan illustrates the potential future development pattern and envisages low-scale rural residential development with small pockets of vegetation being retained to reinforce the bushland setting.

Protection of the area from natural hazards including flooding, bushfire and reflecting surrounding land uses will influence the future urban form. The overall built form of the locality is to be of a low key, relaxed design suited to a large lot residential location.



Structure plan (click here to view [original image](#))

16.2.2 Controls

- (1) Any subdivision of Lot 13 DP 573343 that generates additional traffic movement to and from The Lakes Way will only be permitted if a Traffic Impact Assessment has been prepared and submitted with the development application which demonstrates that safe sight distance and turning requirements can be met and if approved by Council and the Roads and Maritime Services. Access for all other lots in this precinct is to be gained via Aquatic Rd.
- (2) Development Applications for subdivision must propose allotments that will be large enough to contain the required Asset Protection Zone (APZ's) without impacting on environmentally zoned land or retained trees on the development site.
- (3) Any development on the site that is likely to disturb any archaeological relics will require a permit under the National Parks and Wildlife Act, 1974.
- (4) Buildings should be sited so that they do not have a dominant presence from any roads or any neighbouring dwelling.
- (5) Studies have identified two (2) potential flooding issues in relation to the subject land, namely flooding caused by backwater flooding from the Wallamba River, and flooding in the swamp forest area (mostly zoned E2 which is influenced by the capacity of the under road culvert in Riverview Place. As such a minimum floor level will be required (currently assessed at 4.25m AHD) for this local flooding area (upstream of the under road culvert). The final floor level should be confirmed with Council as it is likely that the level will change as further information becomes available on the impacts of climate change.

16.2.3 Conservation Measures

Objectives

To ensure habitat areas and fauna movement corridors are maintained and are available for the safe movement of

Site location plan (click here to view [original image](#))

16.3.1 Objectives

- To achieve the planning objective underlying the Great Lakes Local Environmental Plan controls for areas zoned B2-Local Centre;
- To address the underlying objectives of the Tuncurry Town Centre for the subject land, identified as a special site nominated to provide a visual focus for the Tuncurry business centre and to improve its pedestrian environment;
- To address appropriately those design matters nominated by Council for coverage by this site-specific Plan;
- To include provisions to encourage tourism development;
- To protect the visual amenity of, the natural scenic quality of, and views to and from, the coastal area;
- To make provision for the ten design quality principles of SEPP 65 and take into account the Residential Flat Good Design Code;
- To consider additional matters raised by Council officers (i.e. water table impacts, stormwater principles, traffic study esp. re. parking demand, services, landscaping, acoustic impacts);
- To consider the provisions of the Government's Coastal Policy 1997 and the Coastal Council's Design Guidelines Discussion Paper;

16.3.2 Vision

The Bellevue Hotel (the subject land), is a key site located in the centre of the Tuncurry CBD. Its business zoning permits with Council consent the land's development for a wide range of commercial, retail and residential uses consistent with the site's higher order status.

The subject land has long been associated with a prominent hotel operation, and it is considered important that it should remain so. The site is also identified for the short-term accommodation provided by the on-site motel. It is considered appropriate that any redevelopment of the land continue to offer both a licensed hotel and short-term accommodation, with the opportunity for expanded convention and function facilities and further residential usage within the tower elements above, possibly operated as serviced apartments. Such residential usage thus involves the requirements of SEPP 65 - Design Quality of Residential Flat Development.

Ground level uses should activate the street frontage to Manning Street and possibly also Beach Street, with a combination of hotel/cafe seating and assorted retail uses providing ready access to the covered footpath.

The ground and first floor uses should be built to the Manning Street boundary, but be set back from Beach Street to allow for vehicular access, landscaping and improved pedestrian amenity. Buildings are to be set back off Bakers Lane to allow for improved privacy, additional town centre car parking, and the introduction of street tree plantings to soften the built form and improve amenity generally.

Any development of the subject land be preceded by the preparation and adoption of a site-specific Plan to provide detailed provisions controlling the nature of any development, and nominating a number of additional guidelines for the Plans coverage to ensure that:

- Bulk and massing of site buildings minimises overshadowing.
- Any development enhances the image of Forster/Tuncurry.
- Buildings integrate with the surrounding streetscape.
- Wind impacts are minimised.
- Traffic impacts are minimised.
- Site landscaping is of comparable scale.
- Manning Street setbacks and awning protection be respected.
- Pedestrian plaza arrangements to be incorporated if appropriate.

16.3.3 Primary Development Controls

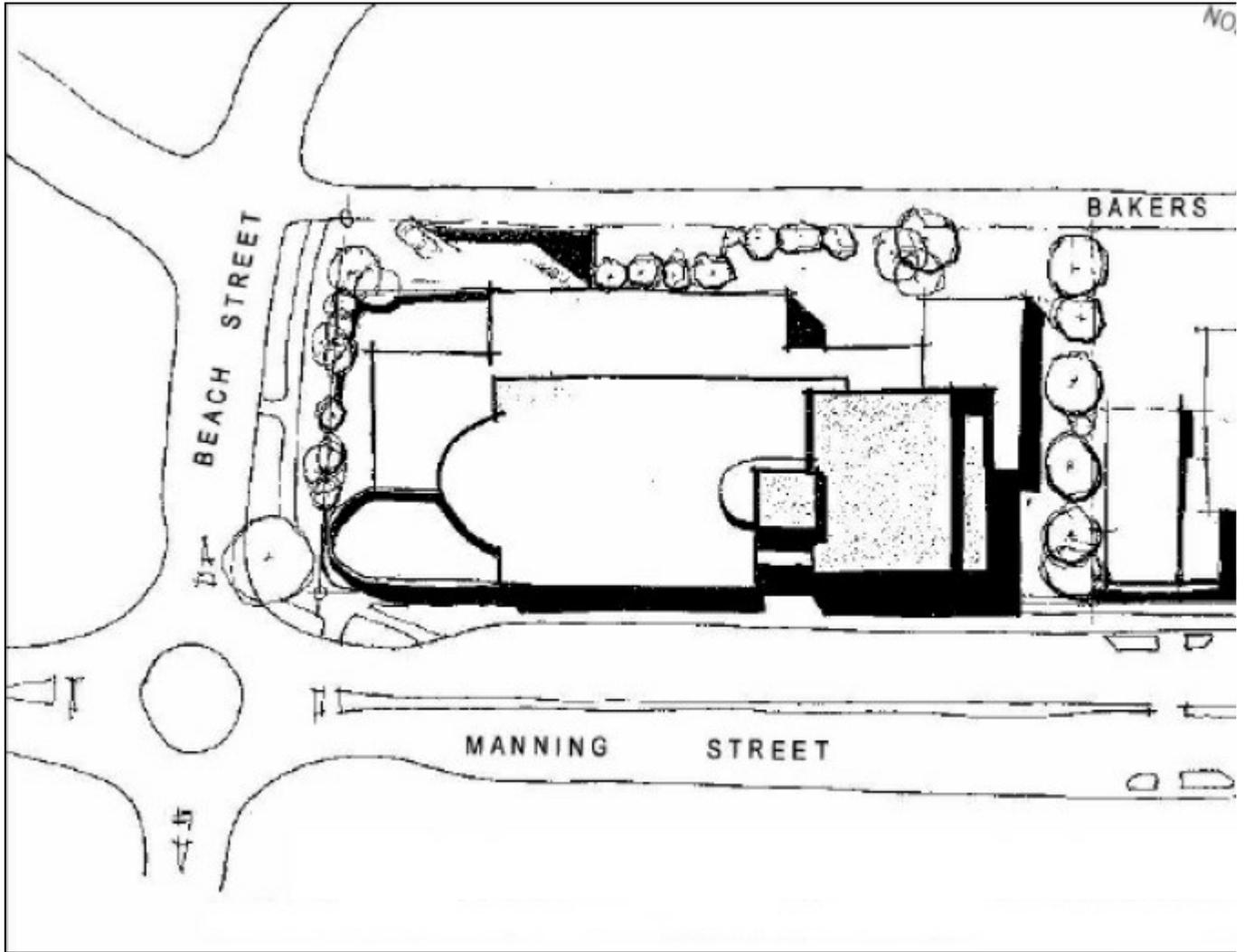
Building Massing

Objectives

- To define the desirable built form massing across the site that accommodates the planning objectives for the land while at the same time generating acceptable impacts on nearby land. The embodied principles expressed by these envelopes are as follows:
 - A two-storey podium structure built to the Manning Street frontage and to the western half of the Beach Street frontage, to reinforce and activate those streets, and set back to the remaining two property boundaries to the east and south.
 - Four -storey above-podium building at the northern end of the site and oriented north-south, located in the western part of the site and addressing both Manning and Beach Streets, and stepping back at upper levels to reduce perceived height;
 - Seven-storey above-podium building running east-west across the middle of the subject land, set back and stepped back to provide for generous building separations for privacy and cross-site views, and built form articulation for architectural interest;
 - A north-south opaque glassed walkway linking these two tower elements designed to reduce wind effects caused by the typical on-shore breezes.
- The envelope controls for the 'corner building' have been defined having regard to:
 - Minimising overshadowing impacts on residential land to the east;
 - An appropriate presentation towards the north, marking the dominant CBD entry point for approaching motorists;
 - The need in this landmark site, to step up to the taller building in the centre of the site, rather than the reverse, which would create unreasonable massing impacts on the CBD and its users.
- The envelope controls for the southern building are a function of:
 - The need to step up from the shorter buildings to the north and south;
 - The need to present the southern building's narrower elevation toward Manning Street and Bakers Lane;
 - The aim of achieving good separation from the buildings to the north and south, both for amenity and cross-site views;
 - The objective of stepping back at upper levels to reduce apparent scale, to achieve interesting modelling and to improve amenity for users and neighbours alike.

Controls

- (1) The floorspace of the habitable area of a building, as defined by Great Lakes Local Environmental Plan 2013 is not to exceed 80 per cent of the building envelope shown. This "80 per cent rule" is designed to accommodate and encourage:
 - (a) Vertical and horizontal articulation;
 - (b) Generous external wall thicknesses for facade depth;
 - (c) Generous balcony areas within the envelope;
 - (d) Generous provision of lifts and stairs, circulation and other spaces internal to the building.
- (2) Unenclosed areas such as balconies may occasionally extend beyond the building envelopes for amenity/lifestyle purposes and/or to add articulation, architectural interest or maritime theme where external impacts (such as bulk, overshadowing and privacy) are not exacerbated.
- (3) The indicative building massing plan provided below illustrates the general concept envisaged.



Indicative building massing plan (click here to view [original image](#))

(4) Finished Floor Levels

- (a) The floor level of the proposed building shall be equivalent to the existing ground level at the Manning Street frontage to maximise opportunities for integration at street level and the uses above must relate well to street front activity and provide good disabled access.
- (b) Generous floor-to-ceiling dimensions are required, to provide for good user amenity and daylight access, and enable future flexibility for adaptation to alternate uses. Accordingly the recommended ground-to-ceiling heights are as follow:

Levels	mm
Ground and first floor	3400-3700
Levels above	2700 habitable rooms
Levels above	2400 non-habitable rooms
Topmost floor	2500

Allowing 300mm on each floor for slab, structure and services and 1000mm to top of building, the height of the taller tower will be no greater than 30.7 metres above existing ground.

(5) Façade Composition and Articulations

- (a) The building envelope controls provide for a significant degree of vertical articulation as the building forms respond to the variable setbacks. The "80 per cent rule" introduces further opportunity for varied facade composition and articulation, In addition it is important that the Manning Street front elevation be 'segmented' into podium elements no wider than 10 metres, in order to achieve a street front rhythm

typical of main street environments. Monolithic architecture is to be avoided.

- (6) Roof Treatment
 - (a) The building envelope anticipates a relatively flat roof structure which conceals lift over-runs and service plant. Roof forms are to:
 - (i) generate an interesting skyline; and
 - (ii) relate to the size and scale of the building, the building elevations and 3D building form.
 - (b) The visual impact of roof fixtures (e.g. vents, plant, solar collectors, mobile phone transmitters and satellite dishes) is to be minimised. The inclusion of an architectural roof fixture such as a mast is permitted with the consent of Council where it enhances the maritime character of the building.
 - (c) Outdoor recreation areas are permitted with Council consent on the roof of the buildings, with the exception of the southern tower where such use will result in any associated structures exceeding the maximum building height of 30.7 metres.

Public Domain Interface

It is important that the Manning Street 'mainstreet' environment be strengthened by any redevelopment of the Bellevue Hotel land, and to a lesser extent the frontage of Beach Street as well.

To achieve this requires close attention to three key elements discussed below:

- (1) The built form;
- (2) its active use; and
- (3) accommodating pedestrians.

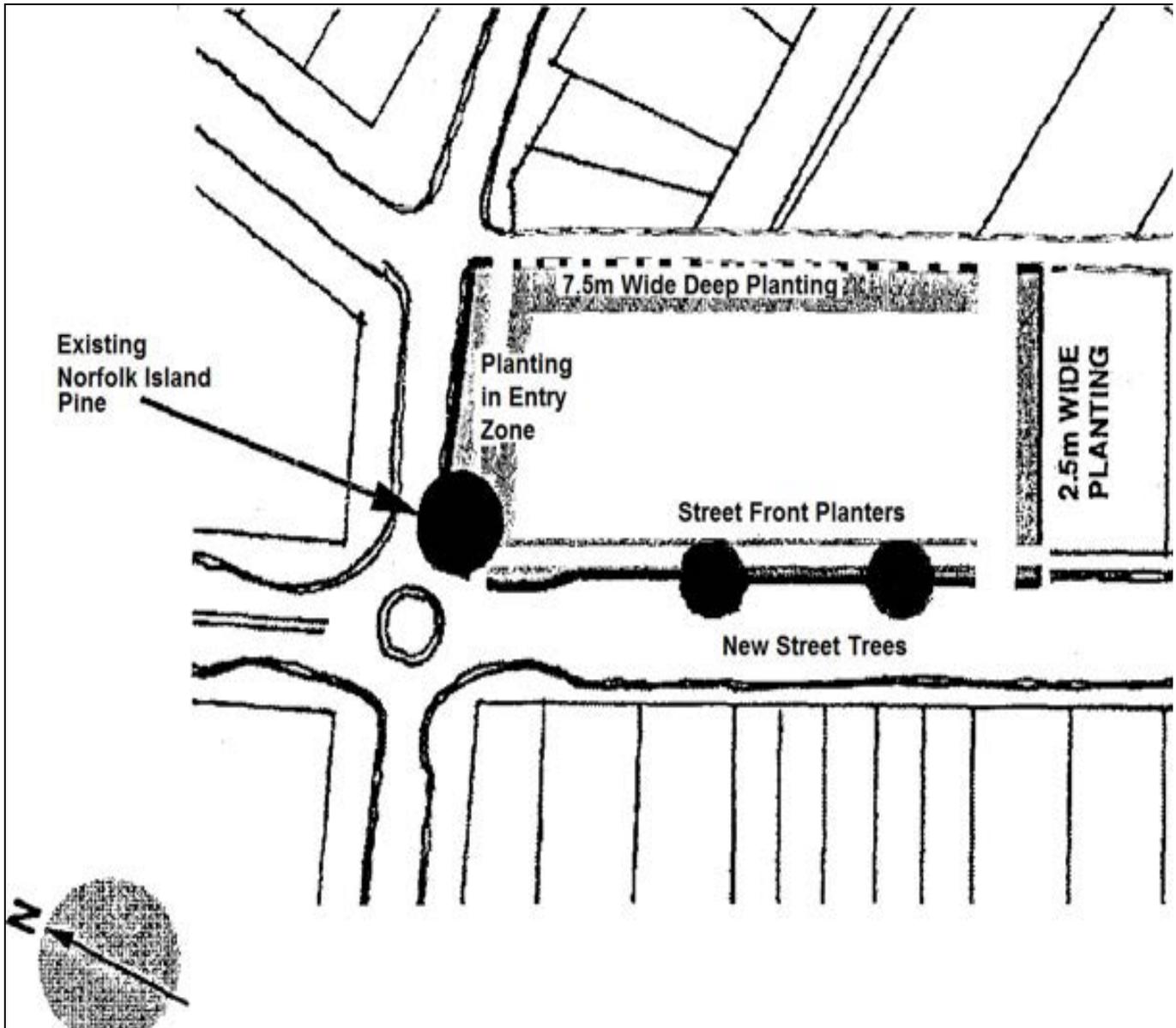
Controls

- (1) The built form on Manning Street frontage is to be two storeys at nil setback, in order to achieve continuity of street-front activity and appropriate built form 'enclosure'.
- (2) The Manning Street setback is able to include alfresco decks at the ground floor where such have been designed to maintain a sense of enclosure to the street via balustrade walls, appropriate awnings and the like as illustrated in the Indicative Building Massing Plan.
- (3) Active land uses are to be located adjacent to and provide casual surveillance over Manning Street and Beach Street.
- (4) The primary pedestrian accesses to the non-residential land uses are to be provided off both Manning Street and Beach Street. Pedestrian access to the residential apartments is to be provided off Manning Street and/or Beach Street.
- (5) Detailed analysis of the existing traffic conditions is required as part of any Development Application. This is to explore options for traffic management at the intersection of Parkes/Bakers/Beach Street, such as a roundabout. Primary vehicle access into the site is not to be provided from Manning Street.
- (6) Any vehicle access from Beach Street is to primarily service non-residential land uses, such as the hotel rooms and conference facilities. This access may include a basement car park driveway and a porte-cochere. These features must be designed to provide adequate turning paths and so as not to interfere with the Beach Street bus layback. The achievement of this control is to be addressed in the traffic report.
- (7) The Bakers Lane property boundary is to incorporate the egress from the existing through-site link, some off-street parking spaces constructed at 90° to the lane, and basement driveway access to the residential apartments in the north of the site (opposite the land zoned 'B2 Local Centre' to the east) and access for on-site servicing.

16.3.4 Secondary Development Controls

Landscaping

The Norfolk Island Pines situated throughout the Foster Tuncurry town centres are an intrinsic element unifying the low and high rise built form characteristic of the locality. Substantial tree landscaping is required to be provided in the as illustrated in the proposed Landscape Plan.



Proposed landscape plan ([click here for original image](#))

Objectives

- Retain the existing Norfolk Island Pine (*Araucaria heterophylla*) located on the corner of Manning and Beach Streets;
- Ensure planting character at street level is elegant coastal country town main street;
- Ensure planting character within the building fabric, either indoors or outdoors on podium levels above ground level, is resort style;
- Ensure that trees that can be either indigenous or exotic trees, to suit specific site conditions, line all street frontages;
- Ensure the building mass is visually softened by the growth of substantial trees and the microclimate is ameliorated by the development of broad well-developed tree canopies wherever possible;
- Ensure property boundary lines, dividing two different towers are lined by trees, either indigenous or exotic trees to suit specific site conditions;

- Ensure trees can grow vigorously and without obstruction at ground level, by allowing deep root penetration and unobstructed crown development.
- Ensure the mature height and spread of trees to be planted are an appropriate scale for the height and mass of multi-storey buildings.
- Tree species should be selected that do not drop large quantities of fruit or leaves and that are known to be brittle and structurally unsound;
- Refer to the schedule of preferred trees for Tuncurry.

INDICATIVE SCHEDULE OF PLANTS

The following schedule provides an indication of the preferred trees for Tuncurry.

Botanical Name	Common Name
Local Native (indigenous species)	
<i>Acacia elata</i>	Cedar Wattle
<i>Acacia floribunda</i>	White Sally Wattle
<i>Acacia glaucescens</i>	
<i>Acmena hemilampra</i>	Broad-leaved Lilly Pilly
<i>Acmena smithii</i>	Lilly Pilly
<i>Alphitonia excelsa</i>	Red Ash
<i>Argyrodendron trifoliatum</i>	Brown Tulip Oak
<i>Banksia integrifolia</i>	Coastal Banksia
<i>Brachychiton acerifolium</i>	Illawarra Flame Tree
<i>Callicoma serratifolia</i>	Black Wattle
<i>Callistemon citrinus</i>	Lemon-scented Bottlebrush
<i>Callistemon viminalis</i>	Weeping Bottlebrush
<i>Castanospermum australe</i>	Black Bean
<i>Casuarina glauca</i>	Swamp Oak
<i>Casuarina torulosa</i>	Forest Oak
<i>Corymbia maculata</i>	Spotted Gum
<i>Cupaniopsis anacardioides</i>	Tuckeroo
<i>Euodia elleryana</i>	Pink Eudodia
<i>Harpullia pendula</i>	Tulipwood
<i>Liphostemon confertus</i>	Brush Box
<i>Melaleuca quinquenervia</i>	Broad-leaf Paperbark
<i>Melaleuca stypheloides</i>	Pricky-leaf Paperbark
<i>Syzygium paniculatum</i>	Magenta Lilly Pilly
<i>Tristaniopsis laurina</i>	Water Gum
Exotic Plants and Introduced Native Plants	
<i>Bachhousia citriodora</i>	Lemon-scented Myrtle
<i>Elaeocarpus reticulatus</i> 'Primma Donna'	Blueberry Ash
<i>Glochidion ferdinandi</i>	Cheese Tree
<i>Hymenoporum flavum</i>	Native Frangipani
<i>Lepiderema pulchella</i>	Fine-leaved Tuckeroo
<i>Melaleuca quinquenervia</i>	Broad-leaf Paperbark
<i>Metrosideros excelsa</i>	New Zealand Christmas Bush
<i>Syzygium australe</i>	Brush Cherry
<i>Waterhousia floribunda</i>	NSW Christmas Bush
<i>Waterhousea unipunctata</i>	Roly Poly Satin Ash

Click here to view [original image](#)<

Large Trees for Unrestricted Spaces	
<i>Agathis robusta</i>	Kauri Pine
<i>Araucaria heterophylla</i>	Norfolk Island Pine
<i>Ceratopetalum gummiferum</i>	
<i>Ficus microcarpa hillii</i>	Weeping Fig
<i>Magnolia grandiflora</i>	Bull Bay Magnolia
<i>Toona australis</i>	Red Cedar
Deciduous Trees	
<i>Acer negunda</i>	Box Elder Maple
<i>Fraxinus oxycarpa</i>	Desert Ash
<i>Fraxinum oxycarpa 'Raywoodii'</i>	Claret Ash
<i>Jacaranda mimosifolia</i>	Jacaranda
<i>Melia azedarach</i>	White Cedar
<i>Pistacia chinensis</i>	Pistachio
<i>Platanus orientalis</i>	Oriental Plane
<i>Pyrus calleryana 'Aristocrat'</i>	Callery Pear
<i>Pyrus calleryana 'Chanticlear'</i>	Callery Pear
<i>Ulmus parvifolia</i>	Chinese Elm
Palm Trees	
<i>Achontophoeniza cunninghamiana</i>	Bangalow Palm
<i>Howea belmoreana</i>	Curly Palm
<i>Howea forsteriana</i>	Kentia Palm
<i>Livistonia australis</i>	Cabbage Palm
<i>Phoenix canariensis</i>	Canary Island Date Palm
<i>Phoenix recinata</i>	African Wild Date
<i>Washingtonia robusta</i>	Mexican Washington Palm

[Click here to view original image](#)

Streetscape

Controls

A maritime design theme has been adopted for this site. This theme emphasises the holiday atmosphere and coastal image of Tuncurry.

- (1) In establishing a maritime theme, the following features are encouraged:
 - (a) The building form utilises curves, flowing forms or a series of off-set wall planes not strong, box-like geometric designs, which present a formal and official appearance;
 - (b) Buildings are constructed of rendered or painted concrete or brick;
 - (c) Sail structures as a design feature and/or as shade structures;
 - (d) Balconies for private open space project beyond the main wall plane to avoid a flat, textureless appearance.
 - (e) Balcony walls are of solid construction or built from opaque materials;
 - (f) External decked areas;
 - (g) Light coloured external surfaces are encouraged to reflect heat with accent colours that reinforce the maritime theme such as blues and greens.
- (2) A pedestrian awning that provides protection from sun and rain is to be erected along Manning Street with a height above the footpath of 3.6 to 4 metres. This awning is to be no deeper than 3.6 metres and may extend over public footpaths to within 600mm of the kerb face, so long as street trees are not required.
- (3) The development's northern facade to Beach Street is to provide awning(s) that identify and protect pedestrian

entries to the development.

Amenity

Controls

- (1) Visual Privacy
 - (a) Minimise direct overlooking of rooms and private outdoor space, both within the development and of existing residential development and anticipated future apartments to the south, by:
 - (i) orienting major window, entries and balconies to face the street frontages;
 - (ii) designing windows and balconies to prevent overlooking into neighbouring apartments and balconies;
 - (iii) Using external screening devices and landscaping;
 - (iv) Combine uses with similar privacy needs;
 - (v) Balconies and balustrade design is to consider privacy from the street during the day and at night;
 - (b) Provide minimum distances between buildings on this site and to the opposite windows of neighbouring apartments and the desired future apartments to the south.
 - (c) 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.
- (2) Acoustic Privacy
 - (a) 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.
 - (b) Arrange apartments within a development to minimise noise transition between flats by:
 - (i) 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;
 - (ii) using storage or circulation zones within an apartment to buffer noise from adjacent apartments, mechanical services or corridors and lobby areas;
 - (iii) minimising the amount of party (shared) wall with other apartments.
 - (c) Design the internal apartment layout to separate noisier spaces from quiet spaces by grouping uses within an apartment, bedrooms with bedrooms and services areas like kitchen, bathroom, laundry together.
 - (d) Resolve conflicts between noise, outlook and views by using design measures including:
 - (i) double glazing;
 - (ii) operable screened balconies;
 - (iii) continuous walls to ground level courtyards where they do not conflict with streetscape or other amenity requirements.
 - (e) Reduce noise transmission from common corridors or outside the building by providing seals at entry doors.
 - (f) Construction is to meet or exceed the sound insulation requirements of the Building Code of Australia.
 - (g) Recommended noise criteria to be satisfied by any redevelopment is noted below:
 - (i) Road traffic noise criteria - the units are to comply with satisfactory indoor design levels specified in Australian Standard 2107:2000.
 - (ii) Noise Emission from the Hotel/licensed premises - comply with the recommendations set out in NSW Licensing Court guidelines as noted below:
 - (A) LA10 noise level emitted from the licensed premises shall not exceed the background noise level in any Octave Band Centre Frequency (31.5Hz-8kHz inclusive) by more than

5dB between 07.00am and 12.00 midnight at the boundary of any affected residence.

- (B) The LA10 noise level emitted from the licensed premises shall not exceed the background noise level in any Octave Band Centre Frequency (31.5Hz-8kHz inclusive) between 12.00 midnight and 07:00am at the boundary of any affected residence.
- (C) Notwithstanding compliance with the above, the noise from the licensed premises shall not be audible within any habitable room in any residential premises between the hours of 12:00 midnight and 07.00am.

(iii) Mechanical Plant and Equipment - The guidelines detailed in EPA Industrial Noise Policy are to be followed to determine the limit of allowable noise emission from the proposed site. This assessment procedure has two requirements that must be met, namely:

- (A) That the noise source not be 'intrusive'; and also
- (B) That the 'amenity' of the nearby land be preserved.

(iv) Deliveries and Waste Collections - guidelines in the EPA ENCM Chapter 157, Section (iii) Intermittent or Low Traffic Flow should be implemented as follows:

- (A) "for suburban situations an LA10 T55 dB(A) should be adopted for new developments and an LA10 T60dB(A) should be adopted as a goal for existing situations."
- (B) Compliance with the above controls will likely require loading dock facilities to be subject to time restrictions, such as no deliveries between 10.00pm and 7.00am.

(v) Construction Period - The construction noise control guidelines from the NSW EPA's 'Environmental Noise Control Manual, Chapter 171' are to be applied. In addition, the EPA's recommended acceleration (RMS) for "intermittent or impulsive" vibrations is also to apply. This may require the preparation of a Construction Noise Management Plan to be approved by the Council.

(3) Sunlight

- (a) The SEPP 65 direct sunlight access requirements to the living areas of the proposed residential apartments between 9.00am and 3.00pm during the winter solstice is 70% of units (min) - 3 hours
- (b) Shade northern, eastern and western facades from the severity of the summer sun to prevent overheating the building. Suitable shading devices to consider include roof eaves, balconies, pergolas and adjustable external vertical devices (e.g. louvres, blinds) that are suitable for lower sun angles.
- (c) Roof terraces are to be protected with shade cloths, planting, pergolas and/or vergolas.
- (d) Any redevelopment of the site is not to prevent 70% of the living areas of nearby residential developments from receiving 3 hours of direct sunlight between 9.00am and 3.00pm during the winter solstice.
- (d) Any redevelopment of the site is not to prevent 70% of the residences within 'desired future' mixed use buildings to the south and west receiving 3 hours of direct sunlight between 9.00am and 3.00pm during the winter solstice. This analysis is to assume that residential units will:
 - (i) Have their primary aspect to the north-east, towards Wallis Lake;
 - (ii) Be located on Levels 3 to 5, above a 2 storey commercial podium with a 4 metre building line to Manning Street;
 - (iii) Incorporate a 4 metre wide balcony that commences from the 'setback' line;
 - (iv) Setback 6 metres from its northern boundary/SEPP 65 Residential Flat Design Code requires 12m separation therefore it is fair that each Development Application provide at least half of the required minimum.
- (e) Shade diagrams indicating the extent of overshadowing of apartments within the development, of adjoining development and of any shared open spaces will be required.

(4) Ventilation

- (a) Commercial buildings are to have openable windows.
 - (b) Residential flat buildings are to have a thin cross-section, apartments with dual orientation or with two storeys and high ceilings to facilitate convective currents. Maximum glass-to-glass width of 18 metres.
 - (c) Sixty per cent (60%) of residential units should be naturally cross-ventilated.
 - (d) Windows are to be designed to catch prevailing breezes, and are to be hinged to funnel breezes into the apartment (e.g. vertical louvres, casement windows and externally opening doors). High level casement, sash or operable fanlight windows can be used where additional air circulation is required.
 - (e) Building designs should promote 'mixed mode' ventilation that is the choice of natural ventilation or air conditioning.
- (5) Safety and Security
- (a) Developments are to clearly define the progression from public through to private space.
 - (b) Entrances are to:
 - (i) be orientated towards the public street and ensure visibility between entrances, foyers and the street;
 - (ii) provide separate access from commercial uses for the residents.
 - (iii) provide an audio or video intercom system at the entry or in the lobby for visitors to communicate with residents.
 - (c) Surveillance in accordance with Crime Prevention through Environmental Design (CPTED) principles is to be facilitated by:
 - (i) Podium level commercial land uses providing casual views of the streets and activating the Main Street after hours;
 - (ii) Views over the public domain from living areas and balconies where possible.
 - (d) All common areas, including entrances, basement car parks, corridors and walkways are to be well lit with clear lines of sight. Recesses and unlit alcoves which might conceal intruders are to be avoided.
 - (e) Access to basement car parks from public and common areas is to be controlled.
- (6) Wind Conditions
- (a) Suitable criteria for evaluating environmental wind amenity both internal to the development and for the public domain are detailed in the Pedestrian Level Wind Acceptability Criteria table. The same criteria can be used to assess the safety and security of the development in terms of wind impact.
 - (b) These criteria should not be viewed as hard numbers as their value has generally been derived from a subjective assessment of wind acceptability. This will vary according to the height, strength, age, etc. of the pedestrian concerned.
 - (c) A suitably qualified professional with experience in wind tunnel testing can provide guidance on the acceptability of a proposed development in terms of the above criteria and can often provide advice in terms of wind amelioration techniques. Landscaping will often provide a suitable wind-break solution to ameliorate higher wind speeds.
 - (d) Wind conditions along all pedestrian areas around the development should remain below the 16m/sec walking comfort criterion level, or remain at or below present levels where the criterion is currently being exceeded.
 - (e) If the analysis concludes that a structure is required between the north and south tower to mitigate wind conditions, the facade of such may only be constructed of clear glazing so as to allow east-west views through the site.

Pedestrian Level Wind Acceptability Criteria

Limiting Gust Wind Speed (m/s)	Type of Criteria	Activity Concerned
24	Safety	Knockdown in isolated areas
23		Knockdown in Public Access Ways
16	Comfort / Amenity	Comfortable Walking
13		Standing,
10		

(7) Storage

- (a) Ensure that residential apartments have dedicated and sufficient storage areas within easy access of the apartment for household items such as sporting, leisure, fitness and hobby equipment.
- (b) At least 50% of the storage area is to be provided within the apartment. Any storage areas that are not within the apartments are to be secure.
- (c) In addition to kitchen cupboards and bedroom wardrobes, storage facilities are to be provided at the following rates per residential apartment:

Storage facilities rates per residential apartment

Studio	6m ³
1 bedroom	6m ³
2 bedrooms	8m ³
3+ bedrooms	10m ³

(8) Services and Facilities

- (a) Provide secure open-air clothes drying facilities that are easily accessible, are screened from the public domain and have good solar access. Where open air-drying is not possible, provide a clothes drier with a minimum 3.5 star rating.
- (b) Locate any service structures such as satellite dishes, telecommunication on terrace and air conditioning plant:
 - (i) away from the street frontage or any public or private property; and
 - (ii) in a locality that reduces visual impact.
- (c) Provide residential mail boxes adjacent to the residential entry/foyer.

Environmental Sustainability

Controls

(1) Flexibility and Adaptability

- (a) Separate commercial and residential entries are to be provided.
- (b) Design the tower elements with thin cross-sections that are appropriate to either commercial or residential use to allow for a variety of changing users and users over time.
- (c) Minimise the number of structural walls within the apartments.

(2) Residential Mix

- (a) Desirable to provide a mix of 1, 2 and 3+ bedroom apartments within the development.

(3) Energy and Water

- (a) Energy and water measures in accordance with BASIX and Part J of the Building Code of Australia.

Maintenance

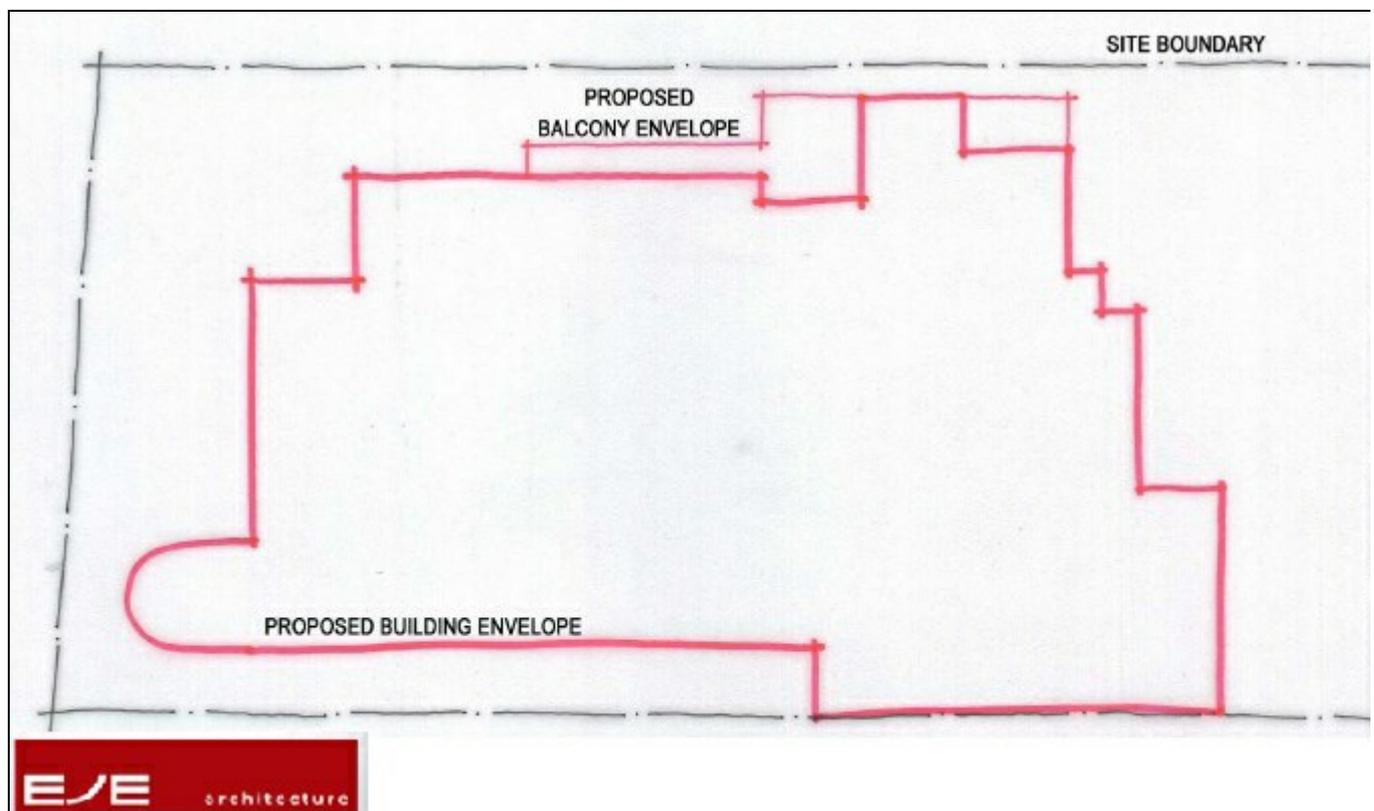
Controls

- (1) Materials and design detailing are to ensure long life and ease of maintenance.
- (2) Windows are to be designed to enable cleaning from inside the building.
- (3) Manually operated systems such as blinds, sunshades, pergolas and curtains are preferred to mechanical systems.
- (4) Where mechanical systems are used, care should be taken to ensure that wherever possible, they can also be manually operated.

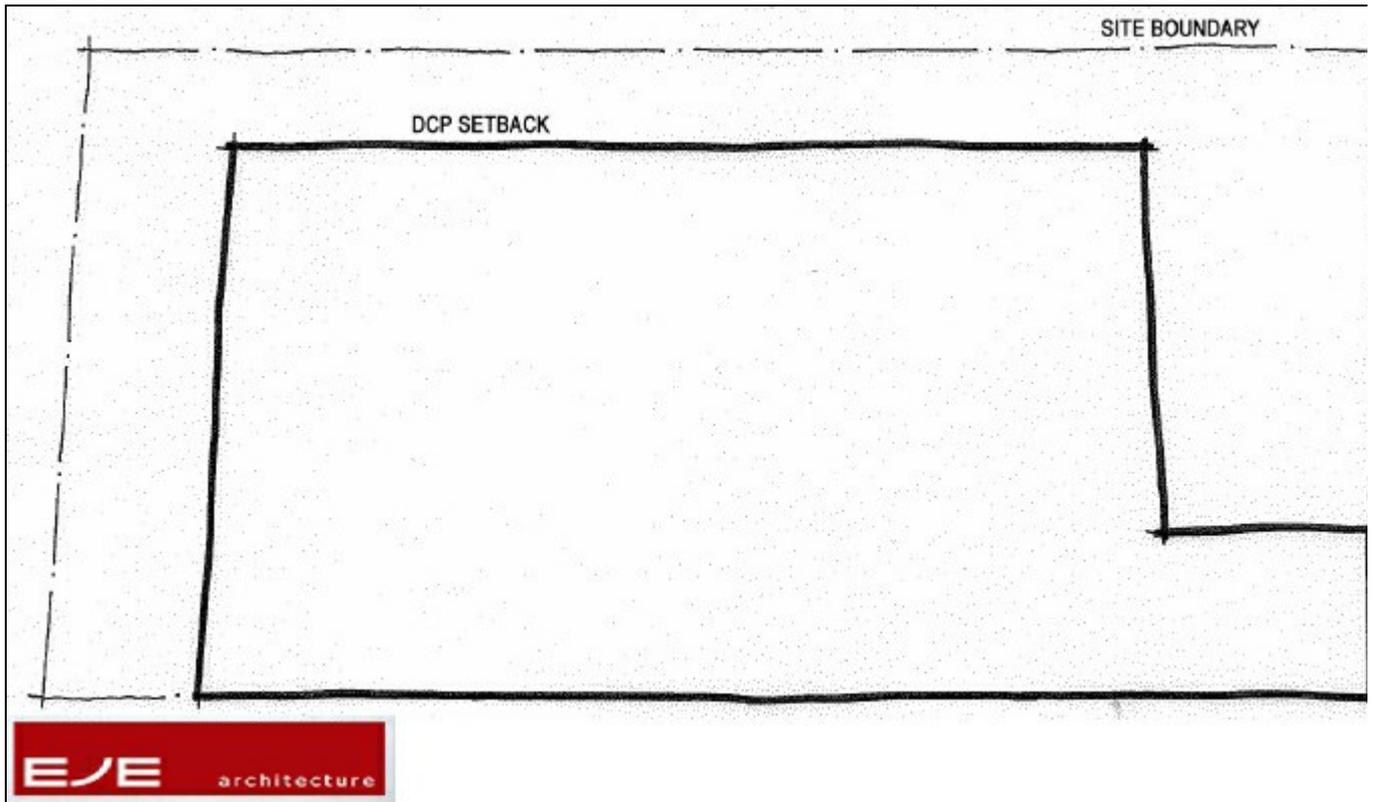
Building Envelopes

Envelope Principles

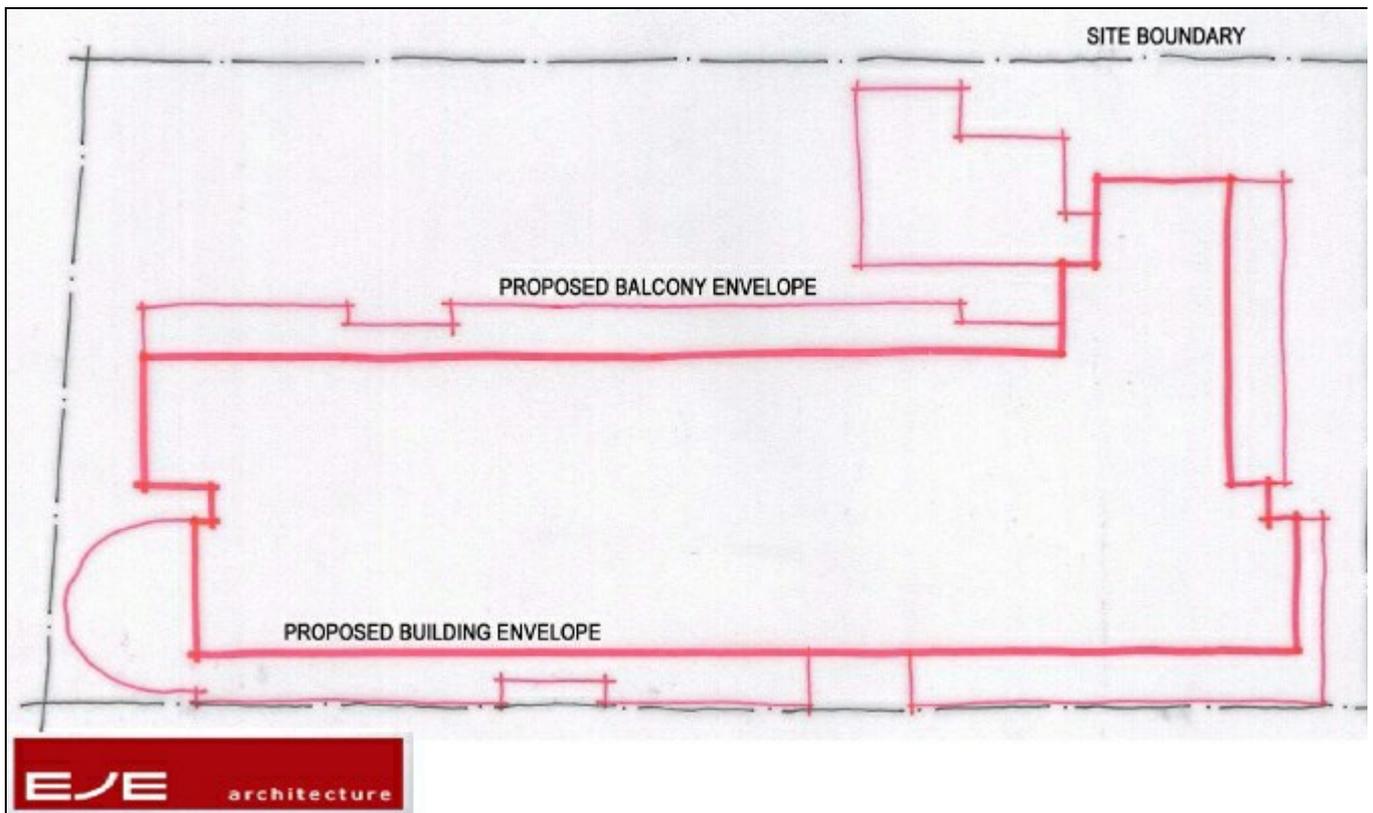
Building envelopes (also referred to as 'building zone') are three dimensional zones that limit in plan and section the extent of a building in any direction. The envelopes for this site are provided below.



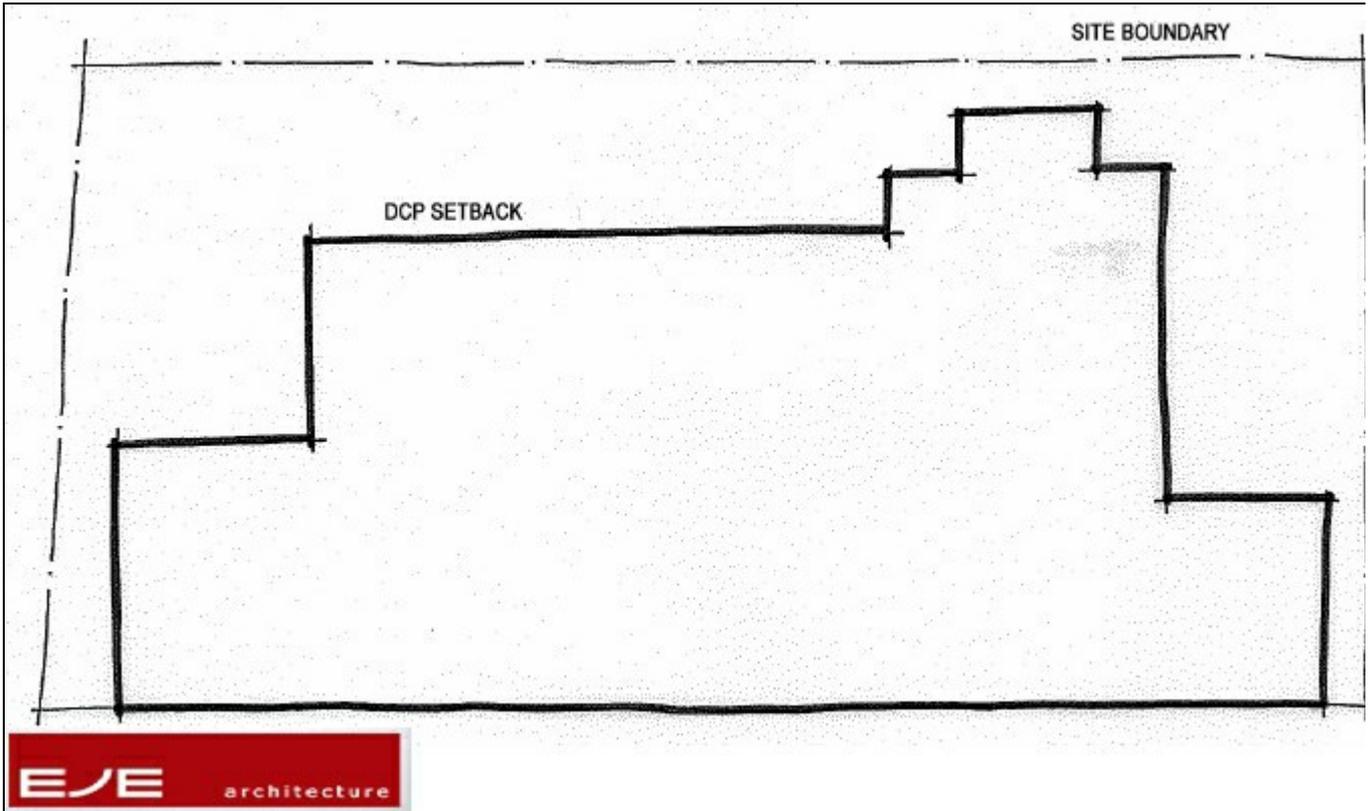
Bellevue Hotel building envelope - ground level (click here to view [original image](#))



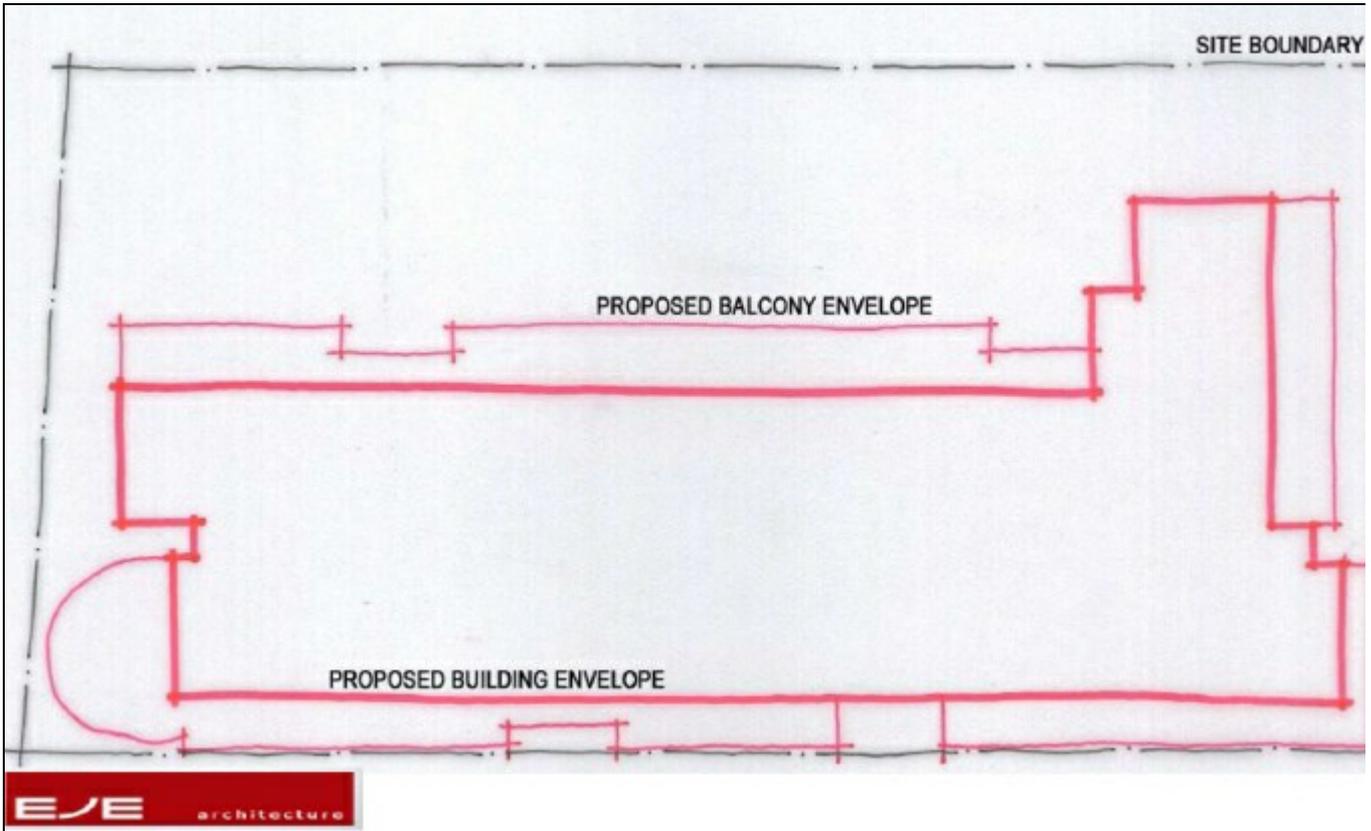
Bellevue Hotel building envelope - ground level (click here to [view original](#))



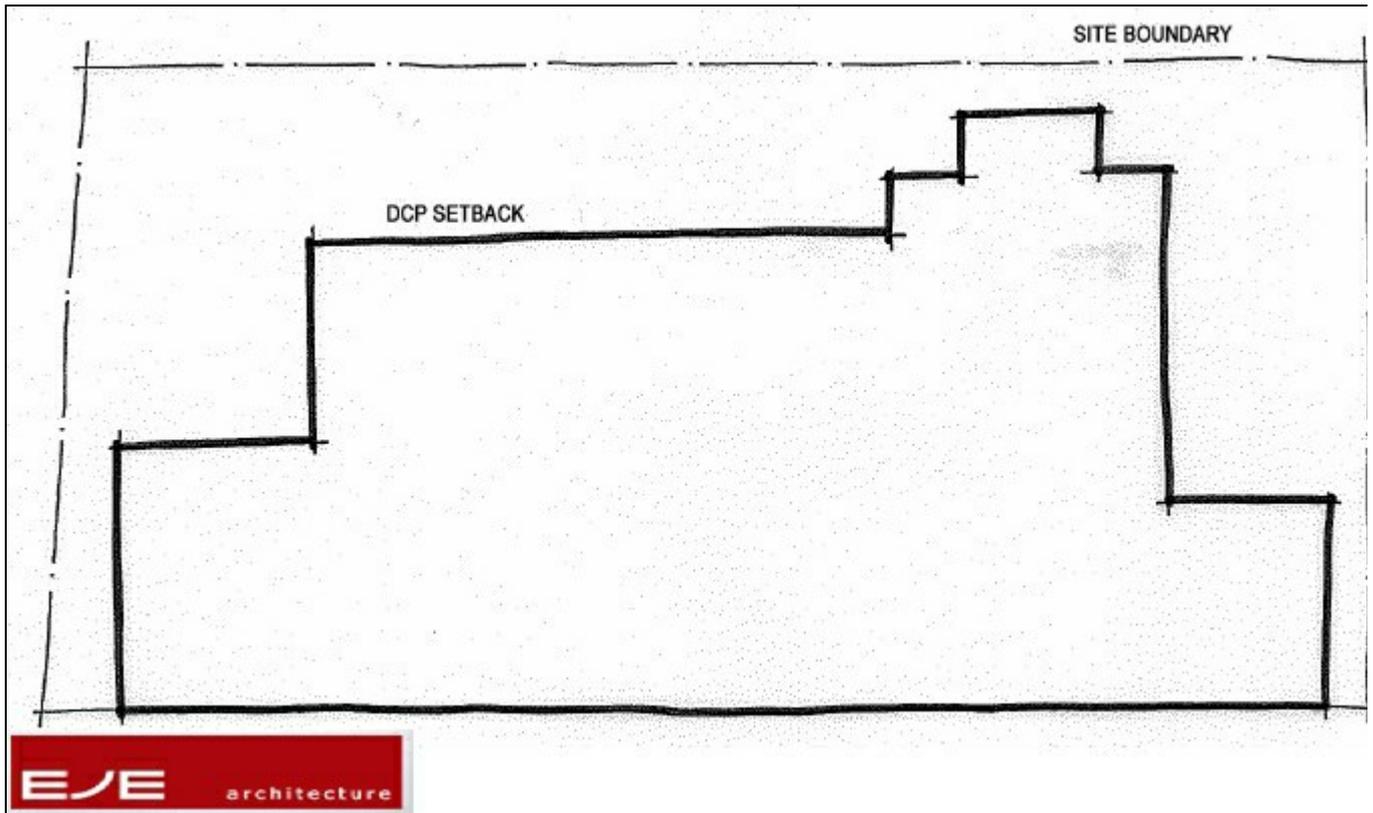
Bellevue Hotel building envelope - level 1 (click here to view [original image](#))



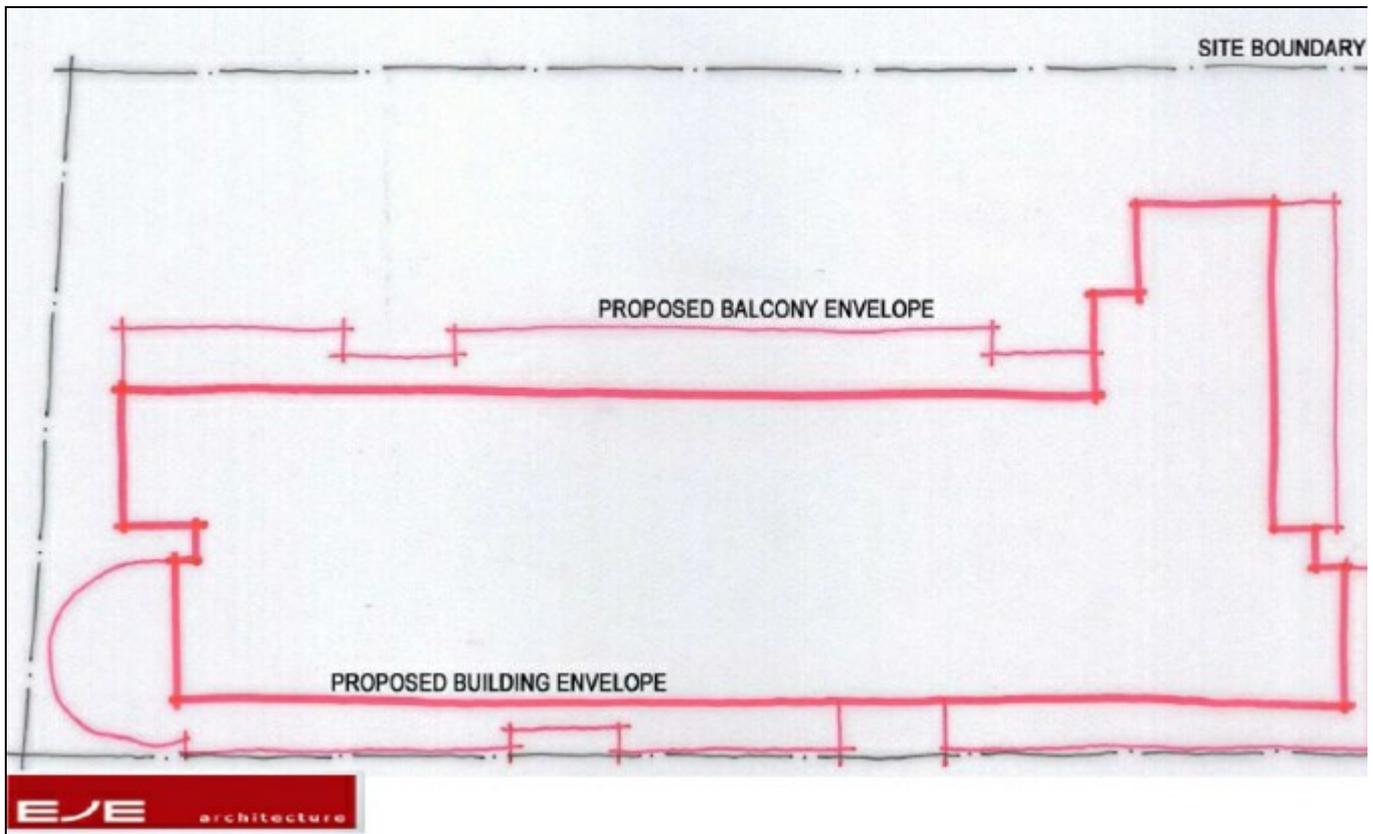
Bellevue Hotel building envelope - level 1 (click here to view [original image](#))



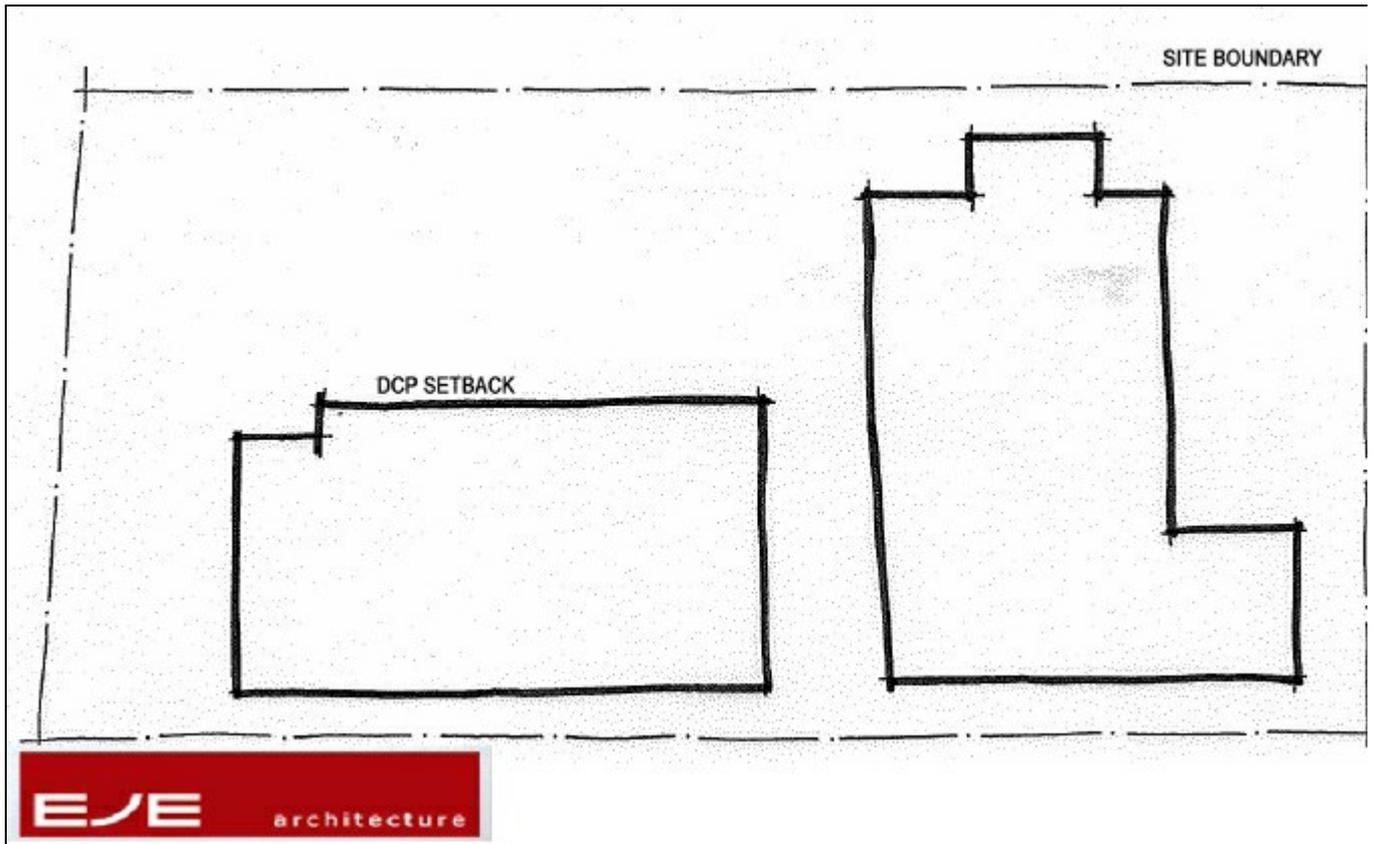
Bellevue Hotel building envelope - level 2 (click here to [view original](#))



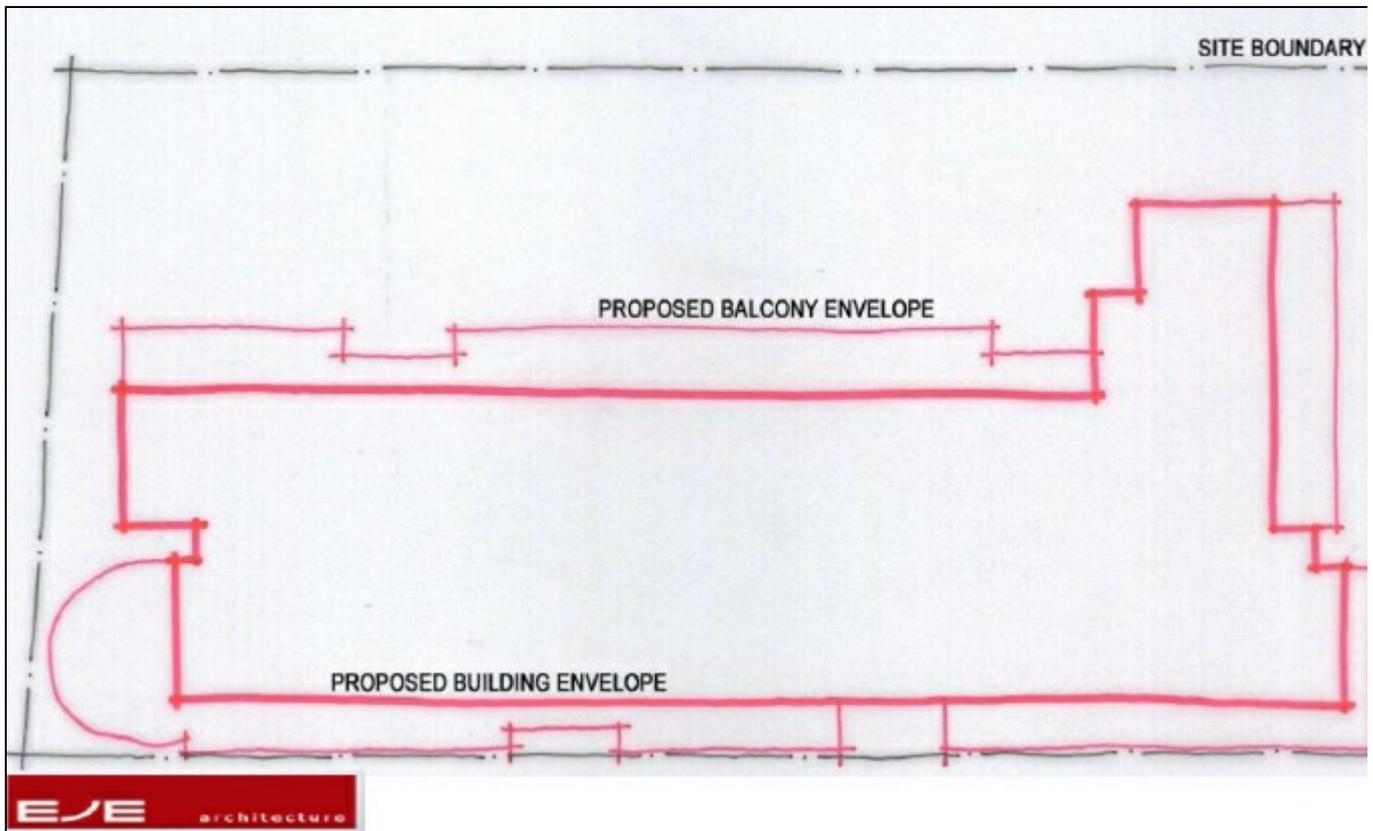
Bellevue Hotel building envelope - level 2 (click here to view [original image](#))



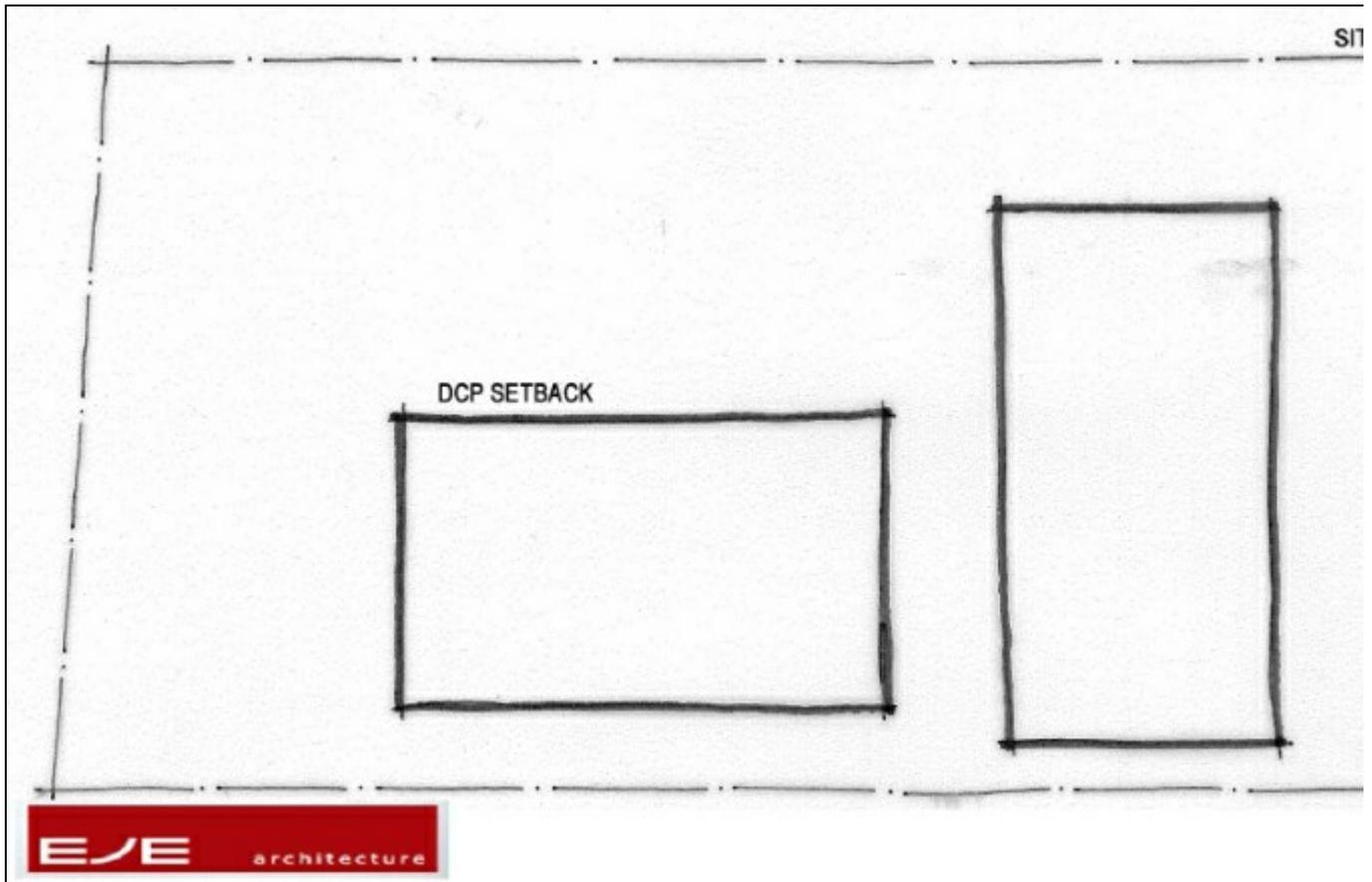
Bellevue Hotel building envelope - level 3 (click here to view [original image](#))



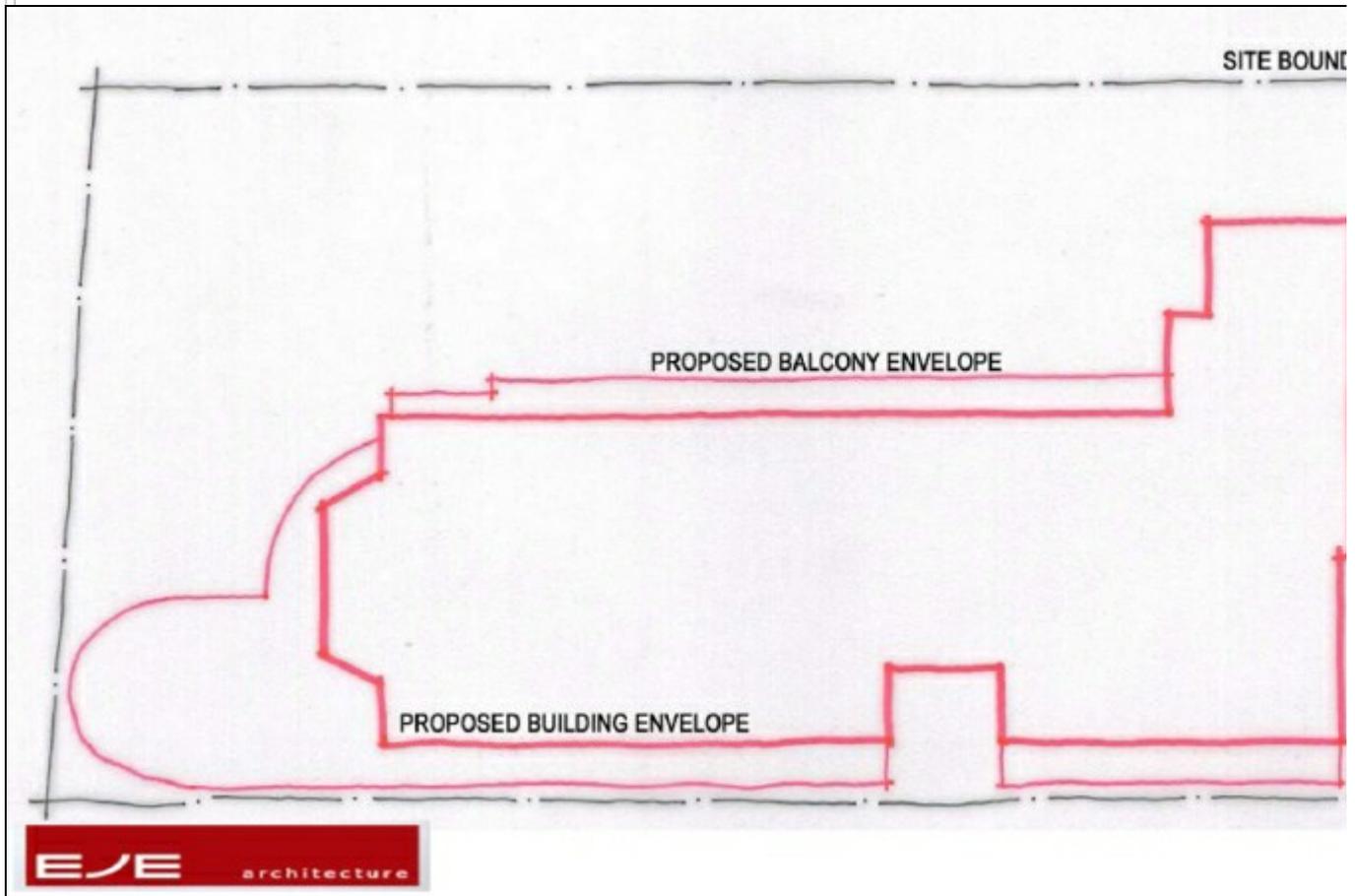
Bellevue Hotel building envelope - level 3 (click here to view [original image](#))



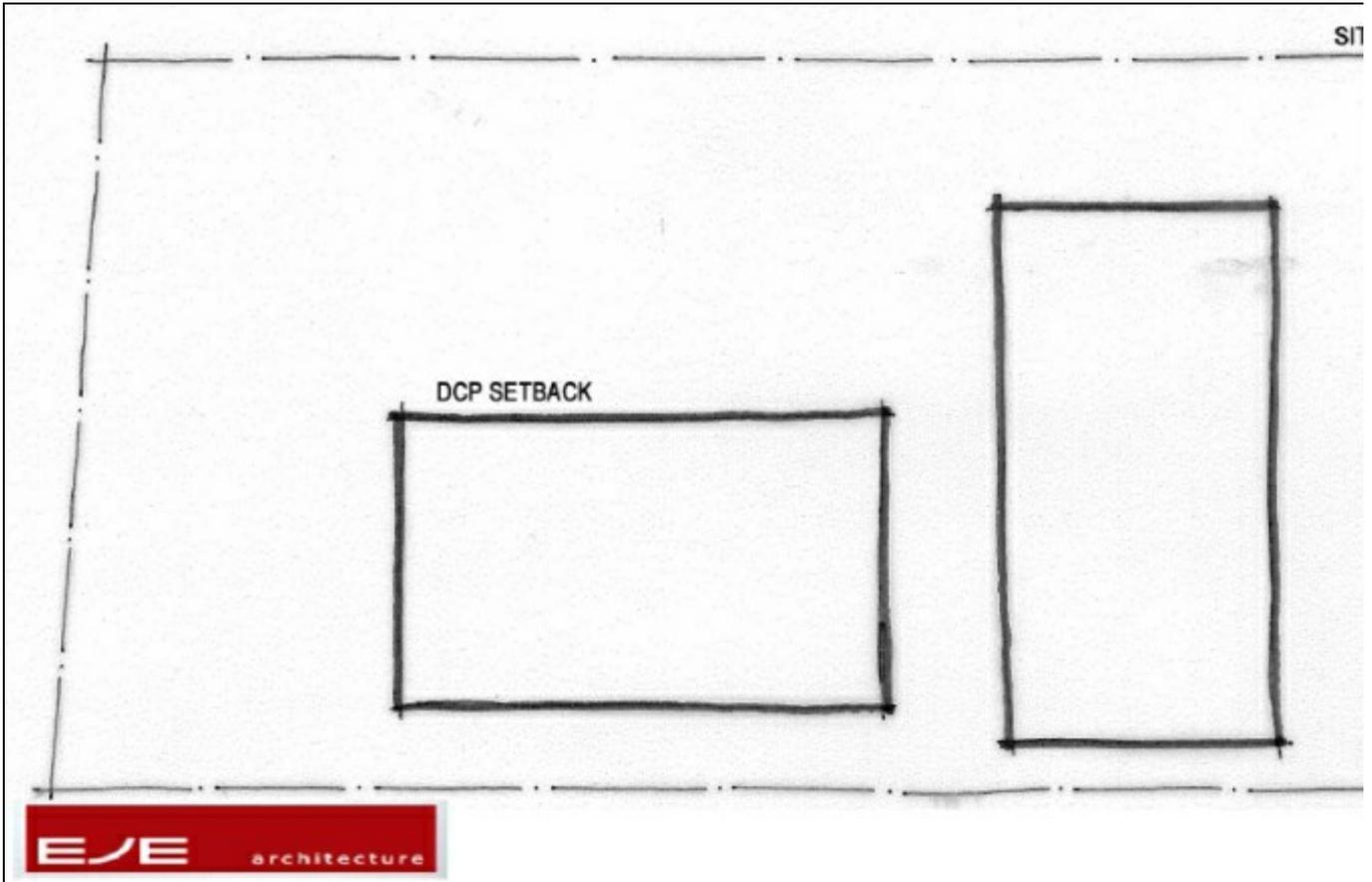
Bellevue Hotel building envelope - level 4 (click here to view [original image](#))



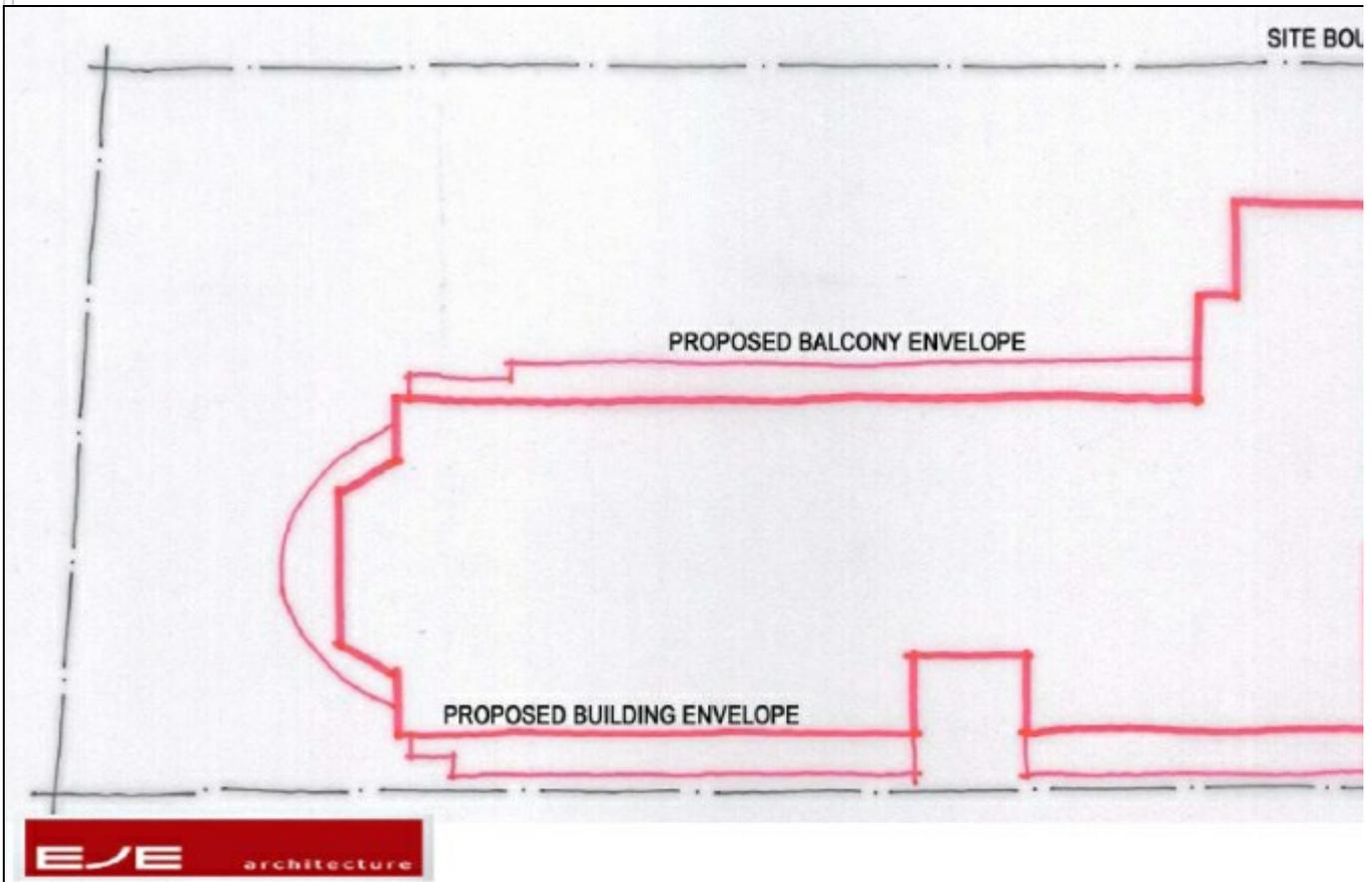
Bellevue Hotel building envelope - level 4 (click here to view [original image](#))



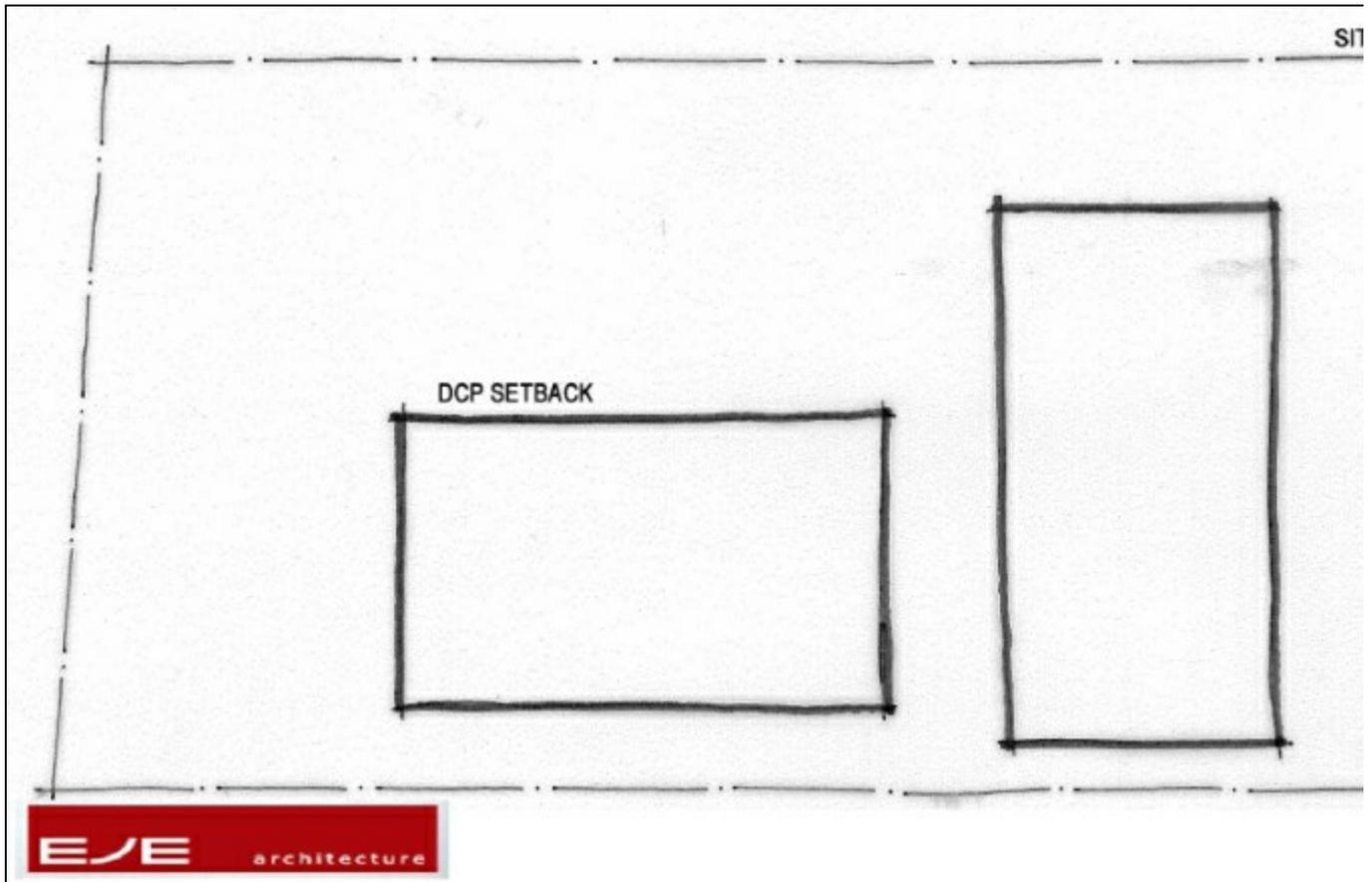
Bellevue Hotel building envelope - level 5 (click here to view [original image](#))



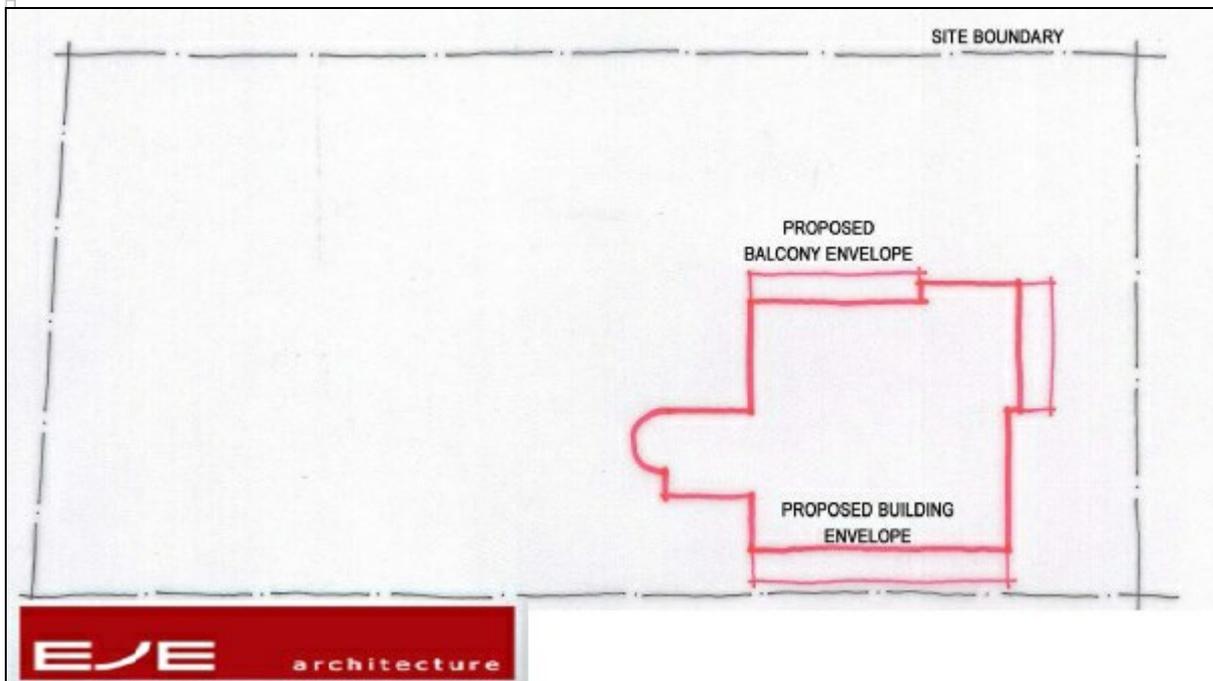
Bellevue Hotel building envelope - level 5 (click here to view [original image](#))



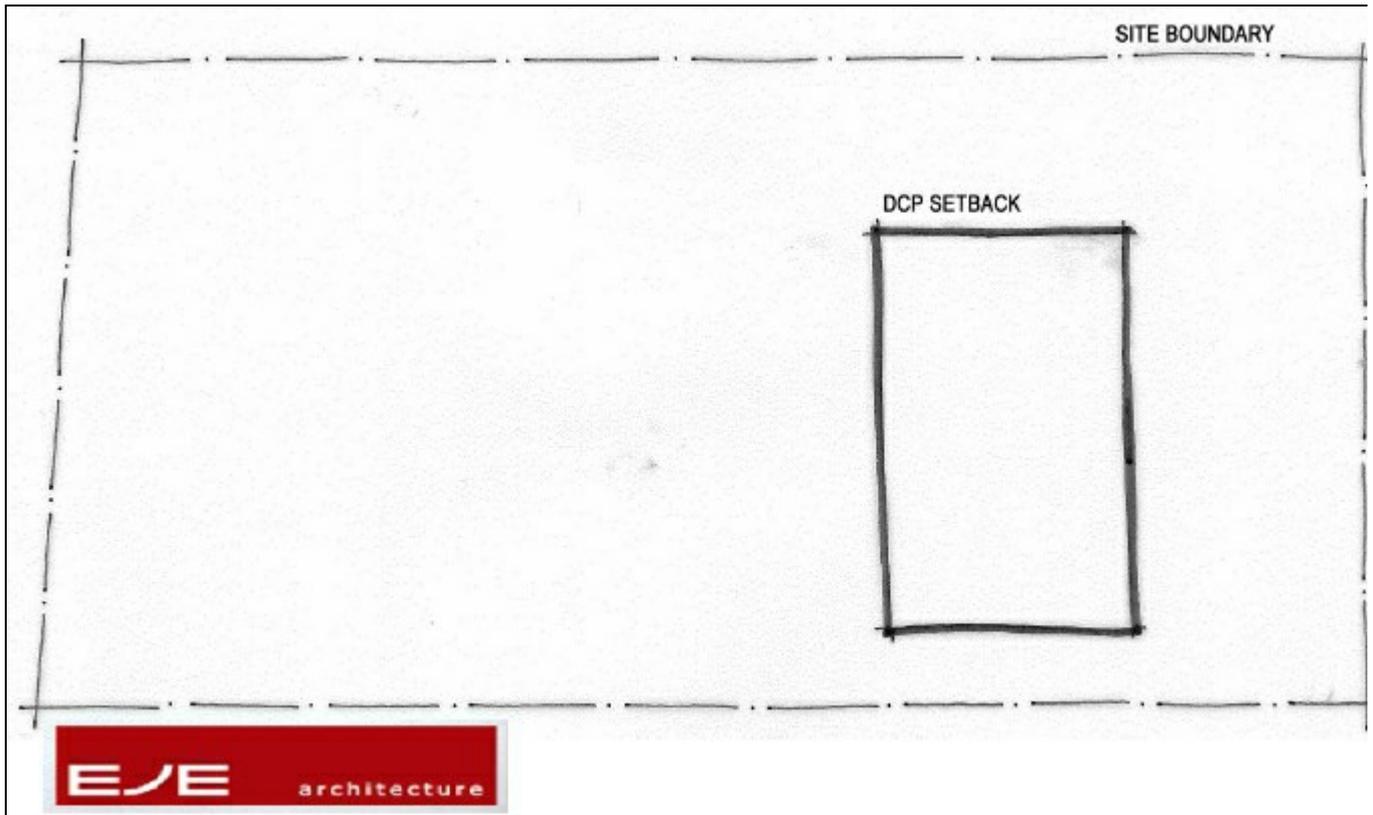
Bellevue Hotel building envelope - level 6 (click here to view [original image](#))



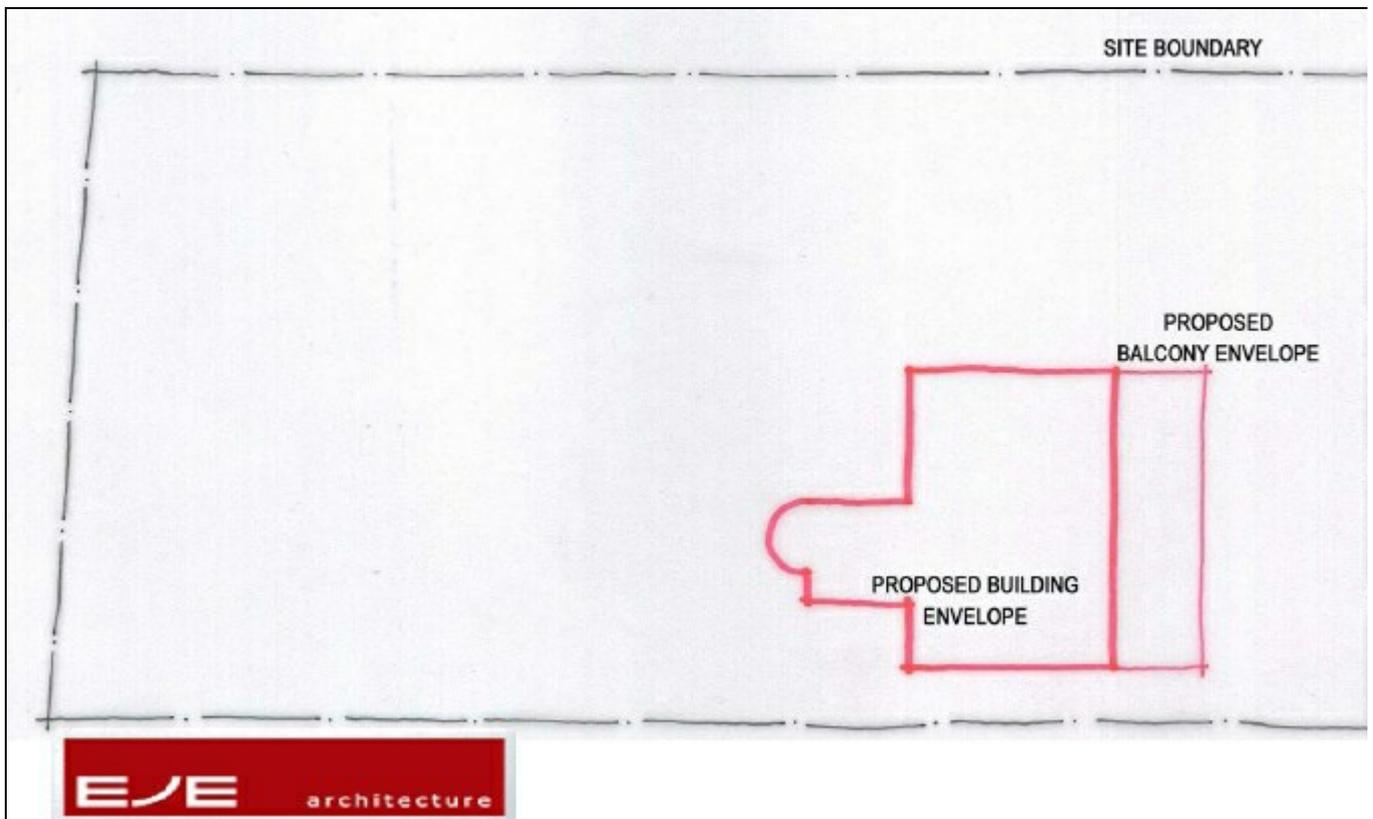
Bellevue Hotel building envelope - level 6 (click here to view [original image](#))



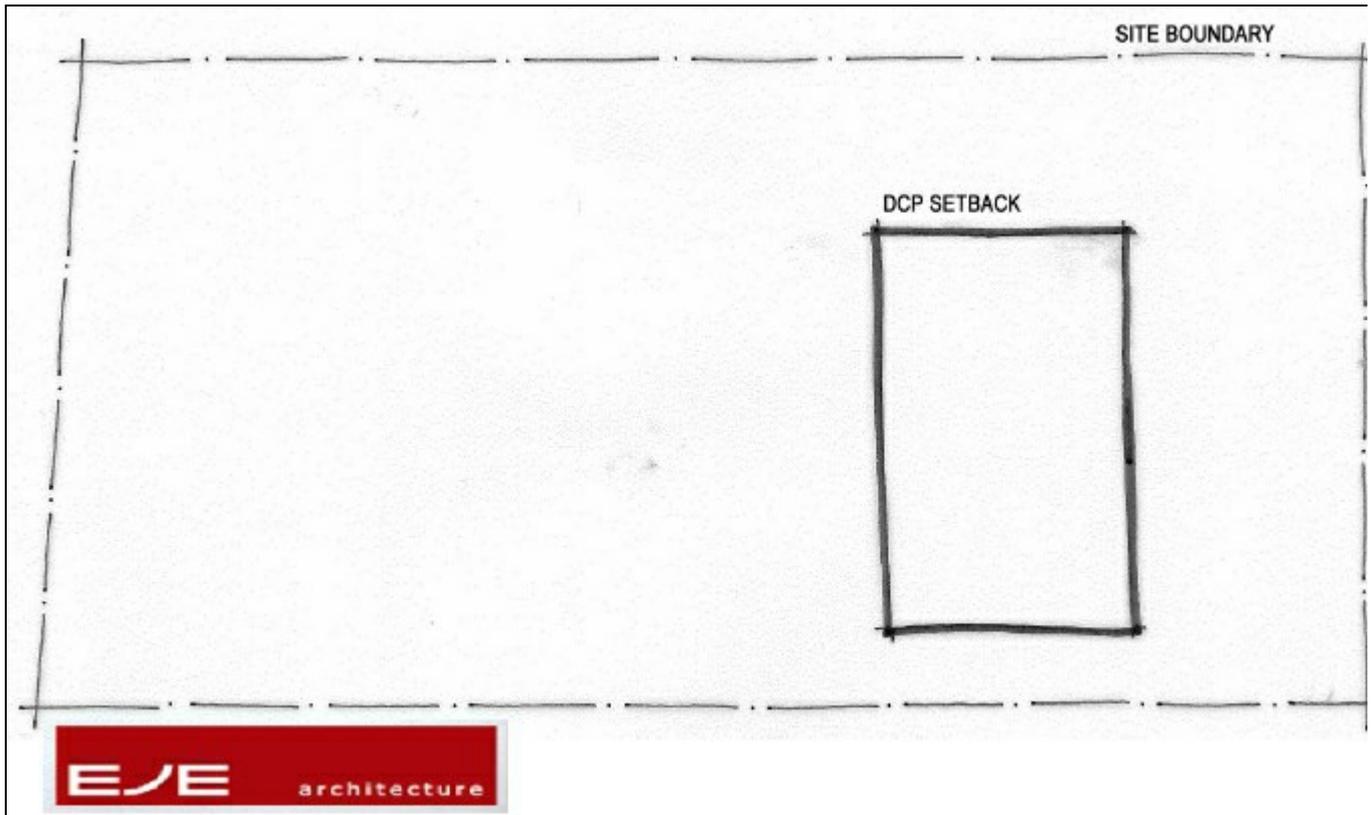
Bellevue Hotel building envelope - level 7 (click here to view [original image](#))



Bellevue Hotel building envelope - level 7 (click here to view [original image](#))

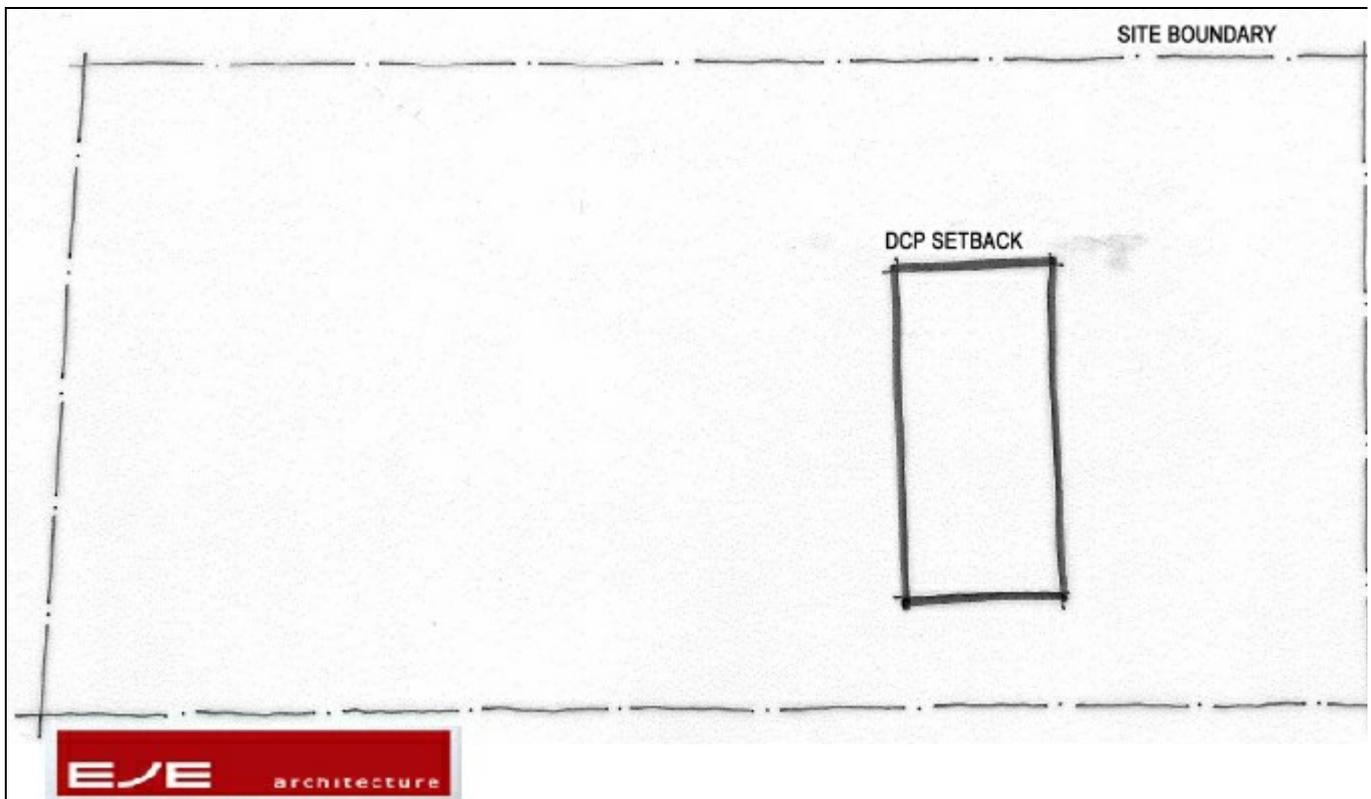


Bellevue Hotel building envelope - level 8 (click here to view [original image](#))



Bellevue Hotel building envelope - level 8 (click here to view [original image](#))

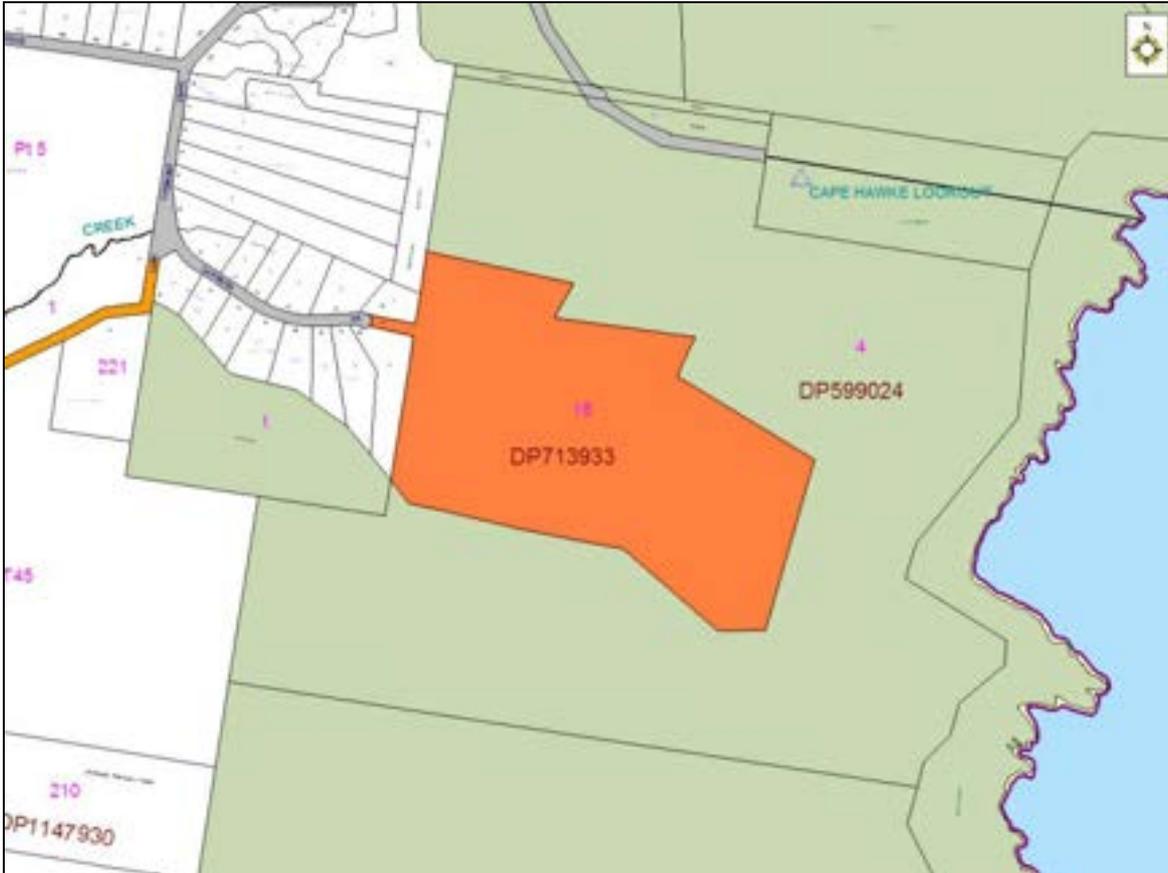
Bellevue Hotel building envelope - Level 9



Bellevue Hotel building envelope - level 9 (click here to view [original image](#))

16.4 Carmona Drive, Forster

Controls apply to all development within the subject land as shown in the Site Location Plan.



Carmona Drive site location plan (click here to view [original image](#))

16.4.1 Desired Future Character

The Carmona Drive precinct is aimed at fostering and maintaining the coastal and environmental character of the site whilst creating a high quality rural residential development that respects the unique natural amenity of the site and its setting. The design and form of the Community Title subdivision recognise that it is bordered on three sides by Booti Booti National Park, and further to the east by the escarpment that falls to the Pacific Ocean.

The subdivision incorporates corridors of locally indigenous vegetation consistent with the ecological character of the site and the adjoining National Park. Public and private infrastructure is purpose-designed to promote energy efficiency, to facilitate native fauna movement across the site and to provide safe rest, refuge and feeding areas for native fauna within the site. Site landscaping, planting and bush fire management measures are consistent with the ecological characteristics and management measures in the adjoining National Park.

Future built form is to be sympathetic to the natural landform and setting, and of high quality, energy efficient design that is suited to the sensitive location. Future dwellings and structures will have minimal impact on the landform so as to minimise adverse visual impacts whilst creating a contemporary, low profile rural coastal character in keeping with the existing natural character.

Development applications will need to demonstrate compliance with the relevant development and design controls. If a development application is seeking a departure from the development and design controls it must demonstrate:

- That the nominated development and design controls are unreasonable or unnecessary in the circumstances of the case; and
- How the proposed alternative solution or design approach will deliver an outcome that is consistent with the relevant element objectives and with the desired future character.



Aerial overview of site location (click here to view [original image](#))

Note: land to the east of the site within Booti Booti National Park, including the area known as 'The Saddle' and land to be transferred to the Minister for the Environment for addition to Booti Booti National Park, are not within the land covered by this plan.

16.4.2 Subdivision and Lot Design

The following site specific controls should be read in conjunction with the [Subdivision](#) section. In the event of any inconsistencies, the site specific provisions shall prevail.

16.4.2.1 Community Title Subdivision

Objectives

- To create a subdivision that provides common property for the benefit of all future residents and that is located so as to create suitable opportunity to establish ecological corridors and buffers to the neighbouring National Park.
- To ensure ongoing good management of the community land (common lot).

Controls

- (1) Development of the site will be based on a community title subdivision pursuant to the [Community Land Development Act, 1989](#).
- (2) A draft Community Management Statement, consistent with the requirements of the [Community Management Statement section](#), will accompany any application for subdivision so as to ensure the ongoing management and maintenance of facilities.
- (3) The subdivision design will define an area within the site, to be agreed with Mid Coast Water, for future

provision of a recycled water reservoir site.

- (4) A minimum combined area of 9 hectares will be provided for the purposes of common property, reservoir site, pathway/ cycleway and public reserve.
- (5) Existing natural watercourses (excluding the dam in the proposed existing house lot) and proposed habitat corridors must be located within the community lot.
- (6) A workshop and maintenance area must be provided within the community lot for site maintenance services and equipment.
- (7) The Potential Archaeological Deposit (PAD) must be located within the Community Lot.
- (8) The community association will be responsible for the management of the community land.

16.4.2.2 Development Density

Objectives

- To create a density of development that respects the neighbouring land use and the natural setting of the site.

Controls

- (1) A maximum yield of 27 residential lots, together with one Community lot, a reservoir site and associated public reserve and pathways/ cycleways are permitted within the site.

16.4.2.3 Subdivision Design

Objectives

- To ensure that the subdivision design respects the natural, geographical and visual characteristics and constraints of the site whilst facilitating residential development that can meet the housing and building design requirements.

Controls

- (1) The Subdivision design, including the provision of habitat corridors, must be substantially in accordance with the principles illustrated in the Carmona Drive Precinct Masterplan shown below.
- (2) The minimum lot size for individual residential lots shall be 3,300m² in accordance with the Carmona Precinct Master Plan.
- (3) The subdivision design must include provision for planting, retention and maintenance in perpetuity of screen planting between the site and the existing rural residential development in Carmona Drive, and within and between the lots in the development. The screen planting is to be consistent with the an approved Vegetation and Habitat Management Plan as described in the [Ecological Management and Repair section](#).
- (4) Minimum lot boundary setbacks from the National Park boundaries must be consistent with the principles illustrated in the Carmona Drive Precinct Master Plan.
- (5) A building envelope must be designated for each lot within the proposed subdivision plan. The size and location of the building envelopes should be substantially in accordance with the principles illustrated in the Carmona Drive Precinct Master Plan, with a maximum building envelope of 800m² per lot. Any variance from these principles must be justified in relation to visual impacts, based on 3 Dimensional visual modelling techniques approved by Council. Building envelopes are to be located so that Level 2 or lower bush fire construction standards apply for the construction of most dwellings.
- (6) The subdivision design must incorporate the proposed vegetation rehabilitation and management measures in accordance with an approved Vegetation and Habitat Management Plan as described in the [Ecological Management and Repair Section](#).

- (7) The subdivision design must incorporate proposed laneways designed in accordance with the requirements for [Driveway Design](#).
- (8) The subdivision design must define an area to be agreed with MidCoast Water for future provision of a recycled water reservoir site. That area may be excised and transferred to MidCoast Water.

Precinct Master Plan



Carmona Drive precinct master plan (click here to view [original image](#))

16.4.2.4 Ecological Management

Objectives

- To ensure that the subdivision design respects the ecology of the site and its surrounds, and facilitates the provision of ecological corridors to be included with the site.

Controls

- (1) Landscaping and rehabilitation of the site is to be undertaken in conjunction with the subdivision in accordance with an approved [Vegetation and Habitat Management Plan](#).

- (2) Further controls relating to ecological management measures are addressed in the [Ecological Management and Repair](#) section.

16.4.2.5 Integrated Water Cycle Management

Objectives

- To promote Water Sensitive Urban Design and practices that will not detrimentally affect the natural water cycle by providing a balanced approach between constructed and natural systems so as to improve water quality and manage discharge quantity.

Controls

- (1) Stormwater systems must be designed by a suitably qualified engineer and generally in accordance with the principles as specified in the modified [Stormwater Management Report Dated 05/02/08 prepared by BMT WBM, contained in CPEP \(2008\)](#).
- (2) The design of stormwater systems must incorporate the Water Sensitive Design measures specified.
- (3) Stormwater systems must be located to minimise disturbance, redirection, reshaping or modification of watercourses and associated vegetation.
- (4) Stormwater harvesting measures must be implemented within the residential lots to maximise stormwater reuse and to maintain the quantity of stormwater discharge from the development site at pre-development levels (i.e. no net increase).
- (5) Bioretention swales and basins must be incorporated in the development to manage upslope residential lot runoff where longitudinal road gradients within the 2-4% range can be achieved. Where roads are steeper than 4% a piped drainage system must be incorporated to capture and divert runoff into small bioretention basins.
- (6) Concentrated stormwater runoff must be diverted away from minor watercourses draining the steep catchment slopes to protect these watercourses from potential erosion. Only the overflow from the individual lot raingardens and ground surface runoff should enter these minor watercourses. The watercourses will be rehabilitated in accordance with the approved Vegetation and Habitat Management Plan.
- (7) The rehabilitated riparian zone must be a minimum width of 10m each side of the watercourse as advised by [DWE and specified in the Stormwater Management Report Dated 05/02/08 prepared by BMT WBM, contained in CPEP \(2008\)](#).
- (8) The most western dam within the site may be modified (approximately 30% of the surface area) to incorporate a constructed wetland as specified in the [Stormwater Management Report Dated 05/02/08 prepared by BMT WBM, contained in CPEP \(2008\)](#).
- (9) On site flood detention must be incorporated into the most western dam.

16.4.2.6 Roads, Bridges and Traffic Calming

Objectives

- To ensure that the design and construction of Traffic infrastructure will provide safe pedestrian, cycle and vehicle access and movement to and from the site as well as within.

Controls

- (1) The internal road system must be located within the community lot.
- (2) The location of internal roads must be generally in accordance with the principles illustrated in the concept Masterplan.
- (3) Proposed Roads, bridges and traffic calming devices must be designed in accordance with council

requirements for Community Title subdivision. Variable road widths and threshold treatments will be incorporated in the subdivision design to limit traffic speed.

- (4) Kerb and guttering are discouraged and should only be included where demonstrated to be necessary.
- (5) Internal bridges must be used instead of culverts (where possible) to facilitate fauna crossing.
- (6) Preliminary design for this infrastructure is to accompany any application for subdivision approval.

16.4.2.7 Reticulated Water & Sewer Services

Objective

- To provide water and sewer infrastructure to the site that will service the proposed development.

Controls

- (1) Proposed water and sewer infrastructure to service the site will be connected to the existing infrastructure provided by MidCoast Water, in accordance with the report prepared by Hunter Water Australia, dated 13 March 2009, titled 'Carmona Drive Water and Waste Water Servicing Strategy' (Hunter Water, 2009).
- (2) Water supply will be provided in accordance with [Option 5](#) described in [Sections 2.3.6 and 2.4](#) and illustrated in [Exhibit 6 of Hunter Water \(2009\)](#).
- (3) Sewer services will be provided in accordance with the strategy described in [Section 3.3](#) and illustrated in [Exhibit 5 of Hunter Water \(2009\)](#).

16.4.2.8 Bushfire Management

Objectives

- To ensure that all future residents and homes are adequately protected from the threat of bushfire.
- To ensure that appropriate Asset Protection Zones are incorporated into the subdivision design and do not impact upon environmentally sensitive land.
- To ensure that suitable access is provided for fire management purposes

Controls

- (1) The subdivision plan must take into account the statutory requirements of the [Environmental Planning & Assessment Act 1979](#) and the [Rural Fires Act 1997](#), in particular the measures for bushfire protection as outlined in '[Planning for Bushfire Protection](#)' 2006.
- (2) A Bushfire Hazard Assessment prepared by a suitably qualified Bushfire consultant must accompany any future subdivision application.
- (3) Prescribed APZ's as per the Bushfire Hazard Assessment prepared in accordance with [Planning for Bushfire Protection 2006](#) are to be implemented into the subdivision design.
- (4) Any Asset Protection Zone requirements must not encroach upon any land zoned for Environmental Protection purposes or within the adjoining Booti Booti National Park.
- (5) Where possible, perimeter roads and fire access trails are to be located within the community lot and, subject to the other controls below, their siting is to be generally consistent with the principles illustrated in the concept Masterplan.
- (6) Fire access trails are to be gated to prevent unauthorised use.
- (7) Fire access trails are to be designed in accordance with the provisions of '[Planning for Bushfire Protection](#)' 2006.

16.4.2.9 Special Measures for Steep Land

Objectives

- To ensure the site's foundation conditions are satisfactory for the proposed form of development.
- To ensure that buildings are designed to minimise land disturbance and impact on the existing ground conditions.
- To ensure that proposed development has due regard for the site's geotechnical and topographic characteristics.

Controls

- (1) The geotechnical investigations undertaken as part of the Local Environmental Study process are satisfactory for rezoning and subdivision stages. Further geotechnical investigations for site classification, earthworks, foundation and pavement design are to be undertaken at Development Application stage as required by the consent authority.
- (2) Buildings on steeper land must be split level and/or pier construction.
- (3) Footings must be designed in accordance with the relevant Australian Standards.
- (4) Development applications must demonstrate that proposed development is designed to be carried out in accordance with the guidelines for hillside construction and good hillside practice as set out in [Appendix 4 of Umwelt \(2007\)](#) and the results of further investigations undertaken on site in accordance with the Special Measures for Steep Land - geotechnical measures.

16.4.2.10 Community Land

Objectives

To ensure ongoing good management of the community land (common lot).

Controls

- (1) The community association will be responsible for the management of the community land.
- (2) Any application for subdivision must be accompanied by a draft Community Management Statement addressing the issues outlined in the [Community Management Statement](#) section.
- (3) Existing natural watercourses (excluding the dam in the proposed existing house lot) and proposed habitat corridors must be located within the community lot.
- (4) A workshop and maintenance area must be provided within the community lot for site maintenance services and equipment.
- (5) The Potential Archaeological Deposit (PAD) must be located within the Community Lot.

16.4.2.11 Pedestrian and Cycle Paths

Objectives

- To ensure the provision of accessible, well located and well designed pedestrian and cycle paths.

Controls

- (1) Pedestrian and cycle paths must be located and constructed to Council's standards, generally in accordance with the principles illustrated in the Carmona Drive [Precinct Masterplan](#).
- (2) The Pedestrian and Cycle path networks must connect to the perimeter fire trail system.
- (3) Pedestrian and cycle paths must be located and designed to complement and protect the existing and proposed natural attributes of the site.
- (4) A pedestrian and cycle path plan must accompany any application for subdivision approval.

16.4.2.12 Public Reserves and Facilities

Objectives

- To enable the public to access the site and utilise the public recreational facilities.

Controls

- (1) Pedestrian and cycle paths, together with passive 'rest parks' must be constructed and dedicated to Council, generally consistent with the principles illustrated in the concept [Precinct Master Plan](#), linking Carmona Drive to the eastern boundary of the site. The 'rest parks' must be provided with outdoor furniture, equipment and landscaping designed to Council's standards to facilitate their use as passive public parks.

16.4.2.13 Lighting Management

Objectives

- To ensure that the implementation of public lighting does not cause significant visual impact.
- To ensure the public lighting does not negatively affect ecological communities within and neighbouring the site
- To ensure that the rural character of the development, the view from close-by vantage points and (neighbouring) residents are not adversely impacted through inappropriate public and private lighting.

Controls

- (1) A lighting plan must accompany any application for subdivision approval. The plan must indicate the location of public lighting (including lighting intensity and areal extent of illuminated areas). The plan must be consistent with the approved lighting policy prepared in accordance with items (2) and (3). It must demonstrate that the character and nature of the resultant lighting will be consistent with the site's natural setting adjoining the National Park, and with the rural residential character of the Carmona drive locality.
- (2) Outdoor lighting, including lighting of recreation areas and facilities (e.g. tennis courts, swimming pools) on residential lots and/ or community land must be designed to ensure no adverse ecological impacts, and no adverse lighting impacts on the nocturnal amenity and character of the visual catchment of Carmona Drive.
- (3) Night lighting must be designed and installed in accordance with [Australian Standard AS1158: Public Lighting Code](#) and [AS 4282 Control of the Obtrusive Effects of Outdoor Lighting](#).
- (4) A lighting policy prepared in consultation with a suitably qualified ecologist must be submitted for Council's approval with a subdivision application. The lighting policy must specify criteria for artificial lighting adjoining ecological corridors and the National Parks lands designed to minimise adverse lighting impacts on local native fauna and habitat values.
- (5) As part of the lighting plan, specific design consideration is to be given to ensuring the rural character of the development is maintained.
- (6) External lighting should be designed ensuring minimal energy consumption; solar power lighting should be considered, particularly stand alone lighting for public lighting. Public lighting should be fitted with integrated photo electric cells and be manufactured in accordance with [AS 3771](#).
- (7) External lighting of private residences and community buildings must be designed and placed considering potential impacts of light spillage and glare on surrounding residents and local wildlife and avoiding a negative impact on neighbouring residences within or outside of the site.
- (8) Lighting should be directed downwards to focus on roads/footpaths/bike paths.
- (9) Light fittings should be adequately shielded to minimise light spill.

16.4.2.14 Visual Impact Management

Objectives

- To minimise visual impacts of the development and ensure retention of the visual character of the locality.
- To ensure that any proposed variations from the principles illustrated in the [Precinct Master Plan](#) are adequately remodeled.
- To ensure that the proposed development is consistent with the relevant [Future Character and Design Guidelines](#) contained in the [Local Environmental Study](#).

Controls

- (1) Building envelopes must be located in accordance with the principles illustrated in the [Precinct Master Plan](#). Any proposal for variation from those principles will require visual modelling, which must demonstrate that the resultant development will improve or maintain the visual character demonstrated by the Precinct Master Plan.
- (2) Screen vegetation provided in accordance with an approved [Vegetation and Habitat Management Plan](#), as described in the Ecological Management and Repair section, must be maintained and managed in perpetuity.
- (3) If the proposed location of the building envelopes varies from the principles illustrated in the [Precinct Master Plan](#), in addition to the requirements of this DCP, the proposed visual remodelling must be consistent with standards of modelling and graphics not less than those contained in [Appendices B and E of CPEP \(2008\)](#).
- (4) Modelling must demonstrate that potential buildings and ancillary structures will be sited away from viewer sightlines where possible, or be sited where existing or proposed vegetation or landform will be used for screening.
- (5) The relevant Future Character and Design Guidelines are reflected in the principles illustrated in the [Precinct Master Plan](#) and described in the site specific controls included in this section. Any subdivision design must be consistent with those principles.
- (6) Any proposal for variation must clearly define all departures from those principles and must demonstrate that the proposed variation will result in improved natural environment, neighbourhood amenity and environmental character outcomes for both the site and its surrounds.

16.4.3 Housing and Building Design

16.4.3.1 Architectural Design Guidelines

Objectives

- To ensure that the design of houses and buildings is based on integrated environmental and contemporary design principles, and is compatible with the site's coastal and ecological setting.
- To ensure achievement of the planned Water Sensitive Urban Design outcomes for the proposed development.

Controls

- (1) All new dwellings and structures must be consistent with the Architectural Design Guidelines as specified in this Plan.

16.4.3.2 Energy Efficiency and Sustainability

Objectives

- To ensure that the design of houses and buildings is based on energy efficiency and sustainability principles.

Controls

- (1) Dwellings must be designed to maximise energy efficiency through passive solar design and the use of renewable energy sources where feasible. SEPP BASIX 2004 defines minimum standards for dwellings in NSW.
- (2) Installation of a solar hot water system is encouraged.
- (3) Installation of a grid-connected or standalone photovoltaic system is encouraged.

- (4) Installation of house-based wind turbines is permitted but must be located to minimise visual impact in accordance with the Architectural Design Guidelines of this Plan.
- (5) All external lighting is to comply with AS 4282 Control of the Obtrusive Effects of Outdoor Lighting.
- (6) External lighting on Community property will be kept to a minimum and where feasible will be low voltage and solar powered.

16.4.3.3 Water Sensitive Design

Controls

- (1) In addition to SEPP BASIX 2004 requirements, the following Water Sensitive Design (WSD) measures must be provided for each dwelling house. Design details and site layouts must be provided with the development application for each dwelling. These criteria are based on the recommendations in [Section 5.2.2 of the Modified Stormwater Management Concept Report by BMT WBM at of CPEP \(2008\)](#):
 - (a) A minimum 15kL rainwater tank must be provided with each dwelling house. The purpose of this measure is to harvest stormwater to achieve water conservation, stormwater quality and flow frequency/duration objectives for the site. The captured water may be used for a range of purposes including toilet flushing, hot water and irrigation.
 - (b) A minimum area of 15m² of Rain Garden must be provided for each dwelling house on the site, and maintained in perpetuity. Rain gardens utilise vegetation and filter media to treat water, to reduce pollution loadings, to contribute to improvement of run-off quality and to reduce run-off volume through temporary storage on site and through encouragement of evapoaspiration and infiltration. A Rain Garden typically consists of a surface layer of vegetation underlain by a layer of soil or filter material. Overflow from the rain gardens should be designed to distribute flow across the downstream lot area (rather than concentrating into select locations) in order to minimise potential for erosion, scouring and/or sedimentation.
 - (c) Private driveways and internal access roads must be constructed from permeable paving, to minimise increased run-off volumes.
 - (d) A minimum of 30% of the total area of each residential lot must be planted and maintained in perpetuity with native vegetation landscaping (xeriscaping). Planting species and techniques must be consistent with the approved Vegetation and Habitat Management Plan. The purpose of xeriscaping is to improve habitat values, to reduce and discourage large lawn areas, to minimise fertiliser application and to reduce potential for excessive nutrient loads to be discharged into the watercourse and downstream.

16.4.3.4 Site Survey On Site Analysis

Objectives

- To ensure that opportunities and limitations of the site have guided the design and development process.

Controls

- (1) A detailed site survey must be submitted with a Development Application for the construction of a new dwelling, or for alterations and additions having a value of more than \$50,000, showing (but not necessarily limited to) spot levels and contours on Australian Height Datum; the location, ridge heights and living areas of adjoining houses; natural features; location and species of existing vegetation, trees, tree heights and canopy widths; and the location of relevant services.
- (2) A site analysis must be submitted with a Development Application for the construction of a new dwelling, or for alterations and additions having a value of more than \$50,000. The site analysis must relate to the abovementioned site survey and must address/include the following as a minimum requirement:
 - (a) site dimensions & building envelope;
 - (b) site levels and grades;

- (c) orientation, sun path & prevailing wind directions;
 - (d) flow direction of surface water & natural drainage;
 - (e) cut & fill of proposed development;
 - (f) services (including easements and location of utilities);
 - (g) major natural features of the site and the building envelope;
 - (h) existing vegetation and trees (including height, canopy spread, species);
 - (i) the location of sightlines and views to and from the site, including sightlines from adjoining and nearby properties, and from public vantage points; and
 - (j) location and relative levels of existing and approved development on adjoining land.
- (3) For specific design requirements for dwellings on proposed lots 21 & 22 refer also to [Building Heights](#) and [Ancillary Buildings and Structures](#) . For specific design requirements for dwellings on proposed lots 1 & 21 refer also to [Design for Privacy of Existing Dwelling](#).

16.4.3.5 Location and Siting of Buildings

Objectives

- To ensure that the rural residential character of the development and adjoining development in Carmona Drive is maintained.
- To ensure that view corridors from external vantage points into the site and within the site are preserved.
- To provide for privacy between neighbours, airflow, sunlight and general amenity.
- To ensure that structures are screened by planting established during the development of the subdivision.

Controls

- (1) All buildings or parts thereof must be constructed within the building envelope defined pursuant to the controls in the [Subdivision and Lot Design](#) section.

16.4.3.6 Building Heights

Objectives

- To sustain the rural residential character of the development and adjoining development in Carmona Drive.
- To ensure that view corridors from external vantage points into the site and within the site are preserved.
- To ensure that the profile of buildings or parts thereof will not protrude beyond the silhouette of surrounding ridges if viewed from surrounding vantage points.

Controls

- (1) Building heights are limited to a maximum of two habitable stories except for buildings on Lots 1, 21 & 22, which are limited to one habitable storey. Maximum height of any building or part thereof is limited to 6 m measured vertically from natural ground level on Lots 1, 21 & 22; and 9 m measured vertically from natural ground level for all other lots.
- (2) For building sites with a 'pre-development' gradient greater than 1:6 the floor level of the uppermost habitable area, including decks and balconies must not be higher than 5.1 m measured vertically from natural ground level.
- (3) All buildings must be located and designed to ensure that their profile will not protrude beyond the silhouette of surrounding ridges when viewed from must demonstrate that this outcome will be achieved, using visual assessment techniques such as visual transects and photomontages.
- (4) Height profiles indicating the height, bulk and scale of the proposed development must be erected on site prior to the submission of development application documents to Council, and must be maintained in place until the

application is determined.

16.4.3.7 Architecture and Building Design

Objectives

- To ensure achievement of environmentally sustainable and attractive contemporary housing within the distinct ecological setting of the site.
- To minimise the environmental impact on the site and surrounding areas during construction.

Controls

- (1) The building design should take advantage of site-specific conditions such as existing vegetation and topography that afford natural view screening from key viewpoints.
- (2) Mock architecture is not permitted.
- (3) Plans submitted as part of the Development Application must show the outline of the approved building envelope of the subject site.
- (4) Proposed Buildings on land steeper than a gradient of 1:6 (16.7%) must be split level or pier construction to minimise prominence and to reduce land disturbance.
- (5) Proposed materials and colour schemes must complement surrounding landscape elements consistent with the [Materials and Colours](#) section.
- (6) Avoid large expanses of glazing, or other highly reflective building materials where they are likely to reflect sunlight when viewed from surrounding vantage points or neighbouring properties.
- (7) The building design should make use of environmentally responsible material by avoiding materials that cannot be recycled or that are harmful to the environment. For suitable building materials refer to www.ecospecifier.org.
- (8) Buildings must demonstrate a high ecological performance regarding energy efficiency, water usage and material usage.
- (9) Buildings should be designed to minimise waste generation during construction. Waste and material recycling management must be implemented during the construction and post-construction phase.
- (10) Erosion and dust generation must be limited during construction phase.
- (11) The design must aim to minimise cut & fill.
- (12) Noise pollution must be minimised during the construction and post construction phase.

16.4.3.8 Materials and Colours

Objectives

- To ensure that building design, materials and colours complement and do not detract from the visual character of the site.

Controls

- (1) Building materials should blend as much as possible with the landscape. Appropriate materials include timber, sandstone, corrugated iron roofing and paving stones or gravel ground surfaces. Brick-veneer external walls and tile roofs are not permissible.
- (2) Use recessive materials colours such as earthy browns and natural timber colours as appropriate. A recommended range of external building colours from Umwelt (2007) is included.
- (3) Avoid reflective building materials such as unpainted metal roofs or white walls.
- (4) A colour palette illustrating all proposed external colours is to accompany any development application.
- (5) Dwellings on lots 1, 21 & 22 must be single-storey and external walls and roofs must be designed to blend-in with the surrounding environment.



Recommended range of external building colours from Umwelt (2007) ([click here to view original image](#))

16.4.3.9 Ancillary Buildings and Structures

Objectives

- To ensure that ancillary buildings and structure are compatible with the existing residence and the surrounding landscape.

Controls

- Ancillary buildings and structures are to be sympathetic in design with the primary dwelling on the site.
- Proposed materials and colours are to complement the primary dwelling and surrounding landscape elements. Use recessive materials colours such as earthy browns and natural timber colours as appropriate. [A recommended range of external colours from Umwelt \(2007\)](#).
- Structures such as sheds, clothes lines, solar panels or wind generators must be located to minimise visual impacts when viewed from adjoining properties, public viewing points and the surrounding area.
- Any ancillary buildings and structures or part thereof must be placed within the building envelopes identified in this Plan.

16.4.3.10 Landscape Design

Objectives

- To ensure that onsite landscaping is compatible with the existing character and landscape features and does not detract from the overall aims and objectives of the development

Controls

- (1) All Development Applications for dwellings must be accompanied by a landscape plan prepared by a suitably qualified landscape designer and consistent with the approved VHMP.
- (2) Clearing of existing native vegetation around buildings is to be limited to the minimum necessary for fire management.
- (3) The landscape design must incorporate the Rain Gardens, Xeriscaping, Water Sensitive Urban Design and fencing components required in accordance with the objectives for the [Architectural Design Guidelines](#). The landscape design submitted with the development application must include the location and design of these components, together with details of plant species, planting techniques and maintenance.
- (4) Landscaping structures must use materials sympathetic with the surrounding natural landscape.
- (5) Driveways must be designed and landscaped to minimise visual impacts when viewed from surrounding areas.
- (6) Structures such as sheds and clothes lines must be located to minimise visual impacts when viewed from adjoining properties, public viewing points and the surrounding area.

16.4.3.11 Fencing

Objectives

- To ensure that the rural character of the development is not detrimentally affected due to inappropriate fencing.
- To ensure that fencing does not adversely affect movement of native fauna through the site.

Controls

- (1) Fencing must be rural style plain wire fences, gapped timber slat fences or natural rock walls to 1.0 m in height. Timber fences or rock walls should be articulated to improve visual appeal and limited to 10 m sections as feature corners or entrances to minimise impediments to native fauna movement.
- (2) All fences are to be constructed so that they do not prevent the natural flow of stormwater drainage/runoff.
- (3) Solid fences such as colorbond and paling fences are discouraged.
- (4) Details of proposed fencing design and location are to be included on the landscape plan prepared in accordance with the [Landscape Design](#) section.

16.4.3.12 Driveway Design

Objectives

- To sustain the rural character of the development.
- To minimise the visual impact of driveways when viewed from surrounding areas.
- To reduce the surface water run-off from driveways.

Controls

- (1) Where feasible, and where shown on the concept Masterplan, laneways must be provided off the internal road. The laneways must be designed to provide access to groups of dwellings to reduce the length and area of individual driveways and their potential visual impact.
- (2) The pavement surface of laneways must be permeable, where feasible.
- (3) Laneways are to comprise a single lane carriageway. They must be part of the community property and must be landscaped and maintained according to the approved [Vegetation and Habitat Management Plan](#) and the

Community Management Statement.

- (4) Tall-growing trees must be provided in the internal road reserve to mark the entry to laneways. The trees must be consistent with the approved [Vegetation and Habitat Management Plan](#) and located to reduce the visual impact of laneways and driveways.
- (5) Individual driveways off laneways must be designed to minimise the visual dominance of garage doors.

16.4.3.13 Design for Privacy of Existing Dwellings in Carmona Drive

Objectives

- To minimise the visual impact by proposed dwellings on adjoining properties in Carmona Drive.
- To protect the privacy of adjoining properties in Carmona Drive.
- To ensure viewing corridors into the site from adjoining properties in Carmona Drive are kept intact.
- To ensure that the rural character of the development is not detrimentally affected due to inappropriate fencing.

Controls

- (1) Living and outdoor areas of dwellings on lots 1 and 21 must face away from and be well screened with vegetation from neighbouring houses in Carmona Drive to protect the privacy of adjoining properties. Vegetation and planting requirements shall be designed to provide effective visual screening based on the location and levels of existing houses relative to the proposed location and levels of new houses, and must be consistent with the approved Vegetation and Habitat Management Plan.
- (2) Screen vegetation and planting must be retained and maintained in perpetuity through positive covenants on the individual lots and through provisions incorporated in the Community Management Statement for the site.
- (3) External walls and the roof of dwellings on lots 1 and 21 must be chosen to blend-in with the surrounding environment.
- (4) Fencing is to be in accordance with the fencing controls detailed in this part of the DCP,

16.4.4 Ecological Management and Repair

16.4.4.1 Vegetation and Habitat Management Plan

Objectives

- To ensure a holistic and managed approach to ecological rehabilitation and management of the site.
- To ensure that the site's vegetation and habitat rehabilitation will foster ecological connectivity and compatibility with the adjoining Booti Booti National Park and with key ecological values and characteristics of the locality, whilst facilitating efficient functioning of the site as an eco-focussed living area.
- To ensure that the site's vegetation and habitat rehabilitation are consistent with and support Council's ecological management planning for both the immediate locality and Great Lakes Council area.

Controls

- (1) The applicant must prepare and submit for Council's approval a Vegetation and Habitat Management Plan (VHMP) that specifies all ecological restoration, maintenance and management measures for the site, including the measures outlined in the remainder of this Chapter.
- (2) The VHMP must be in accordance with [Appendix L of Umwelt \(2007\)](#) and be approved by Council before consent is issued for the first stage of subdivision or housing development on the site.
- (3) The VHMP must be designed to optimise ecological connectivity and compatibility with the adjoining Booti Booti National Park. It shall incorporate the use of appropriate native local native plant species propagated from local provenance material.
- (4) The approved VHMP must be implemented in conjunction with subdivision of the site.
- (5) The site must be maintained and managed in perpetuity in accordance with the terms of the VHMP through

positive covenants on the individual lots and through provisions incorporated in the Community Management Statement.

- (6) The VHMP must address specifically:
- (a) Implementation of a "Landscape Conservation Framework" across the site, consistent with the principles illustrated in the [Precinct Master Plan](#) and incorporating two levels of habitat corridors across the landscape. The Local Riparian Corridor is the Dunns Creek corridor. The Local Corridors are based on the two North/South drainage lines across the property.
 - (b) Incorporation, retention and management of planting and revegetation regimes across the site consistent with the principles illustrated in the [Precinct Master Plan](#) including (but not limited to) planting shown as Managed Corridor Vegetation (both high growing and low growing); Managed Asset Protection Zone vegetation; Managed aquatic vegetation; existing vegetation; Managed screening vegetation; and minimal inter-allotment screening vegetation.
 - (c) Fauna-friendly management measures to be provided within the site, including (but not necessarily limited to) permeable fencing; installation of bridges across waterways to provide cover, shelter and accessibility; implementation of 20 km per hour speed limit and traffic slowing devices within the road network; and development and implementation of a lighting policy which will include restrictions on artificial lighting adjoining corridors and National Parks lands.
 - (d) Proposed treatment of the local riparian corridor along Dunns Creek within the proposed subdivision – a detailed restoration and revegetation plan must be developed for this precinct.
 - (e) Proposed treatment of the local riparian corridor along Dunns Creek downstream of the proposed subdivision - this will be in the form of a 'Dunns Creek Community Restoration Guide' leaflet as a community education tool.
 - (f) Local corridor consolidation and enhancement within the site, integrating with water sensitive urban design plans and bushfire planning provisions for the site.
 - (g) The specific vegetation planting and management measures to be undertaken within the dwelling lots, to provide visual screening consistent with the requirements of the [Subdivision Design](#) controls. These measures must be integrated with water sensitive urban design plans and bushfire planning provisions for the site.
 - (h) Prohibition of dogs, cats, livestock and cattle at the site, other than Assistance Animals as referred to in section 9 (Disability discrimination--guide dogs, hearing assistance dogs and trained animals) of the *Disability Discrimination Act 1992* of the Commonwealth. This prohibition is also to be enforced by means of inclusion in the Community Management Statement.
 - (i) Any proposals for staged implementation of the VHMP.

16.4.4.2 Defining Ecological Precincts, Riparian Corridors, Dams & Aquatic Buffers

Objectives

- To ensure that the areas specified as ecological precincts, riparian corridors, dams and aquatic buffers are appropriately defined and managed.

Controls

- (1) A component of the [Vegetation and Habitat Management Plan](#) is that a plan be prepared that clearly defines the areas specified as ecological precincts, riparian corridors, dams and aquatic buffers. The areas so defined must be generally consistent with the principles illustrated in the [Precinct Master Plan](#) and in accordance with Appendix L of Umwelt (2007).
- (2) All areas specified as ecological precincts, riparian corridors, dams and aquatic buffers (other than those located in the easternmost house Lot) are to be located within the community lot and managed by the Community Association under the provisions of the Community Management Statement and the VHMP.
- (3) Riparian corridors, dams and aquatic buffers located in the easternmost house Lot are to be managed in

accordance with the provisions of the approved VHMP.

16.4.4.3 Revegetation and Planting Measures

Objectives

- To ensure that all revegetation and future planting is compatible with the natural ecological character of the site and the neighbouring National Park.

Controls

- (1) All on site planting and revegetation is to be undertaken in accordance with the Landscape Conservation Framework prepared as a component of the [Vegetation and Habitat Management Plan](#).
- (2) Site specific vegetation screening must be located and planted within the Lots in accordance with the recommendations of the Landscape Conservation Framework and VHMP to retain and promote the site's visual character. The planting is to be protected and maintained in perpetuity by means of a positive covenant on the individual lots and through provisions incorporated in the Community Management Statement for the site.

16.4.4.4 Fauna management Structures & Measures

Objectives

- To provide safe and relatively unrestricted movement through the site to and from the National Park for native fauna species.

Controls

- (1) Fauna-friendly management measures must be implemented within the site, including (but not necessarily limited to) permeable fencing; installation of bridges across waterways to provide fauna cover, shelter and accessibility; implementation of 20 km per hour speed limit and traffic slowing devices within the road network; and development and implementation of a lighting policy which will include restrictions on artificial lighting adjoining corridors and National Parks lands.
- (2) Any fencing implemented is to be rural style plain wire fences, gapped timber slat fences or natural rock walls to 1.0 m in height. Timber fences or rock walls should be articulated to improve visual appeal and limited to 10 m sections as feature corners or entrances to minimise impediments to native fauna movement.

16.4.4.5 Ongoing maintenance, management & environmental repair

Objectives

- To ensure that the site is managed, maintained and repaired in a manner that upholds the objectives of the Vegetation and Habitat Management Plan and the desired future character of the site outlined in the desired future character for Carmona Drive.

Controls

- (1) The [Vegetation and Habitat Management Plan](#) (VHMP) must specify all ongoing ecological restoration, maintenance and management measures for the site.
- (2) Any habitat, environmental or landscaping repair and/or maintenance works on site must be undertaken in accordance with the approved VHMP.

16.4.4.6 Weed management

Objectives

- To ensure that undesirable weeds and introduced species of flora are managed in an appropriate manner.

Controls

- (1) Weed management of the community lot is the responsibility of the Community Group Association and is to be undertaken in accordance with the approved VHMP and community management statement.

16.4.4.7 Treatment & Fencing of National Park boundaries

Objectives

- To ensure compatibility between the site and the neighbouring National Park whilst ensuring the property boundaries are clearly defined.

Controls

- (1) Fences and/or alternate boundary treatments located on the common boundary between the site and Booti National Park must be approved by DECCW prior to erection.
- (2) Solid fences such as colorbond and paling fences are prohibited.

16.4.5 Potential Archaeological Deposit

Objectives

- To ensure that the Potential Archaeological Deposit (PAD) is maintained and protected in perpetuity unless the relevant State Government Authority confirms in writing that future investigations have determined that the site does not have cultural heritage values.
- To ensure that if further investigation takes place it is undertaken in accordance with the statutory requirements of the [National Parks and Wildlife Act 1974](#).

Controls

- (1) The Potential Architectural Deposit (PAD) as shown on the Precinct Master Plan, is to be retained within the Community Land and protected from future development, unless the relevant State Government Authority confirms in writing that further investigations have determined that the site does not have cultural heritage values, in which case the site may be developed for Community Purposes.
- (2) Management of the PAD will be the responsibility of the Community Association in accordance with the provisions of the Community Management Statement and the Vegetation and Habitat Management Plan.
- (3) If further investigations are to be undertaken on the PAD an application to the relevant State Government Authority for a Permit is to be made.

16.4.6 Community Management Statement

Objectives

- To ensure that the Community Management Statement, prepared in accordance with the Community Land Development Act, 1989, will provide for the ongoing maintenance and control of development within the site consistent with the provisions of this Plan.

Controls

- (1) A draft of the Community Management Statement must be submitted for Council's approval as part of any subdivision application.
- (2) The Community Management Statement must be prepared in accordance with the requirements of the [Community Land Development Act](#). The Community Management Statement must specify the ongoing responsibilities and obligations of land owners, occupiers and the Community Association for (but not necessarily limited to) the following matters:

Architectural Design Statement

Specify the preparation, implementation and ongoing management of the approved [Architectural Design Guidelines](#) that form part of this Plan, that will ensure sustainable outcomes in terms of height limits, construction materials and colours, energy efficiency, water conservation, community identification, driveway design, visual compatibility, character and design. The guidelines must include the location of living and outdoor living areas of dwellings on lots 1 and 21 to ensure privacy of adjoining properties in Carmona Drive.

Visual character and Modelling

Specify the requirements for visual modelling of proposed dwellings and other onsite buildings to demonstrate achievement of the Desired Future Character for the site as nominated in the Desired Future Character section. Modelling requirements must be consistent with the provisions of the Visual Impact Management section.

Vegetation and Habitat Management Plan

Specify the ongoing obligations and required standards of vegetation and habitat management, including site regeneration, environmental repair, weed management and habitat management in accordance with the approved Vegetation and Habitat Management Plan.

Specify details relating to the preparation and distribution of the "[Landholders Eco-Kit](#)" (a resource for prospective and new owners, detailing matters such as plant species, environmental weed management, pest animal management, eco-friendly home garden guidelines, corridor and community land management guidelines) and identifying landholder obligations in this regard. The "[Landholders Eco-Kit](#)" is to be distributed to all owners.

Specify ongoing obligations in relation to site specific vegetation screening.

Water Management

Specify requirements for Water Sensitive Urban Design measures to be implemented, including requirements for subdivision, dwelling houses, other buildings and management of watercourses and the central riparian corridor. Water management measures must be consistent with the requirements of the Intergrated Water Cycle Management and the Energy Efficiency and Sustainability sections.

Asset Protection Zones

Specify requirements for management and maintenance of bush fire measures, including Asset Protection Zones and fire access trails in accordance with the NSW Rural Fire Service - Planning for a Bushfire Protection 2006. Requirements must be consistent with the provisions of Bushfire Management section.

Lighting Management

Specify lighting standards to be implemented to minimise and manage visual, character, ecological and habitat impacts from lighting. At a minimum, lighting standards must be consistent with the requirements of the Lighting Management and Architectural Design Guidelines sections.

Keeping of Animals

Specify requirements regarding the prohibition of cats, dogs and livestock. The requirements must be consistent with the relevant provisions of Vegetation and Habitat Management Plan.

Fencing

Specify fencing standards to be applied within the development in accordance with the fencing provisions of this Plan.

Management of Night Time Noise

Specify requirements that ensure that L90 night time noise from activities on residential and/ or community land will not exceed 10 Db(A) above ambient L10 noise levels when measured at the boundary of any residential or community Lot.

Services

Specify requirements for the provision and maintenance of water and sewer infrastructure for all development on the site. Requirements must be consistent with the provisions of the Reticulated Water and Sewer Services section.

Potential Archaeological Deposit

Specify requirements for the protection, ongoing maintenance, supervision and further investigations to be undertaken on the Potential Archaeological Deposit. Requirements must be consistent with the provisions of the Potential Archaeological Deposit section.

16.4.7 References

CPEP (2008) Submission to Great Lakes Shire Council, Response to Public Exhibition of Draft Local Environmental Study, Lot 15 DP 713933 Carmona Drive, South Foster, 6 February 2008.

GLSC (2003) Foster/Tuncurry Conservation and Development Strategy.

GLSC (2006) South Foster Structure Plan.

Hunter Water (2009) Carmona Drive Water and Waste Water Servicing Strategy.

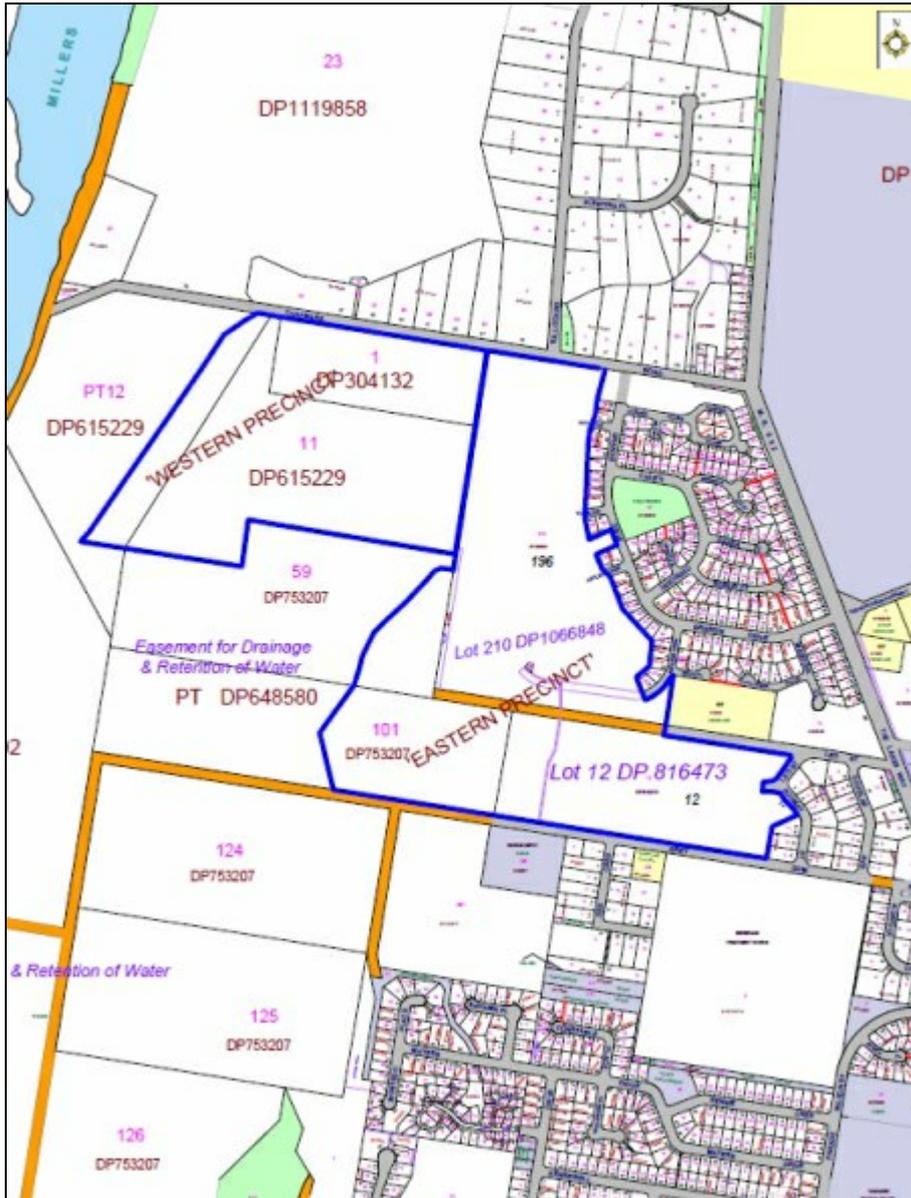
Umwelt (2007) Local Environmental Study, Draft Local Environmental Plan, Desired Future Character and Design Guidelines Lot 15 DP 713933 Carmona Drive, South Foster, September 2007.

16.5 Chapmans Road, Tuncurry

This is a guide for all applications for subdivision and development of land at North Tuncurry being part of Lot 1 DP 304132, Lot 11 DP 615229, Part Lot 12 DP 615229, Lot 1 (9.766ha) in a subdivision of Lot 59 DP 753207 and Lot 101 DP 753207, Lot 210 DP1066848 and Lot 12 DP 816473.

The land has been separated into 'eastern' and 'western' precincts as identified by blue edging in the Site Location Plan.

Lot 12 DP 1816473, located within the Eastern Precinct, is zoned Industrial and is to be developed for this purpose. The remaining lots are zoned for residential and/or environmental protection purposes in accordance with the Great Lakes Local Environmental Plan 2014.



Chapmans Road Tuncurry site location plan (click here to view [original image](#))

16.5.1 Objectives

- To guide subdivision of the land so that it is undertaken in an ecologically sustainable manner taking into account the impacts of climate change.
- To ensure quality of life for current and future generations whilst preserving the quality of the natural environment of nearby land through conservation of biological diversity and ecological integrity.
- To inform the preparation and assessment of any development application on a site greater than 1000m².

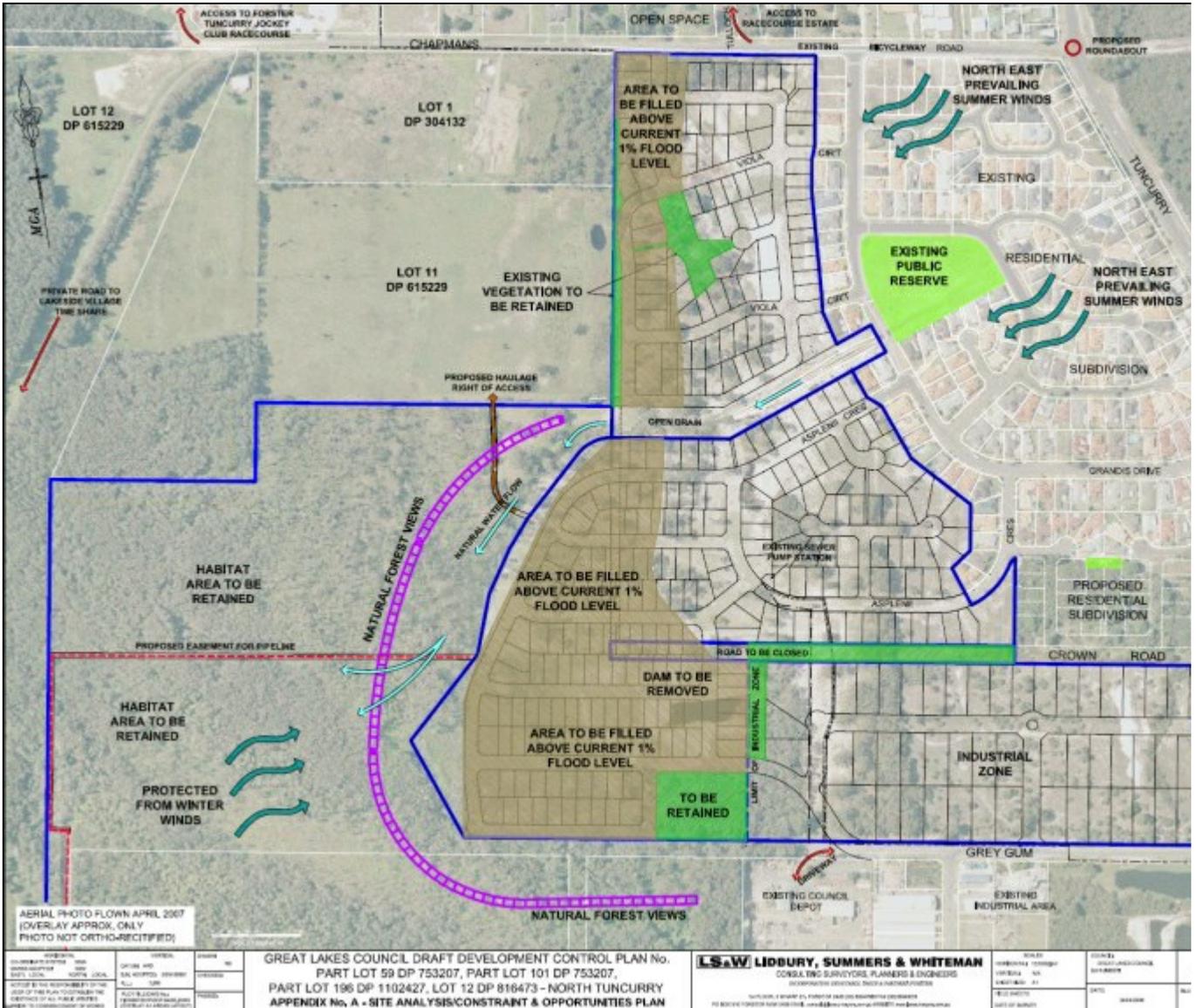
16.5.2 Vision

Lot 12 DP 816473 is zoned Industrial under the Great Lakes Local Environmental Plan 2014. This land is to provide for a range of light and industrial uses which will provide economic development in a flexible and innovative manner. Future development applications seeking consent for subdivision must address road layout and stormwater management issues.

The main land use envisaged for the remaining lots is low density residential development. This is consistent with the residential character of adjoining precincts. It is unlikely that this area will be self-sustaining, but will form an extension to the existing North Tuncurry residential area. This is shown on the Site Analysis Constraints and Opportunity Plan for the Eastern Precinct below.

Any development on that land should recognise the environmental and visual qualities of the surrounding landscape and take into account the impacts of climate change.

In relation to future character, development also should have regard to the relevant objectives, principles and performance criteria set out in the general controls for Forster Tuncurry.



Chapmans Road Tuncurry site analysis constraints and opportunity plan - eastern precinct (click here to view original image)

16.5.3 Subdivision

It is essential that future subdivision development within each precinct ensures connectivity between the subject lands (where practical and appropriate) in terms of lot layout, road hierarchy, stormwater management and infrastructure servicing. In addition to the development standards set out below, Council's general subdivision aims, objectives, controls and design principles with apply. The proposed subdivision pattern for the Eastern Precinct is shown on the 'Lot Plan', while an indicative subdivision layout for the Western Precinct is shown on the 'Proposed Lot Layout'.

Eastern Precinct

Controls

- (1) Any filling or levelling is required to meet Council's designs specifications and AS2870 (residential slabs and footings). Levels shall be adjusted to ensure that stormwater from roads can be directed into bio-retention and

detention ponds. Filling shall be planned to minimise damage or disturbance to existing vegetation to be retained. The proposed filling area is shown on the [Site Analysis Constraints and Opportunity Plan](#).

- (2) The minimum lot filling level is to be in accordance with the Flood Planning Area Map contained in [Great Lakes Local Environmental Plan 2014](#).
- (3) Proposed residential allotments shall be generally in accordance with the proposed 'Lot Plan' .
- (4) Infrastructure including water and sewer are to be provided to adequately service the Eastern Precinct sites . Those reticulation networks are shown on the '[Infrastructure Plan - Water and Sewer Plan](#)'.

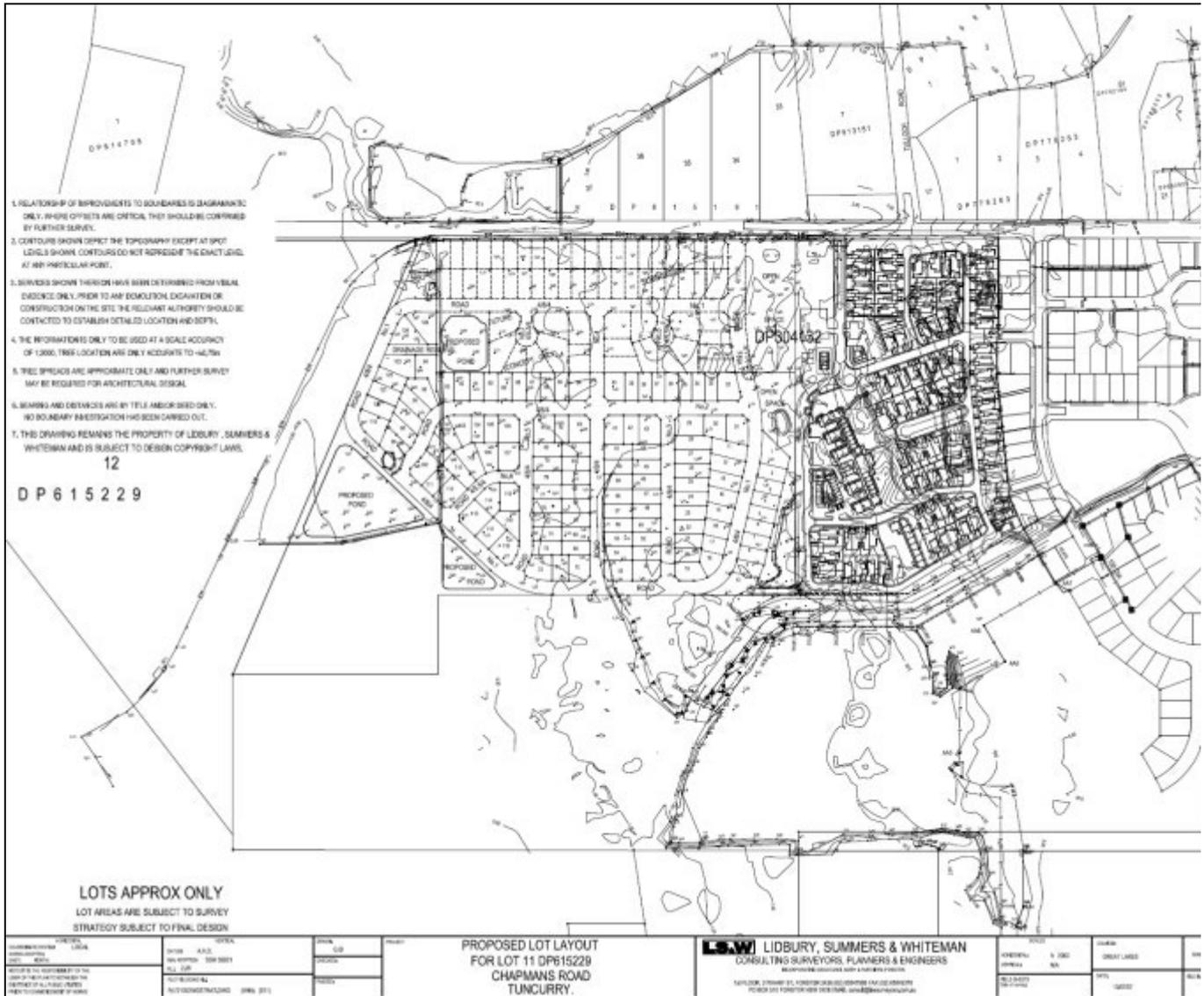


Chapmans Road Tuncurry - eastern precinct lot plan (click here to view [original image](#))

Western Precinct

Controls

- (1) Any filling or levelling is required to meet Council's design specifications and AS2870 (residential slabs and footings). Levels shall be adjusted to ensure that stormwater from roads can be directed into bio-retention and detention ponds. Filling shall be planned to minimise damage or disturbance to existing vegetation to be retained.
- (2) Proposed residential allotments shall be generally in accordance with the '[Proposed Lot Layout](#)' plan.
- (3) Infrastructure including water and sewer are to be provided to adequately service the Western Precinct sites.



Chapmans Road Tuncurry western precinct proposed lot layout (click here to view [original image](#))

16.5.4 Eastern Precinct

Water Quality and Stormwater Management

'Eastern Precinct' being Lot 1 (9.766ha) in a subdivision of Lot 59 DP 753207 and Lot 101 DP 753207, Lot 180 DP 1175115 and Lot 12 DP 816473.

Objectives

- stormwater management facilities within the "Eastern Precinct" are designed in accordance with the principles contained in the [Voluntary Planning Agreement](#) dated 26 February 2008 and outlined below; and
- responsibility for the provision and maintenance of stormwater management measures within the "Eastern Precinct" is shared fairly between landowners/occupiers, developers and Council.

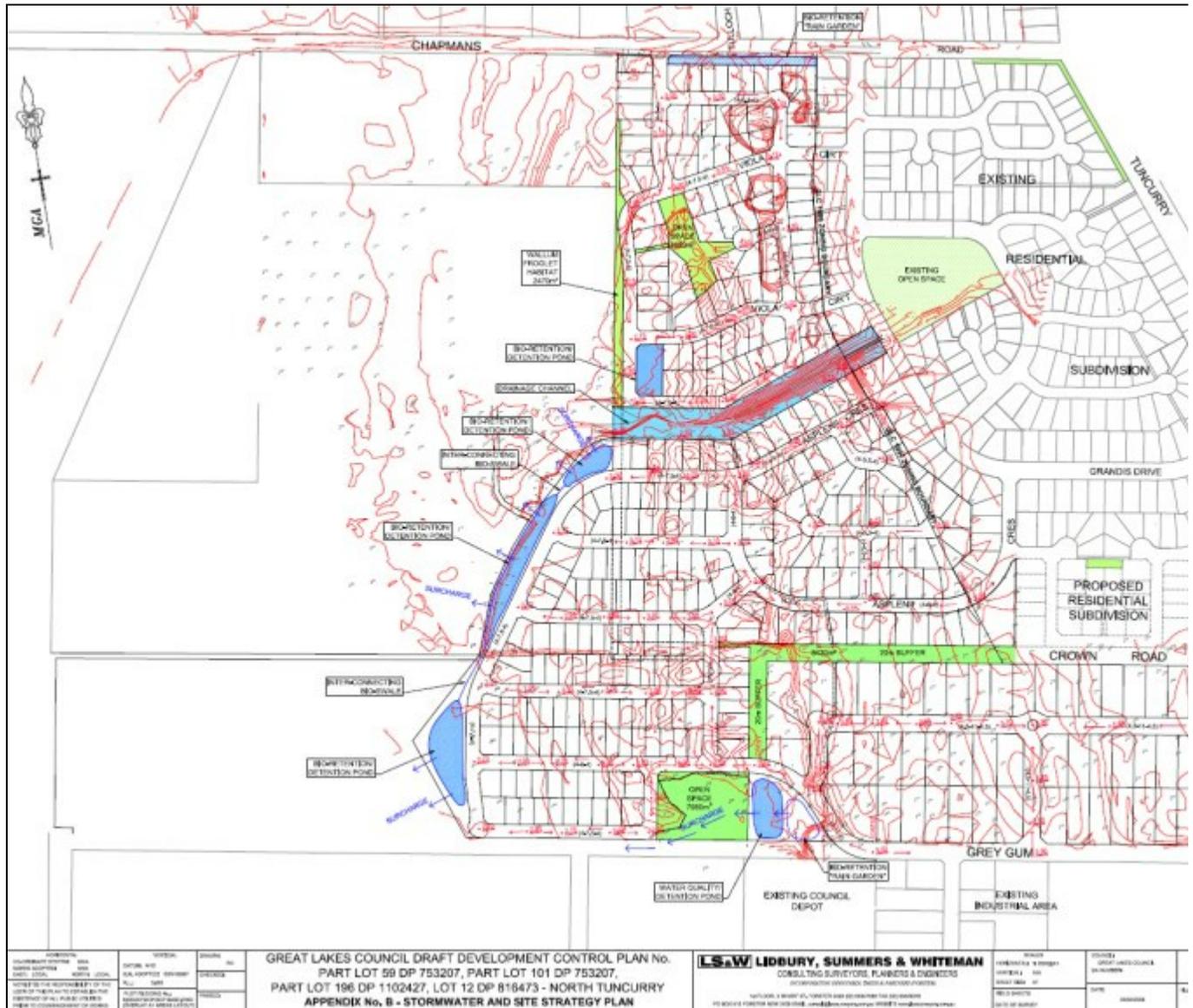
Controls

Future development of the land identified within the "Eastern Precinct", excluding development on lots less than 1000m², or the land zoned industrial being Lot 12 DP 816473 will require:

- (1) The measures to be implemented are shown on the Stormwater and Site Strategy Plan.
- (2) The developer to construct stormwater management facilities onsite to cater for open space, road reserve,

roads and other public domain areas stormwater runoff, in accordance with the following principles:

- (a) Stormwater quality objectives are to conform with the below Table from the Forster Tuncurry & Wallis Lake Stormwater Management Plan (dated 2nd April 2000).
 - (b) Any additional runoff generated is to be managed by appropriate stormwater measures that reduce the frequency of surface discharge from the site to not more than 5 days/yr unless MUSIC modelling incorporating the results geotechnical and groundwater investigations indicate otherwise, but so that the said frequency is not greater than 10 days/yr;
 - (c) The management of stormwater runoff quality and quantity close to the source to avoid concentration of pollutants adjacent to discharge locations into the receiving waters (wetland).
 - (d) Distribution of appropriate stormwater management measures throughout the land to minimise reliance on any one specific method for stormwater management.
 - (e) Any modelling is to demonstrate that additional runoff generated as a result of development is to be treated by a suite of current best practice measures such as underground modular detention/infiltration tanks, rainwater tanks, road side bioswales and bioretention basins to reduce the frequency of surface runoff from within the development footprint.
 - (f) Stormwater treatment measures are to be distributed across the land to maximise point source controls and a 'treatment train' approach so as to minimise concentration of pollutants and promote even distribution of surface water infiltration."
 - (g) Appropriate stormwater "management measures" or "specific methods" include combinations of rainwater tanks, raingardens, permeable paving, pit inserts, vegetated filter strips, bioretention swales/basins and retention/infiltration systems. Appropriate combinations of these measures shall be incorporated into all developments at an appropriate scale except where it is clearly demonstrated by site specific investigations that soil, topography or other physical site conditions limit their application. Council shall be consulted prior to proposing any measures different to the appropriate measures summarised above.
- (3) The developer is to contribute to the public engineering works, future water quality monitoring and maintenance costs arising in relation to each subdivision consent granted from the commencement of construction until 2 years after the issue of the relevant Subdivision Certificate.



Chapmans Road Tuncurry stormwater and site strategy plan - eastern precinct (click here to view [original image](#))



Chapmans Road Tuncurry stormwater and site strategy plan - eastern precinct (click here to view [original image](#))

Forster Tuncurry & Wallis Lake Stormwater Management Plan (dated 2nd April 2000)

Pollutant/Issue	Retention Criteria
Quantitative Objectives - applicable to subdivisions and all medium-large scale developments 1&2	
Coarse Sediment	80% of average annual load for particles of 0.5 mm or less.
Fine Particles	50% of average annual load for particles 0.1 mm or less.
Total Phosphorus ³	45% retention of average annual load
Total Nitrogen ³	45% retention of average annual load
Litter	70% of average annual litter load greater than 5 mm

Hydrocarbons, motor fuels, oils and grease	90% of average annual pollutant load
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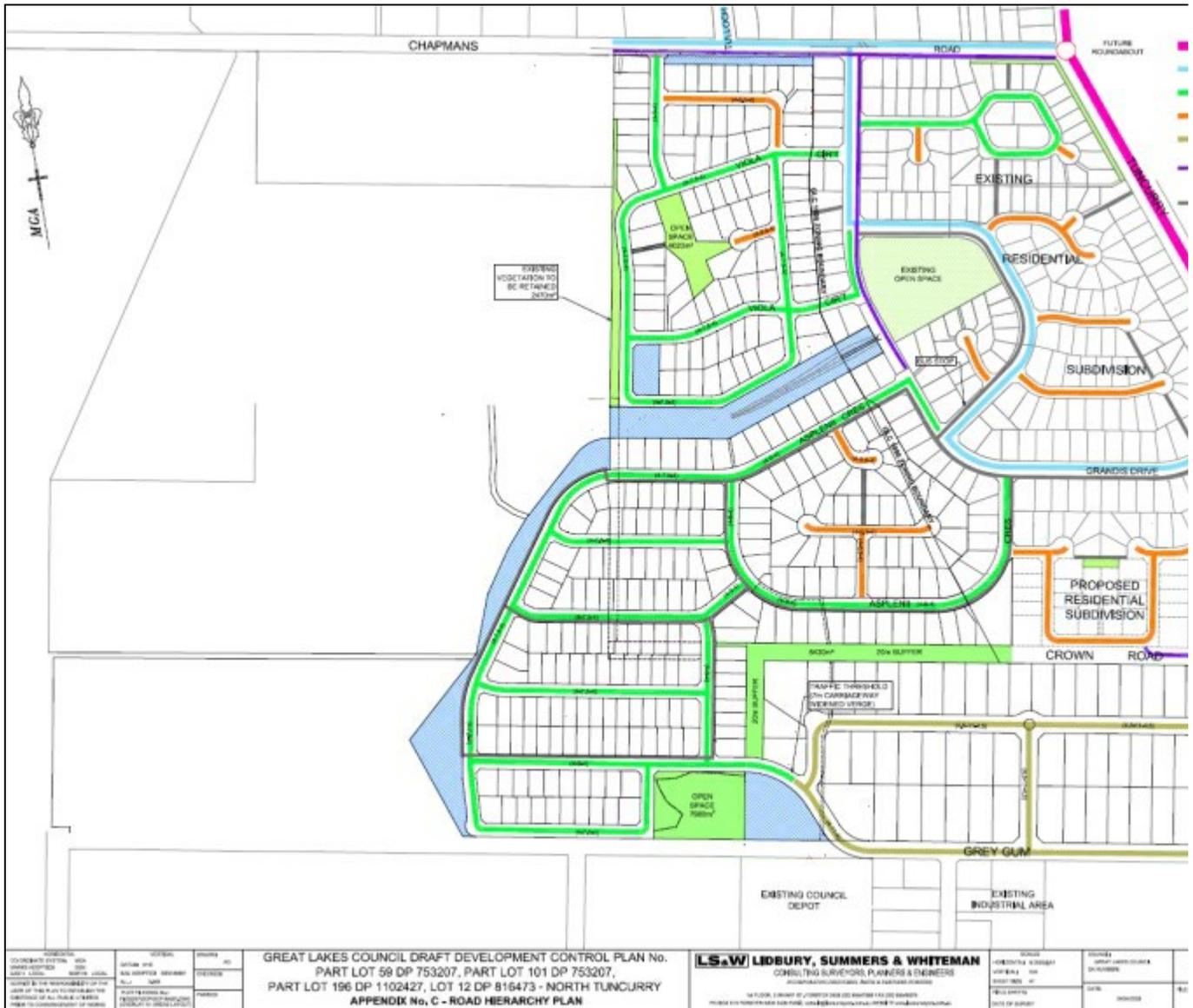
1. Medium -large scale developments are generally defined as those greater than 2,500 m² in total area.
2. Areas relate to total developments, rather than individual stages of a development.
3. These criteria do not apply to developments within the catchments of Pipers Creek, Pipers Bay or South Wallis Lake south of Green Point village.

Road Network and Access

This clause applies to Lot 1 (9.766ha) in a subdivision of Lot 59 DP 753207 and Lot 101 DP 753207, Lot 180 DP 1175115 and Lot 12 DP 816473.

Controls

- (1) The internal road network shall connect to Chapmans Road and Viola Circuit, Asplenii Crescent, Grey Gum Road and Leo Street to enable primary vehicular access to and egress from the residential development area. The proposed road network is shown on the Road Hierarchy Plan contained in the diagram below.
- (2) The primary road network requires the:
 - (a) southern access from Chapmans Road
 - (b) westerly extension of Asplenii Crescent
 - (c) westerly extension of Grey Gum Road
 - (d) westerly extension of Viola Circuit
 - (e) westerly extension of Leo Street to link with Grey Gum Road
- (3) The road network shall include a perimeter road where it adjoins the Biodiversity Provision Lot.
- (4) The road network shall adopt a dominance of east west roads to assist in drainage and ensure a maximum number of north facing blocks.
- (5) Details of road design and construction standard are to be submitted for approval as part of the construction certificate application process.
- (6) The siting and style of street lighting along the perimeter that adjoins the undeveloped land shall be determined in accordance with AS 1158.



Chapmans Road Tuncurry road hierarchy plan - eastern precinct (click here to view [original image](#))

Section 94 Contributions

Council and the landowner entered into a Voluntary Planning Agreement which provides that any Section 94 contributions payable for development pursuant to sections 94, 94A and 94EF of the Environmental Planning and Assessment Act is that which applied at 1 July 2007 except as adjusted for CPI.

The areas proposed to be set aside as open space satisfy the requirement of passive local open space for the residential development of the land as identified in Council's section 94 Open Space Contributions Plan as at 1 July 2007. The provision for active open space is to be made off site and the relevant s94 contributions are to be levied in this regard.

16.5.5 Western Precinct

16.5.6 Bushfire Management

The bushfire legislation that took effect on 1 August 2002 (as amended) requires certain proactive measures to ensure new housing is less susceptible to damage or destruction from bushfires. These measures include the provision of asset protection zones, construction standards, adequate access and water supply for fire fighting.

Objectives

To provide adequate bushfire protection measures which are consistent with:

- the need to preserve life, property and the environment; and
- the need to protect identified conservation areas.

Controls

- (1) All development must comply with the Planning for Bushfire Protection Guidelines (as amended).
- (2) Where bushfire construction is required for future buildings in accordance with AS3959 a Section 88B Instrument shall be created restricting any dwelling erected on the land to the respective level of construction.
- (3) All bushfire protection measures shall be located on residential or industrial zoned land.

Water Quality and Stormwater Management

'Western Precinct' being Lot 1 DP 304132, Lot 11 DP 615229 and Part Lot 12 DP 615229

Objectives

- ensure stormwater treatment measures within the "Western Precinct" substantially achieve the [Great Lakes Water Quality Improvement Plan \(2009\)](#) target of 'no net increase' in average annual pollutant loads relative to existing land use (water quality objective);
- ensure an average of 5 days of surface runoff per year or less is achieved within the "Western Precinct" for the (flow objective);
- responsibility for the provision and maintenance of stormwater management measures is shared fairly between landowners/occupiers, developers and Council; and
- treatment measures implemented are consistent with the [Chapman's Road, Tuncurry – Stormwater Management Strategy \(as adopted 27/4/10\)](#).

Controls

- (1) Future development of the land identified within the "Western Precinct" must demonstrate that:
 - (a) proposed stormwater management measures and facilities will be designed and constructed in accordance with the document titled [Chapman's Road, Tuncurry – Stormwater Management Strategy \(as adopted 27/4/10\)](#);
 - (b) construction phase impacts on water quality will be adequately managed through erosion and sediment control and appropriate site management;
 - (c) WSUD principles will be incorporated into the design of the development, specifically:
 - (i) development shall not adversely impact on the natural values of waterways, wetlands, groundwater or any areas of ecological importance;
 - (ii) development shall be capable of controlling the loads and concentrations of pollutants in stormwater discharges from the site in accordance with established targets;
 - (iii) adverse impacts on site water balance¹ and/or flow regimes are to be minimised;
 - (iv) development shall be integrated with the landscape to achieve multiple benefits including water quality protection, stormwater retention and detention, public open space and recreational and visual amenity; and
 - (v) where possible, stormwater shall be used to reduce potable water demand.
 - (d) stormwater from the development will not result in unacceptable changes to waterway stability or alignment;
 - (e) stormwater from the development will not result in an unacceptable change in vegetation or habitat, including limiting the number of days with surface runoff to the target of 5 per year;
 - (f) stormwater management will be undertaken in a manner that does not encourage the introduction of non-indigenous flora or fauna;

- (g) stormwater management will be undertaken in a manner that does not degrade visual or recreational amenity of local waterbodies; and
 - (h) stormwater drainage infrastructure will be sized to convey the design storm event and manage the design flood event.
¹Site water balance includes the following parameters: surface runoff; baseflow; residential water use; and evapotranspiration.
- (2) As part of the first development application the developer shall provide, for Council's endorsement, a stormwater strategy detailing stormwater management measures for all of the land identified within the "Western Precinct" and staging, as well as lifecycle costing of the proposed stormwater management system with regard to capital, maintenance, modification and decommissioning costs.
 - (3) The developer is to contribute to the public engineering works, future water quality monitoring and maintenance costs arising in relation to each subdivision consent granted from the commencement of construction until a specified future date as agreed between the developer and Council. The monetary amount shall be based on a lifecycle costing of the proposed stormwater management system that includes capital, maintenance, modification and decommissioning costs.
 - (4) Disturbance of soils will be regulated in accordance with a sediment and erosion control plan which is to be submitted with any Development Application for the site. The plan should detail measures to prevent erosion during any earth works or the construction works. The plan is to be in accordance with Council's Sediment and Erosion Control Policy and Department of Housing's Managing Stormwater Urban Soils and Construction 2004.

Road Network and Access

This clause applies to Lot 1 DP 304132, Lot 11 DP 615229 and Part Lot 12 DP 615229.

Controls

- (1) The internal road network shall connect to Chapmans Road to enable primary vehicular access to and egress from the residential development area relating to the lots identified above. In addition, the internal road network shall be designed to provide clear patterns of movement, maximise connectivity and promote efficient flow paths for vehicles, pedestrians and cyclists.
- (2) The road network shall include a perimeter road where it adjoins the land zoned for environmental protection.
- (3) The road network shall adopt an efficient layout to assist in drainage and ensure a maximum number of north facing blocks.
- (4) Where applicable variable road widths and threshold treatments will be incorporated in the subdivision design to limit traffic speed.
- (5) Details of road design and construction standard are to be submitted for approval as part of the construction certificate application process.
- (6) The siting and style of street lighting along the perimeter that adjoins the undeveloped land shall be determined in accordance with AS 1158.

16.5.7 Protection of Aquifer

The Chapmans Road and North Tuncurry Local Environmental Study (2003) identified that "a significant unconfined aquifer is located under the North Tuncurry site". Although this water source would require treatment to improve its water quality, it is a water source that must be protected for potential future sustainable use and for the protection of local groundwater dependant eco-systems. It is therefore important to ensure that stormwater quality measures associated with future development are sufficient to adequately protect the underlying aquifer.

Objectives

To adequately protect the unconfined aquifer located below the subject land for:

- potential future sustainable use(s); and
- local groundwater dependent eco-systems.

Controls

- (1) Stormwater modelling for all future development must demonstrate adequate protection of the underlying aquifer by complying with Stormwater Management Performance Criteria set out in the [Water Sensitive Design Section relating to Large Scale Development](#).

Note: This Plan still allows local infiltration measures (trenches, leaky pipes, etc) to be utilised, but the invert of such measures will have to be located at least one (1) metre above the highest predicted groundwater level. However sealed structures (pipes, etc) can be located within the one (1) metre buffer.

16.5.8 Open Space and Landscaping

Relevant and appropriate public open space and landscaping provides and/ or enhances the:

- landscape character and the amenity and aesthetics of developed areas;
- establishment of vegetation buffers between differing land uses;
- opportunities for public recreation; and
- bushfire protection performance through the planting of fire retardant plants.

Open Space

Objectives

- To ensure adequate provision and distribution of public open space in convenient and accessible locations and of a quality to meet the recreation needs of the community.
- To encourage opportunities to link the open space network with the retention of significant existing vegetation in open space areas.
- To protect significant habitat features, where it is safe to do so, such as tree hollows and threatened species habitats, within public open space areas.

Controls

- (1) Open space shall be provided at the rate of 2.83ha per 1000 people (28.3m² per person) or by the provision of a monetary contribution.
- (2) Land to be set aside for open space is set out in the [Lot Plan](#) (Eastern Precinct only).
- (3) Land set aside for passive open space should incorporate and retain/ protect important habitat features, where practical.

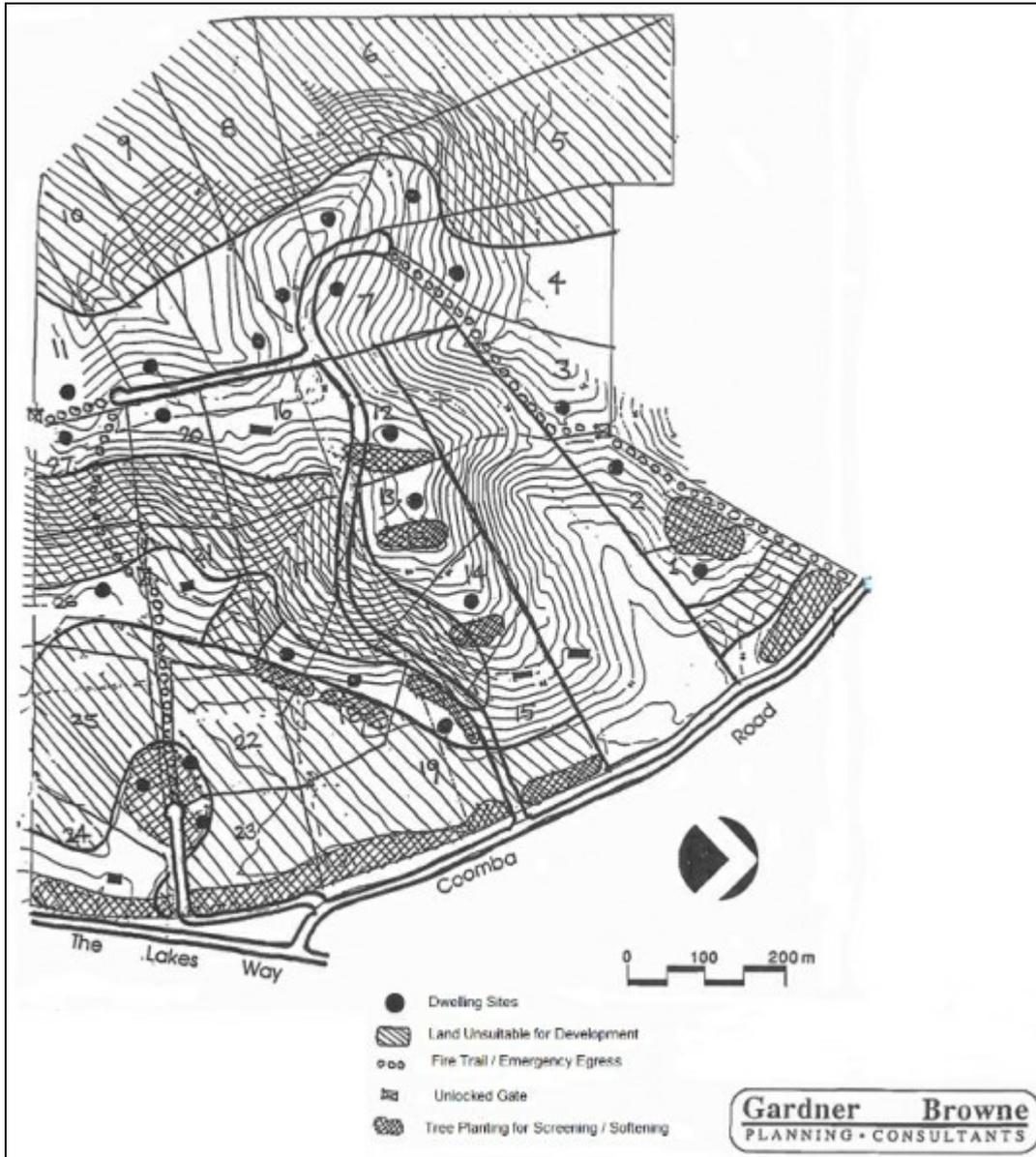
Landscaping

Objectives

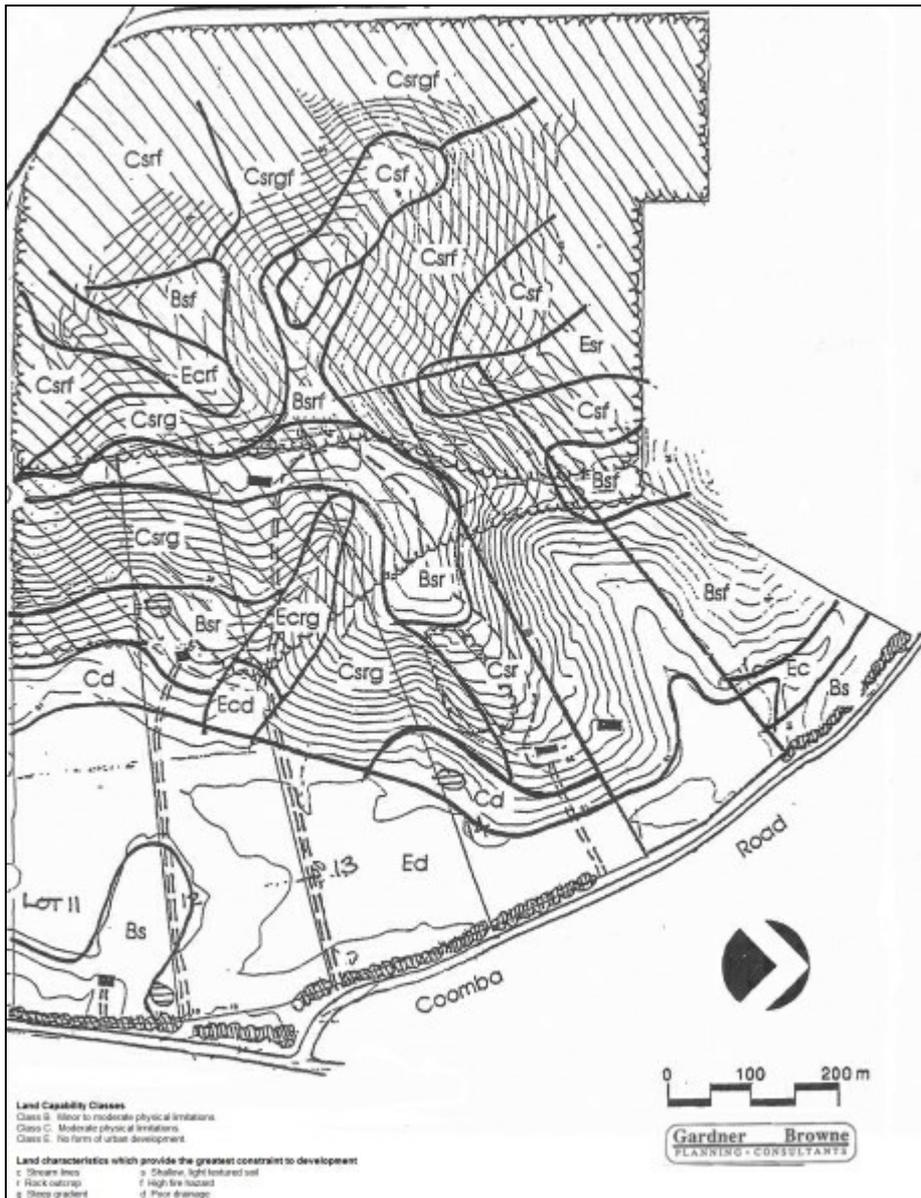
- To encourage the retention or planting of native trees and shrubs, where it is safe to do so, in the street verges, open space and to achieve the benefits of native landscaping.
- To require the use of landscaping that is predominantly of local native flora in streetscapes and open space

Controls

- (1) A landscape / street tree-planting concept plan is to be submitted with each subdivision application.
- (2) Landscaping shall incorporate the retention and protection of existing native trees and shrubs in streetscapes and open space where it is beneficial, safe to do so and proposed service infrastructure allow.
- (3) Introduced landscaping shall use predominantly local native flora, including species of value to native fauna (nectar plants, fruit-plants, shelter) and fire retardant plants.



Coomba Park Road Pacific Palms principles for development (click here to view [original image](#))



Coomba Park Road Pacific Palms land capability (click here to view [original image](#))

16.6.2 Conservation Measures

- (1) The following conservation and environmental protection measures shall apply to development of the land.
 - (a) Vegetation is to be maintained within 30m of drainage lines.
 - (b) On forested lots, tree clearing shall generally be restricted to a maximum of 2000m² (including those cleared areas which already exist on the land) and the approval of Council must be granted prior to the clearing being undertaken. On lots in excess of 2.5ha, some additional clearing may be considered on merit but should not in any case exceed 10% of the total area of the lot.
 - (c) Runoff diversion is required around dwellings, access roads and fire trails on sloping sites and should be shown on the development application.
 - (d) Soil conservation measures are to be taken to protect construction sites during the development of the subdivision and subsequent erection of dwelling houses. These measures should be detailed as part of any development application.
 - (e) Preparation of an erosion and sediment control plan for the road works to the satisfaction of Council prior to granting of subdivision approval.

16.7 Davglade Development, South Forster

The subject land comprises part of Lot 6177 DP 1099599, located within the South Forster area, as shown in the Site Location Plan.



Davglade development South Forster site location plan (click here to view [original image](#))

16.7.1 Desired Future Character

The controls over Pt Lot 6177 DP 1099599, will guide development of the land so that it is undertaken in an ecologically sustainable manner. Sustainable development of the land will ensure quality of life for current and future generations whilst preserving the quality of the natural environment through conservation of biological diversity and ecological integrity.

The main land use envisaged for the site is low density residential development. This is consistent with the surrounding residential character of adjoining precincts. It is unlikely that this area will be self-sustaining, but will form an extension to the existing Forster area. Development should be sited to protect the environmental and visual qualities of the surrounding landscape in accordance with the plans provided.

16.7.2 Water Quality and Stormwater Management

The land to which this Plan applies is located in the 'L'-Leg catchment of South Forster. A significant portion of the lower catchment is flood prone and generally unsuitable for development. Runoff within the catchment ultimately drains into Pipers Creek (Wallis Lake), which is poorly flushed and highly sensitive to increases in pollutant loading. Council has therefore adopted a [stormwater management strategy for the 'L' Leg" catchment](#), which has a water quality objective of no further increase in future pollutant loads entering Pipers Creek from within the catchment.

Objectives

The principal water quality and stormwater management objectives applying to development within this catchment are to:

- reduce the peak flow rate of stormwater run-off from the site for all storms up to the 100 year ARI;
- ensure no further increase in future pollutant loads entering Pipers Creek from the "L" Leg catchment', both

- during and post construction; and
- ensure that responsibility for the provision and maintenance of stormwater management measures is shared fairly between landowners/occupiers, developers and Council.

Controls

- Future residential development of the subject site is contingent upon:
 - Stormwater detention being provided to reduce post development flows to pre development levels for all storm events and durations;
 - The catchment water quality objective of 'no net increase in pollutant loads entering Pipers Creek' being achieved either:
 - at the point of discharge from the subject site, OR
 - at the point of discharge from Lot 602 DP 1076070; and
 - the developer constructing stormwater management facilities on site in accordance with the document titled "[Review of Stormwater Management Strategy for "L" Leg Catchment \(WBM, 2006\)](#)", and
 - Once residential development of the Davglade site reaches the stage where its on-site stormwater management facilities cannot meet the objective of 'no net increase in pollutant loads entering Pipers Creek', no further residential development will be permitted until adequate components of the adopted stormwater management strategy are acquired and constructed; and
 - the developer contributing to future water quality monitoring and maintenance costs in accordance with the [Planning Agreement \(dated 22 April 2012\)](#) between Council and the Developer, as amended from time to time.
- Prior to Council's release of the first plan of subdivision within the low density residential zone the Developer shall provide, for Council's endorsement, full details of the stormwater management facilities for the land and staging of their construction.
- Disturbance of soils will be regulated by a sediment and erosion control plan which is to be submitted with any Development Application for the site. The Plan should detail measures to prevent erosion during any earth works or the construction of dwellings. The Plan is to be in accordance with [Council's Sediment and Erosion Control Policy](#).

16.7.3 Building

Any future Development Application for the land should identify proposed dwelling sites which avoid construction in flood prone areas and do not require clearing of vegetation within habitat conservation areas for bushfire protection.

Objectives

To ensure buildings are designed and located so that:

- they relate to the topography of the site;
- minimal disturbance of vegetation and soils occurs;
- there is low visibility from the surrounding area; and
- bushfire risk is minimised.

Controls

- Those lots to be created that require building construction in accordance with either [Level 1](#), [Level 2](#) or [Level 3](#) of [AS 3959 – Construction of Buildings in Bushfire – Prone Areas \(as amended\)](#), shall be identified as such in the Section 88B of the plan of subdivision.
- Where lots directly abut the recreation zone (i.e. where there is no perimeter road) the design of those buildings must demonstrate how the colour values of built elements have been selected and positioned to complement those of the adjoining forest setting. Suitable colours should include earth tones such as browns, greys, dark beige and varying shades of green according to the natural surroundings.

- (3) The Section 88B Instrument of the plan of subdivision that creates the above-mentioned lots shall contain covenants that require compliance with a range of wall and roof colours.
- (4) Wherever possible, buildings should be generally oriented with a north to north-easterly aspect to:
 - (a) maximise warmth from winter sun;
 - (b) maximise shade from summer sun by use of awnings, pergolas etc;
 - (c) gain advantage of north-easterly breezes; and
 - (d) make the best advantage of north facing outdoor living areas.

16.7.4 Road Network and Access

Controls

- (1) The internal road network shall connect to Kentia Drive, Akala Avenue and The Southern Parkway to enable primary vehicular access to and egress from the residential development area.
- (2) The primary road network requires the:
 - (a) southeasterly extension of The Southern Parkway
 - (b) the southerly extension of Kentia Drive to The Southern Parkway extension and
 - (c) the northerly extension of Akala Avenue to the Kentia Drive extension generally as shown below.
- (3) The intersection of Kentia Drive and The Southern Parkway shall be located as shown below, so that Kentia Drive has a common boundary with the Proposed Conservation / Open Space Corridor.
- (4) Where the extension of Kentia Drive adjoins the proposed Neighbourhood Park the carriageway is to be reduced to no more than 6m in width to promote low vehicle speeds.
- (5) Although 'staging' of subdivision will generally be at the Developer's discretion, the Developer must construct that portion of The Southern Parkway adjoining the subject land prior to Council's release of the first plan of residential subdivision.
- (6) Details of road design, construction standard and erosion and sediment controls are required to be submitted for approval as part of the application process.

16.7.5 Open Space / Conservation Corridor

Objectives

- To protect and enhance remnant vegetation and habitats; and
- To limit fragmentation of habitat and facilitate fauna movement in both a local and regional context; and
- To protect existing vegetation and future development through provision for a fire management plan for Open Space/Conservation Corridor; and
- To restrict residential development and bushfire asset protection zones to the areas zoned residential.

Controls

- (1) Habitat Retention and Enhancement
 - (a) Vegetation within conservation areas and recreation area must not be cleared unless ordered by Council or as part of works outlined in an approved fire management plan.
 - (b) With exception of future lots shown below, vegetation within conservation areas and recreation area should not form part of an "inner" or "outer" Asset Protection Zone to adjoining residential lots.
 - (c) The Developer shall plant 80 native trees (i.e. indigenous to the immediate subcatchment) within the area shown below to compensate for tree removal during construction of dwellings on the allotments where the extension of Kentia Drive which adjoins the proposed neighbourhood park, as well as to facilitate fauna movement. Planting details must be submitted for Council approval. The planting must be implemented by an appropriately qualified person prior to Council's release of the first plan of

subdivision. A Bond or Bank Guarantee of \$2,000 will be required to be lodged with Council as part of any subdivision consent, to ensure the plantings are successful, which will be released upon achieving a 90% survival rate (of establishment of planted trees) at the end of 24 months.

- (2) To minimise pedestrian/vehicle conflicts and fauna fatalities along Kentia Drive where it adjoins the proposed Neighbourhood Park, the carriageway of Kentia Drive at this location is to be no more than 6 metres in width to promote low vehicle speeds and will include planting of large trees close to the carriageway (see below). See also '[Road Network and Access](#)'.
- (3) The siting and style of street lighting along any road adjacent to recreation land shall be determined in consultation with Council's ecologist.
- (4) Landscaping in future residential areas should be undertaken to achieve the following outcomes:
 - (a) enhance biodiversity through planting of species that are indigenous to the local subcatchment;
 - (b) incorporate fire resistant species where appropriate;
 - (c) vegetation management within residential allotments in accordance with the Planning for Bushfire Protection Guidelines or as amended.

16.7.6 Bushfire Protection and Management

Objectives

To provide adequate bushfire protection measures which are consistent with:

- the need to preserve property and dwellings;
- the need to protect identified conservation areas; and
- the limited resources of Great Lakes Bush Fire Control services.

Controls

- (1) All development must comply with the [NSW Rural Fire Service - Planning for Bushfire Protection Guidelines \(2006\)](#) or as amended.
- (2) Where [Level 1, 2 or 3 bushfire construction \(AS3959\)](#) is required for land other than referred to in the [Subdivision section](#), a Section 88B instrument shall be created restricting any dwelling erected on the land to the respective level of construction OR alternatively, subdivision of the land may be undertaken as integrated development as referred to in the [Subdivision controls](#).
- (3) For new allotments in bushfire prone areas, any required asset protection zones (APZ) must be maintained in perpetuity. The following fire measures (having regard to the issue of bushfire mitigation) shall be required in a Section 88B instrument to ensure the provision and ongoing maintenance of an effective 'Inner Asset Protection Zone (APZ)' within each allotment:
 - (a) Trees on the property should not overhang the building ;
 - (b) Trees on the property should be maintained to ensure that a discontinuous canopy of vegetation is formed between the property boundary and the building;
 - (c) The entire property shall be managed as an 'Inner Protection Area' as outlined in Planning for Bushfire Protection.
 - (d) Trees on the property being maintained so as to minimise dead material or excessive quantities of deposited ground fuel;
 - (e) Landscaping should be selected having regard to the potential of the plants contributing to the fuel load surrounding the building and providing a path of transfer of fire to the building. Trees selected may include fire resistant species such as Brushbox, Blackwood, Lilly Pilly, Hakeas, Figs and White Cedar; and
 - (f) Woodpiles and other combustible material storage areas, large areas/quantities of garden mulch, stacked flammable building materials, etc, should not be stored to the surrounds of the building unless suitably safeguarded from ignition by a potential bushfire.

- (4) New owners should be provided with extracts from [NSW Rural Fire Service - Planning for Bushfire Protection Guidelines \(2006\)](#) which provide advice on managing fuel loads and appropriate landscaping.
- (5) Should future lots shown in the [Agreed Planning Principles Plans](#) directly abutt the recreation zone (i.e. where there is no perimeter road), the Developer shall create a fire access trail on the adjoining recreation zone in accordance with Council's plan of management for the reserve, or in the absence of such a plan in accordance with approvals issued by the NSW Rural Fire Service (RFS).
- (6) If the Owner does not obtain the written support of the NSW Rural Fire Service to rezone residual land at end of Oriana Close to residential, within the sooner of five (5) years from date of gazettal for Amendment No. 36 to Great Lakes Local Environmental Plan 1996, or the final stage of subdivision for land to which this section of the Development Control Plan applies; then Council will negotiate with the landowner for dedication of the residual land as public reserve. If negotiations prove unsuccessful then Council shall take all necessary steps to rezone this land for environmental protection with no dwelling entitlement.

16.7.7 Subdivision

In addition to the development standards set out below, the aims, objectives, controls and design principles contained in the subdivision chapter should be considered.

Objectives

- To ensure future buildings within the lots that abut the RE1 Public recreation land comprise only single, detached dwellings, satisfy the visual performance standards and identify to prospective purchasers any requirement to construct buildings to [Level 1, Level 2 or Level 3 of AS 3959 – Construction of Buildings in Bushfire – Prone Areas](#) (as amended).

Controls

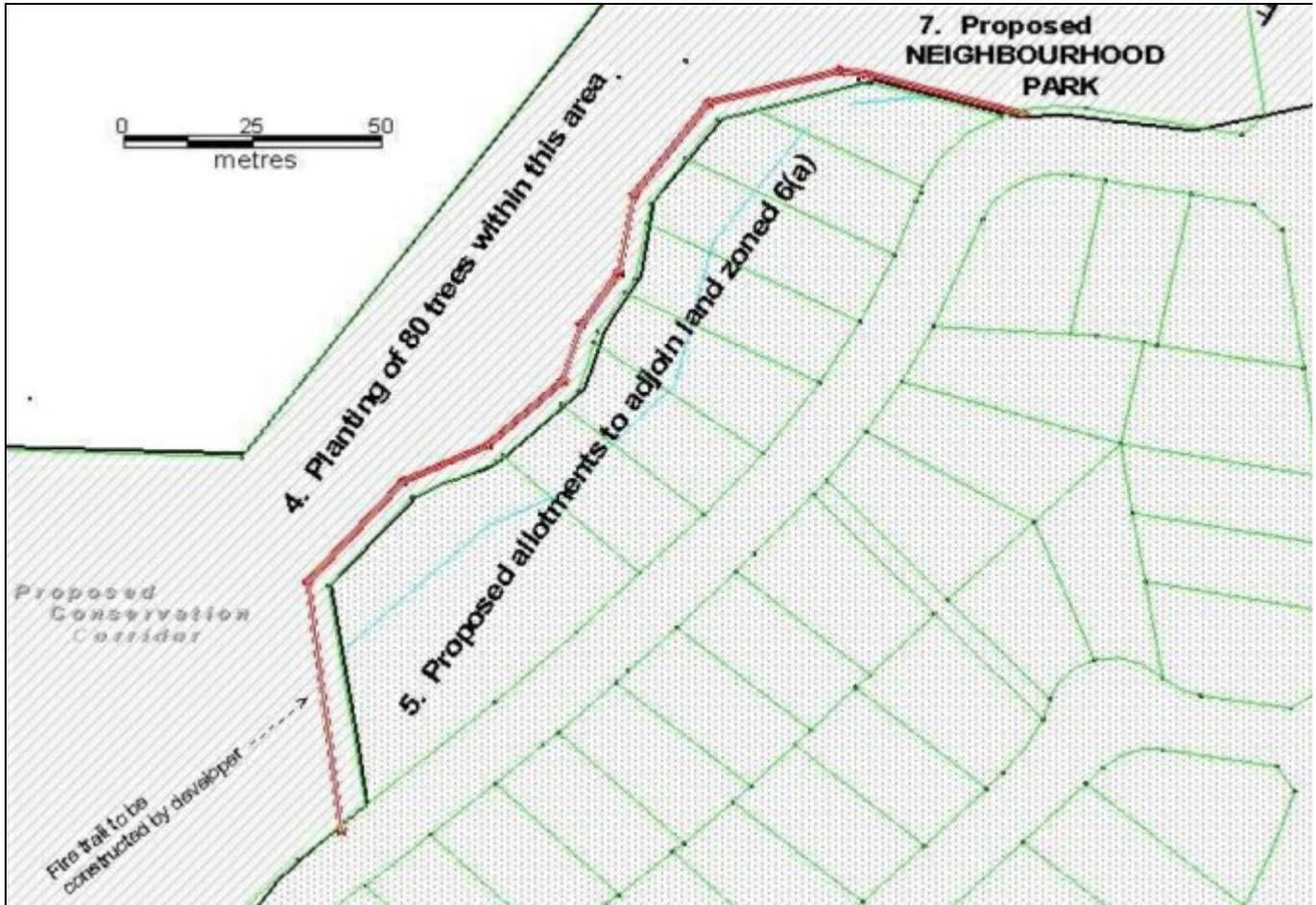
- (1) Proposed residential allotments directly abutting (i.e. where there is no perimeter road) land zoned RE1 Public Recreation (previously zoned 6(a) Open Space and Recreation under Great Lakes Local Environmental Plan 1996) shall be confined to 'Area 5' seen in the [Agreed Planning Principles Plan](#) and created either within the lot boundaries as shown below, OR an alternative lot layout that is in accordance with clause (2) below.
- (2) Any subdivision of this land shall:
 - (a) be undertaken in accordance with the [Community Land Development Act, 1989](#) (i.e. Community Title) and include a Management Statement that addresses such issues; OR
 - (b) be undertaken as integrated development, whereby consent is concurrently obtained for the subdivision of the land and the erection of the dwellings on each approved lot. Council will require completion of slab and floor areas for each dwelling prior to release of the subdivision plan as a condition of development consent; AND
 - (c) include a Section 88B instrument which:
 - (i) restricts development to single, detached dwellings,
 - (ii) identifies the appropriate building envelope and level of bushfire construction (ie. Level 1, Level 2 or Level 3 of AS 3959 – Construction of Buildings in Bushfire – Prone Areas (as amended) within all allotments,
 - (iii) contains covenants that require compliance with a range of wall and roof colours; and
 - (iv) refers to any bushfire management and landscaping requirements within the Asset Protection Zone on each lot.

16.7.8 Section 94 Contributions and Open Space

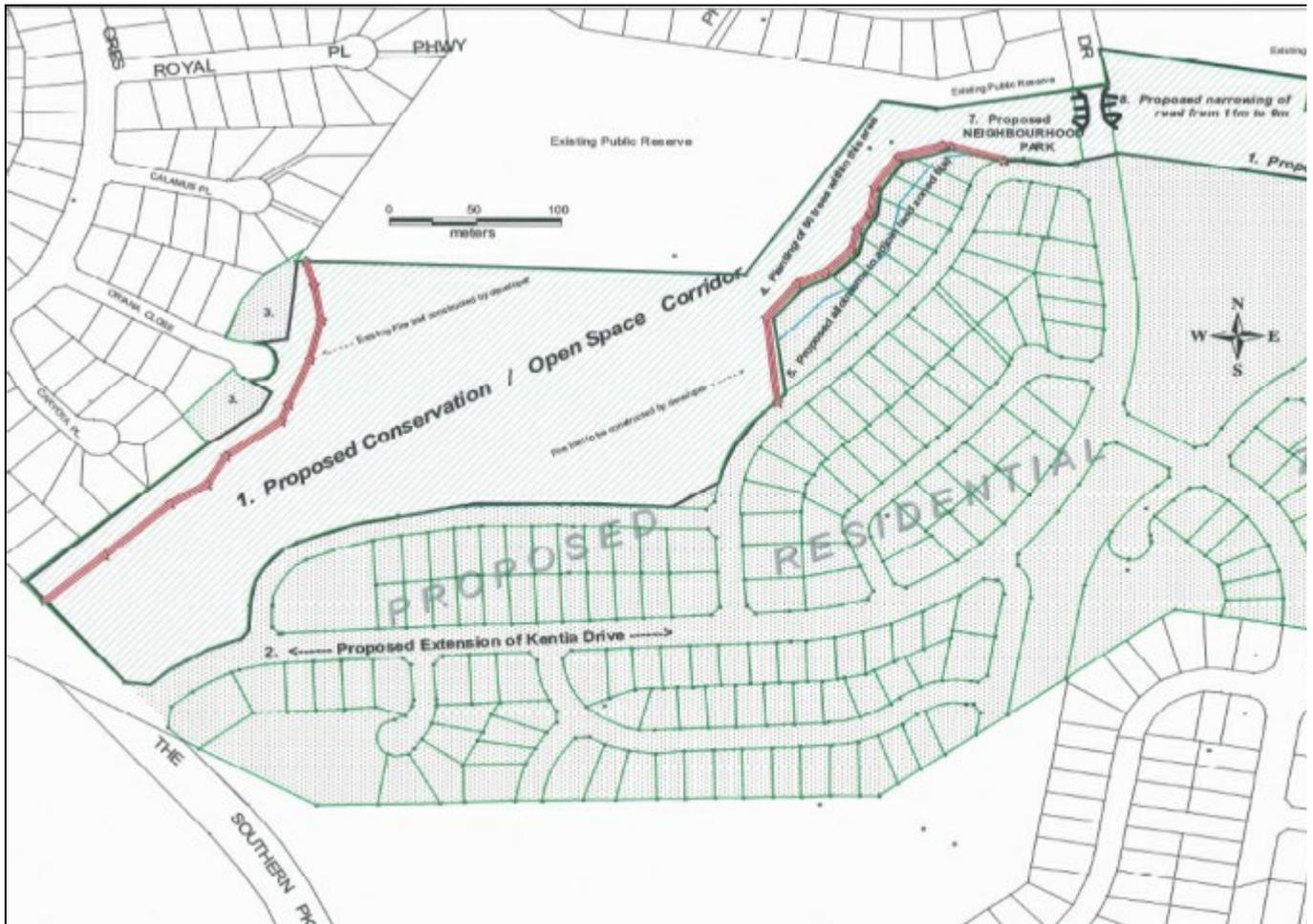
Section 94 contributions will be levied in accordance with Contribution Plans.

The creation as Public Reserve of the land identified as “Proposed Neighbourhood Park” in the ‘[Agreed Planning Principles’ Plans](#), satisfies the requirement of active local open space for the residential development of the residential land, as identified in Council’s Section 94 Open Space Contributions Plan.

16.7.9 Agreed Planning Principles



Davglade development South Forster planning principles ([click here to view original image](#))



Davglade development South Forster planning principles (click here to view [original image](#))

16.7.10 References Cited

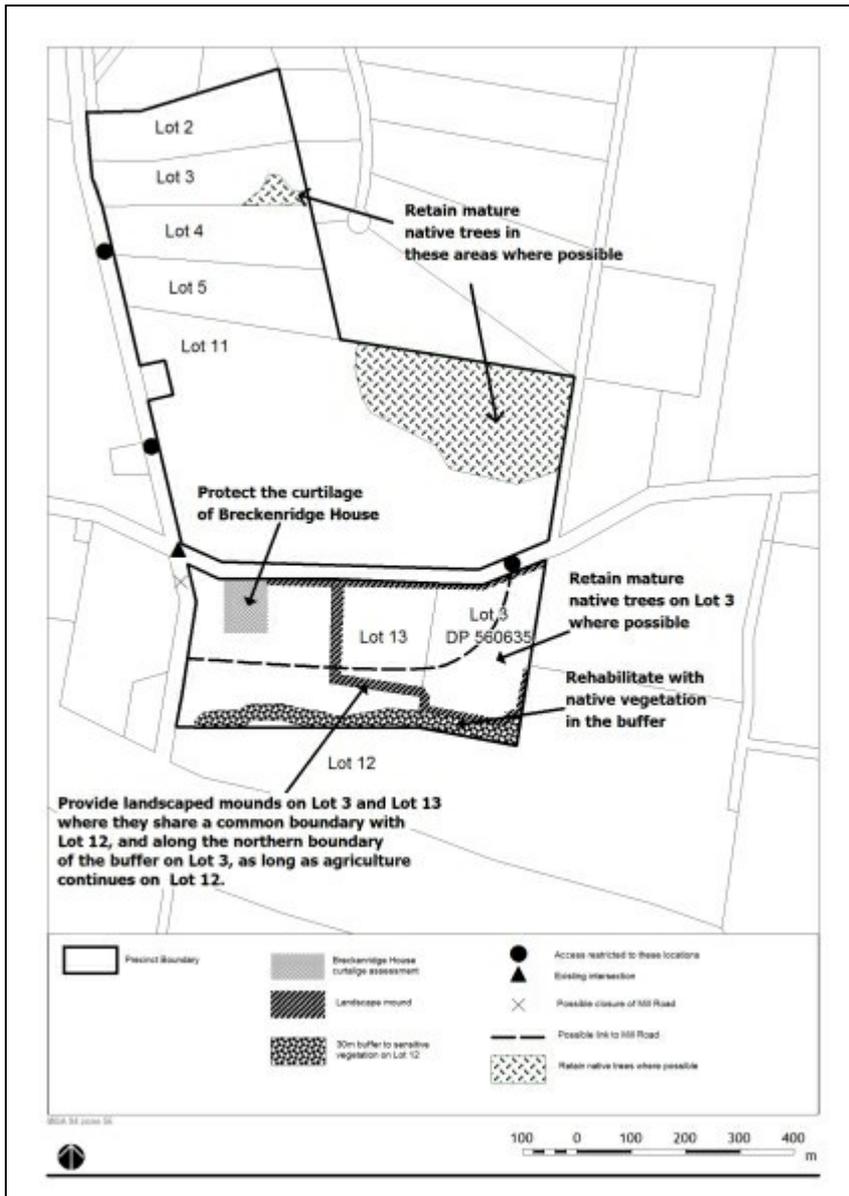
Various investigations have been undertaken prior to rezoning of the land for the purpose of residential development, including:

- South Forster Local Environmental Study, De Groot & Benson; Jelliffe Environmental, May 2000;
- Review of Alternative Stormwater Quality Management – L-Leg, South Forster, Jelliffe Environmental, June 2002;
- Stormwater Management Strategy Forster Palms Estate Stage 5B Alternate Strategy – Eastern Catchment, J. Wyndham Prince, 2005;
- Stormwater Management Strategy Forster Palms Estate Stage 5B Alternate Strategy – Western Catchment, J. Wyndham Prince, 2005;
- Interim Water Quality Control Strategy Forster Palms Estate Stage 5B, (J. Wyndham Prince, 2006; and
- Review of Stormwater Management Strategy for “L” Leg Catchment – South Forster, WBM Oceanics, 2006).

This Plan has been prepared based on the information contained within these documents, as well as the planning principles agreed on between Council and the developer, which were endorsed by Council at its Ordinary Meeting on 11 June 2002.

WBM Oceanics (2006) Review of Stormwater Management Strategy for “L” Leg Catchment – South Forster, prepared for Great Lakes Council.

16.8 Failford Road, Bullocky Way and Mill Road, Failford



Development principles (click here to view [original image](#))

16.8.2 Controls

Land Use

- (1) As long as agriculture continues on Lot 12 DP 747289, landscaped mounds must be constructed on Lot 3 and Lot 13, as shown in 1, to visually and acoustically separate future large lot residential development and agricultural uses on Lot 12.
- (2) The following investigations must be undertaken and submitted with any development application for the subdivision of land that includes Lot 13 DP 747289, south of Failford Road:
 - (a) A geotechnical investigation that provides information on the water table and its quality, acid sulphate soils, soil bearing capacity and site classification under AS 2870.
 - (b) A stormwater management study incorporating water sensitive design principles.
 - (c) A water and sewer servicing strategy that addresses the requirements of Midcoast Water.
 - (d) A bushfire hazard assessment following the current requirements of the NSW Rural Fire Service and its guidelines.

Buffer Area

- (1) A buffer area is required as shown on the [Development Principles plan](#) to provide separation between development in the large lot residential zone and sensitive vegetation. The effective management of the buffer area will limit adverse impacts on vegetation with conservation significance.

European Heritage

- (1) Breckenridge House has been identified as a building of heritage significance and future development must not compromise its significance. Any development application for subdivision or development south of Failford Road must be accompanied by a rigorous curtilage assessment of the Breckenridge House. The assessment must be prepared in consultation with, and satisfy any requirements notified by, the NSW Heritage Office.

Views and Privacy

- (1) Buildings should be sited so that they do not have a dominant presence from any roads or any neighbouring dwelling.

Visual Amenity

- (1) Landscaped mounds must be provided along Bullocky Way and Failford Road (except along the frontage of the Breckenridge House curtilage) in the locations shown on the [Development Principles plan](#) to assist in maintaining the predominantly rural character of the Failford locality. Any development application for subdivision or development south of Failford Road must be accompanied by a landscaping plan that shows the location and height of the mounds and a plan and specification for planting local indigenous species.
- (2) All fences on or within subdivided lots fronting Failford Road, Bullocky Way and Mill Road must be sympathetic to the rural character of the Failford locality. Rural post and wire fences are suitable; solid metal or masonry fences are unsuitable.

Flooding and Drainage

- (1) Council has tentatively accepted 3.2m AHD as the 1 in 100 year flood level for development in this Precinct. Based on survey data provided for Lot 3 DP 560635, the area south of and including the Wallamba River terrace is at or below 3.2m AHD and must be excluded from development.
- (2) Low-lying land fronting Lot 3 DP 560635 on Failford Road experiences ponding from local flooding or an elevated water table and must be filled to above the 1 in 100 year flood level.
- (3) Any development application to subdivide land in the Failford Precinct must be accompanied by a detailed study, using an appropriate model and prepared by a suitably-qualified consultant to the satisfaction of Council, that investigates in sufficient detail local flooding, including:
 - (a) The 1 in 100 year flood level.
 - (b) Potential interactions with the Bungwahl Creek and the Bungwahl Creek Bridge.
 - (c) Post-development site conditions and flows and the impacts of filling on flood behaviour.
 - (d) The requirements for stormwater detention.

Traffic and Access

- (1) Council will only accept two accesses to Bullocky Way from land north of Failford Road and one access to Failford Road from land south of Failford Road. The location of access points must be consistent with the [Development Principles plan](#) and the recommendations in the traffic study for the environmental study (RoadNet 2007). Proposed traffic and access arrangements must be supported by Roads and Maritime Safety and satisfy Council's traffic policies, standards and guidelines.

Reference: RoadNet 2007. Traffic Impact Study Failford Road/Bullocky Way. Report prepared for Great Lakes Council.

Domestic Animals

- (1) Council will require the creation of a restrictive covenant under Section 88B of the Conveyancing Act 1919 that prohibits the keeping of dogs (other than those allowed under the Companion Animals Act 1998) on any large residential lot created from Lot 3 DP 560635 or Lot 13 DP 747289.

16.8.3 Conservation Measures

Bushfire Management

- (1) Building envelopes for subdivided lots should be positioned so that their required Asset Protection Zones are not located in a buffer area shown in the Development Principles diagram. Where possible, Asset Protection Zones must not be located within vegetated riparian buffer zones extending 40 metres from the centreline of a watercourse.

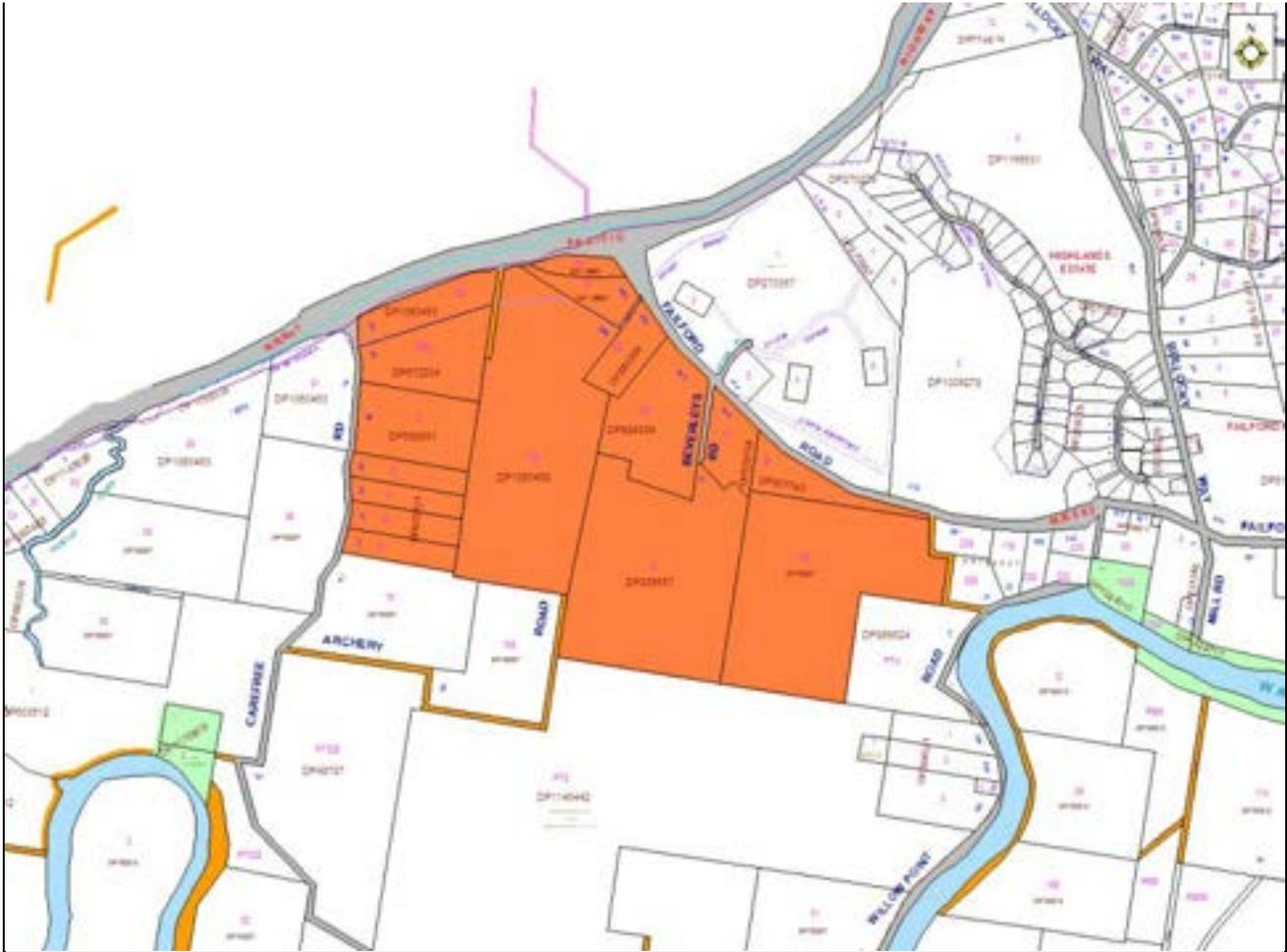
Riparian Zone Management

- (1) The NSW Office of Environment & Heritage may require that the following issues be resolved in any subdivision of land in the Failford Precinct either to obtain an approval under NSW legislation administered by the Department or to comply with the Department's current policies for the sustainable management of riparian areas:
 - (a) The identification, and if present, the protection of core riparian zones and vegetated buffers.
 - (b) If core riparian zones or vegetated buffers are present, demonstration that any structural works, including those for stormwater capture and treatment, and bushfire asset protection zones, are located outside them.
 - (c) The current legal status and intended use of any existing farm dams be determined under the Water Management Act 2000 and the Water Act 1912.

Habitat Management

- (1) The remnant mature native trees on Lot 3 DP 560635 south of Failford Road, in the Scribbly Gum vegetation community on Lot 11 DP 611059, and on Lot 3 DP 250230, shown in the Development Principles diagram, must be retained where possible, by the careful positioning of lot boundaries, building envelopes and infrastructure.
- (2) Any development application for subdivision or development on Lot 3 DP 560635 or Lot 12 DP 747289, south of Failford Road, must make provision for rehabilitation of the buffer area shown in the Development Principles diagram, using indigenous species that occur naturally on the site to offset the loss of native vegetation elsewhere on Lot 3. A rehabilitation plan must be submitted with the development application.

16.9 Failford Road West and Carefree Road, Failford



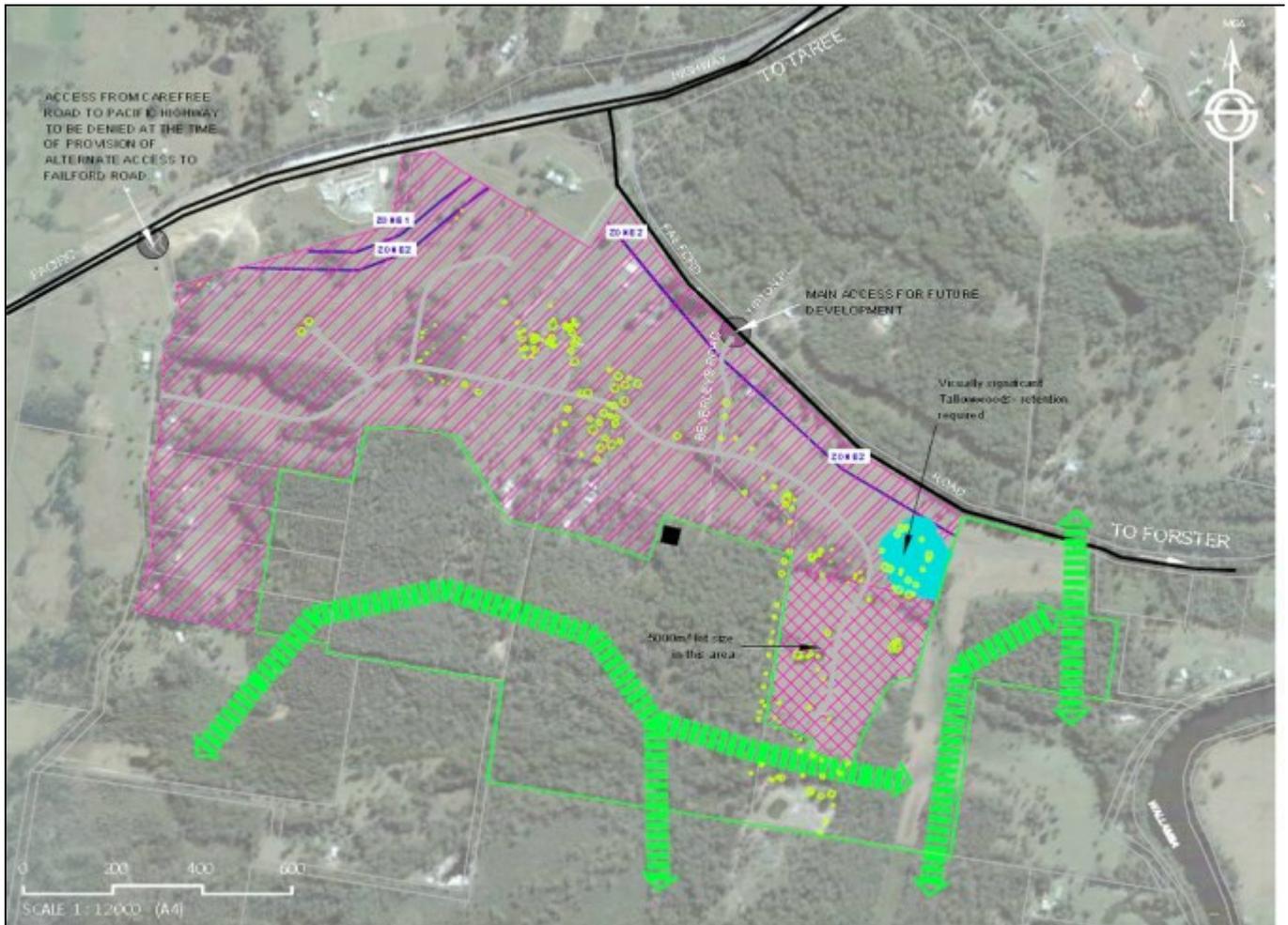
Failford Road West and Carefree Road Failford site location plan ([click here to view original image](#))

16.9.1 Development Principles

Precinct Structure Plan

The Precinct Structure Plan illustrates the potential future development pattern of rural and rural residential land with protected areas of native vegetation representing a key element in the future desired character of this area. New development is to be of a low key, relaxed design suited to the location whilst encouraging sustainable development of the land.

Protection of the area from natural hazards including flooding, bushfire and reflecting existing land uses will influence the future urban form. The overall built form of the locality is to be of a low key, relaxed design suited to a large lot residential location.



Failford Road West and Carefree Road Failford precinct structure plan (click here to view [original image](#))

Subdivision Concept Plan

The Subdivision Concept Plan provides a broad design structure to ensure individual development stages and all properties are appropriately serviced and integrated. A subdivision plan for all the land covered by this part is to be submitted with the first development application for subdivision of the land. The plan is to provide access to all existing lots. In particular the plan is to provide access to enable the future subdivision of Lot 22 DP 884339



Failford Road West and Carefree Road Failford subdivision concept plan (click here to view [original image](#))

16.9.2 Controls

Views and Privacy

- (1) Buildings should be sited so that they do not have a dominant presence from any roads or any neighbouring dwelling.

Environmental Hazards

- (1) All development proposals on land identified as bushfire-prone land are to be accompanied by a Bushfire Hazard Assessment in accordance with the document titled Planning for Bushfire Protection (as amended) or any subsequent Guidelines.
- (2) Any bushfire Asset Protection Zones (APZs) and fire trails must not encroach upon any land zoned for Environmental Conservation purposes unless it can be demonstrated that there will be minimal environmental impact by the establishment and maintenance of the APZs and trails.
- (3) All proposals for development are to comply with relevant Council Stormwater Management Guidelines and Water Sensitive Design Guidelines contained in the [Water Sensitive Design section](#) of this Development Control Plan.
- (4) A Stormwater Management Strategy is to be submitted with all subdivision Development Applications. The

Strategy is to demonstrate that water quality management facilities will be installed to ensure that post-development stormwater runoff does not increase pollutants loads entering downstream drainage systems, including the Wallamba River catchment, unless a lower water quality objective can be tolerated and would be acceptable to Council and stakeholder public authorities.

Traffic and Access

- (1) Internal roads within the precinct are generally to be located in the vicinity of the indicative road centreline indicated in the [Precinct Structure Plan](#).
- (2) The road network is to ensure that all lots within the precinct will have access to enable future subdivision.
- (3) No subdivision of land on Carefree Rd will be permitted until the alternate access via Failford Rd is provided unless otherwise accepted by Roads and Maritime Services. Once the alternate access is available the intersection of Carefree Road with the Pacific Highway is to be closed. Full details of the means of closing the intersection are to be submitted with the first development application for subdivision of the land fronting Carefree Rd.
- (4) All existing driveways off Failford Road are to be closed when alternative access is available internally through the proposed development.
- (5) The intersection of Failford Road and Beverly's Road is to be upgraded to a modified Type B junction with an AUL left turn treatment at the time of the first subdivision of land in the precinct.
- (6) The future location of the Beverly's Road intersection with Failford Road is to be offset from the existing Tipton Place by a minimum of 30m. The stagger would be best to the east but could be either way.
- (7) Internal roads within the future development should be a minimum of 6m wide seal 1 metre wide sealed shoulder either side. The proposed cul-de-sacs have a minimum 9m radius, or allow large rigid trucks including waste collection vehicles, to turn.
- (8) Auspec Table D1 recommends a maximum longitudinal grade for Beverly's Road and proposed Road No.1 of 12% and the internal cul-de-sacs a maximum of 16%.

Noise Impacts

- (1) As identified in the [Precinct Structure Plan](#) an area in the north-west and along Failford Road may be affected by future road noise to an extent that certain measures within new dwelling construction may be required. Measures, such as thicker glazing in road facing windows in future dwellings to minimise road noise are recommended. Overall potential noise impacts from the Pacific Highway and Failford Road can be attenuated within future dwelling design at minimal additional costs.
- (2) New dwellings that are to be located within Zone 1 or Zone 2, as shown in Precinct Structure Plan will require noise attenuation in accordance with criteria contained in [Precinct Structure Plan](#). All Development Applications for dwellings within these zones will need to be accompanied by an acoustic report demonstrating that the dwelling design responds in an appropriate way to the noise attenuation criteria.

6 RECOMMENDED NOISE CONTROL

6.1 Zone 1

The glazing systems sighted in the following Tables are presented as a guide for the supplier:

Glazing Systems: Type A: Standard glazing. Single-glaze 3-4mm clear float glass.
Type B: Single-glaze 6-8mm clear float glass.
Type C: Single glaze laminated glass.
Type D: Double glazed system or Insulating Glass Unit (IGU).

*Note: The typical construction shown in the following Table should be used as a guide only. The supplier of the window/door must be able to provide evidence from a registered laboratory that the complete assembly will achieve the specified Rw performance. **Do not simply install the recommended glass in a standard window frame.***

Table 5: Recommended Construction – Zone 1

Element	Facade	Room	Required Rw	Typical Construction (Indicative Only)
Ground Floor				
Windows /Sl. Doors	North	Liv/Din/Bed	29	Type C
		Kitchen/Entry	26	Type B
		Bath/WC/Lndry	24	Type B
	East/West	Liv/Din/Bed	27	Type B
		Kitchen/Entry	24	Type B
		Bath/WC/Lndry	-	No acoustic requirement
	South	All	-	No acoustic requirement
First Floor				
Windows /Sl. Doors	North	Liv/Din/Bed	30	Type C
		Kitchen/Entry	27	Type B
		Bath/WC/Lndry	25	Type B
	East/West	Liv/Din/Bed	28	Type B or C
		Kitchen/Entry	25	Type B
		Bath/WC/Lndry	-	No acoustic requirement
	South	All	-	No acoustic requirement

Timber Doors: Doors to be 30-40mm solid core with the vertical sides and top of the door frames fitting neatly to provide close contact when doors are closed. All north doors must have Raven or Lorient RP10 acoustic seals fitted at door surrounds and Raven RP71 seals where double doors meet. All glazed sections must be minimum 6.38mm laminated glass.

Note 1 Roof construction should consist of insulation or wire mesh laid down on roof trusses. This is to be completely covered with a 50mm foil faced building blanket or similar (in situations where trusses are at centres close enough to avoid excessive sagging of the blanket, the insulation/wire mesh may be omitted). If Terra Cotta or concrete roof tiles are preferred, the building blanket may be omitted. Close off eaves gaps with timber trimmers/noggings between trusses, followed by placement of roof sheeting (an alternative for steel framed construction is to provide 2 layers S3/R3 insulation in ceiling void, tightly packed at the building perimeter at 600mm width). All ceilings are to consist of an impervious ceiling of 1 sheet taped and set 13mm fire rated plasterboard or 1 sheet 10mm sound rated plasterboard. To further assist in low frequency attenuation, all ceiling voids should contain a layer of fibreglass or rockwool insulation.

REVERB ACOUSTICS

(Click here to view [original image](#))

The insulation is to be installed in addition to, not in lieu of the building blanket. Specialised acoustic insulation is preferred, however dense thermal insulation (eg, R3 batts) will suffice and is much less expensive (\$15/m² for Rockwool and \$8/m² for R3 batts). Generally, Councils now require new dwellings to achieve an adequate energy rating, which will usually only be achieved if thermal insulation is installed in the ceiling void, therefore, builders would be obliged to install insulation in any case.

Note 2 We strongly recommend brick veneer or cavity-brick construction. These high-mass building elements will provide attenuation of the lower frequencies, typically around 125 to 500Hz, typically generated by rail traffic. All internal lining for external walls is to be minimum 13mm plasterboard. All lightweight cladding (vinyl weatherboards, Colorbond, Weatherex, etc) is to be backed with either 9mm fibre cement sheeting (Villaboard, Hardiflex) or 15mm construction plywood. If lightweight construction is preferred, i.e. Hebel Powerpanel, weatherboard, etc, external lining of 9mm FC sheeting or 15mm construction plywood will need to be included, together with a cavity infill of R2/S2 insulation and internal lining 1 sheet 13mm fire rated plasterboard. Where external brickwork stops below the height of the stud frame, 10mm plasterboard, or 6mm Villaboard is to be fixed to the outside of the stud frame to fill the void. The infill material is to extend from the top of the top plate to a point in line with the bottom of the top course of brickwork. Alternatively, an overside noggin is to be fixed to the underside of the top plate to project within 10-20mm of the inside surface of the external wall.

6.2 Zone 2

Table 6: Recommended Construction – Zone 2

Element	Facade	Room	Required Rw	Typical Construction (Indicative Only)
Ground Floor				
Windows /Sl. Doors	North	Liv/Din/Bed	26	Type B
		Kitchen/Entry	-	No acoustic requirement
		Bath/WC/Lndry	-	No acoustic requirement
	East/West	Liv/Din/Bed	24	Type B
		Kitchen/Entry	-	No acoustic requirement
		Bath/WC/Lndry	-	No acoustic requirement
South	All	-	No acoustic requirement	
First Floor				
Windows /Sl. Doors	North	Liv/Din/Bed	27	Type B
		Kitchen/Entry	-	No acoustic requirement
		Bath/WC/Lndry	-	No acoustic requirement
	East/West	Liv/Din/Bed	25	Type B
		Kitchen/Entry	-	No acoustic requirement
		Bath/WC/Lndry	-	No acoustic requirement
South	All	-	No acoustic requirement	

Timber Doors: Doors to be 30-40mm solid core with the vertical sides and top of the door frames fitting neatly to provide close contact when doors are closed.

Note 1 Roof construction should consist of sisalation or wire mesh laid down on roof trusses. This is to be completely covered with a 50mm foil faced building blanket or similar (in situations where trusses are at centres close enough to avoid excessive sagging of the blanket, the sisalation/wire mesh may be omitted).

REVERB ACOUSTICS

November 2009
Document Ref: 08-1361-R1

Commercial in Confidence

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If Terra Cotta or concrete roof tiles are preferred, the building blanket may be omitted. Close off eaves gaps with timber trimmers/hogging between trusses, followed by placement of roof sheeting (an alternative for steel framed construction is to provide 2 layers S3/R3 insulation in ceiling void, tightly packed at the building perimeter at 600mm width). All ceilings are to consist of an impervious ceiling of 1 sheet taped and set 13mm plasterboard. To further assist in low frequency attenuation, all ceiling voids should contain a layer of fibreglass or rockwool insulation. The insulation is to be installed in addition to, not in lieu of the building blanket. Specialised acoustic insulation is preferred, however dense thermal insulation (eg, R3 batts) will suffice and is much less expensive (\$15/m² for Rockwool and \$8/m² for R3 batts). Generally,

Note 2 We strongly recommend brick veneer or cavity-brick construction. These high-mass building elements will provide attenuation of the lower frequencies, typically around 125 to 500Hz, typically generated by rail traffic. All internal lining for external walls is to be minimum 10mm plasterboard. All lightweight cladding (vinyl weatherboards, Colorbond, Weatherex, etc) is to be backed with either 6mm fibre cement sheeting (Villaboard, Hardiflex) or 10mm construction plywood. If lightweight construction is preferred, i.e. Hebel Powerpanel, weatherboard, etc, external lining of 6mm FC sheeting or 10mm construction plywood will need to be included, together with a cavity infill of R2/S2 insulation and internal lining 1 sheet 13mm plasterboard. Where external brickwork stops below the height of the stud frame, 10mm plasterboard, or 6mm Villaboard is to be fixed to the outside of the stud frame to fill the void. The infill material is to extend from the top of the top plate to a point in line with the bottom of the top course of brickwork. Alternatively, an overside noggin is to be fixed to the underside of the top plate to project within 10-20mm of the inside surface of the external wall.

(click here to view [original image](#))

16.9.3 Conservation Measures

Objectives

To ensure habitat areas and fauna movement corridors are maintained and are available for the safe movement of native fauna and ensure that development protects and preserves wildlife habitat on adjoining land; improves conditions of corridors & provides buffers between corridors and development.

Lot 64 DP 753207

- (1) Before Council can approve any development on this lot a legally enforceable mechanism must be in place to ensure:
 - (a) the protection and management, for conservation purposes, of that part of the land shown as “conservation area” in the [Conservation and Wildlife Corridor Map](#).
 - (b) the establishment, including planting and ongoing management, of a wildlife movement corridor, in the location shown as “wildlife corridor” shown in Conservation and Wildlife Map.

A legally enforceable mechanisms would include a Conservation Agreement with the Office of Environment and Heritage under the National Parks and Wildlife Act, a Planning Agreement with Council under the Environmental Planning and Assessment Act or Restrictions as to User and Positive Covenants under the Conveyancing Act.

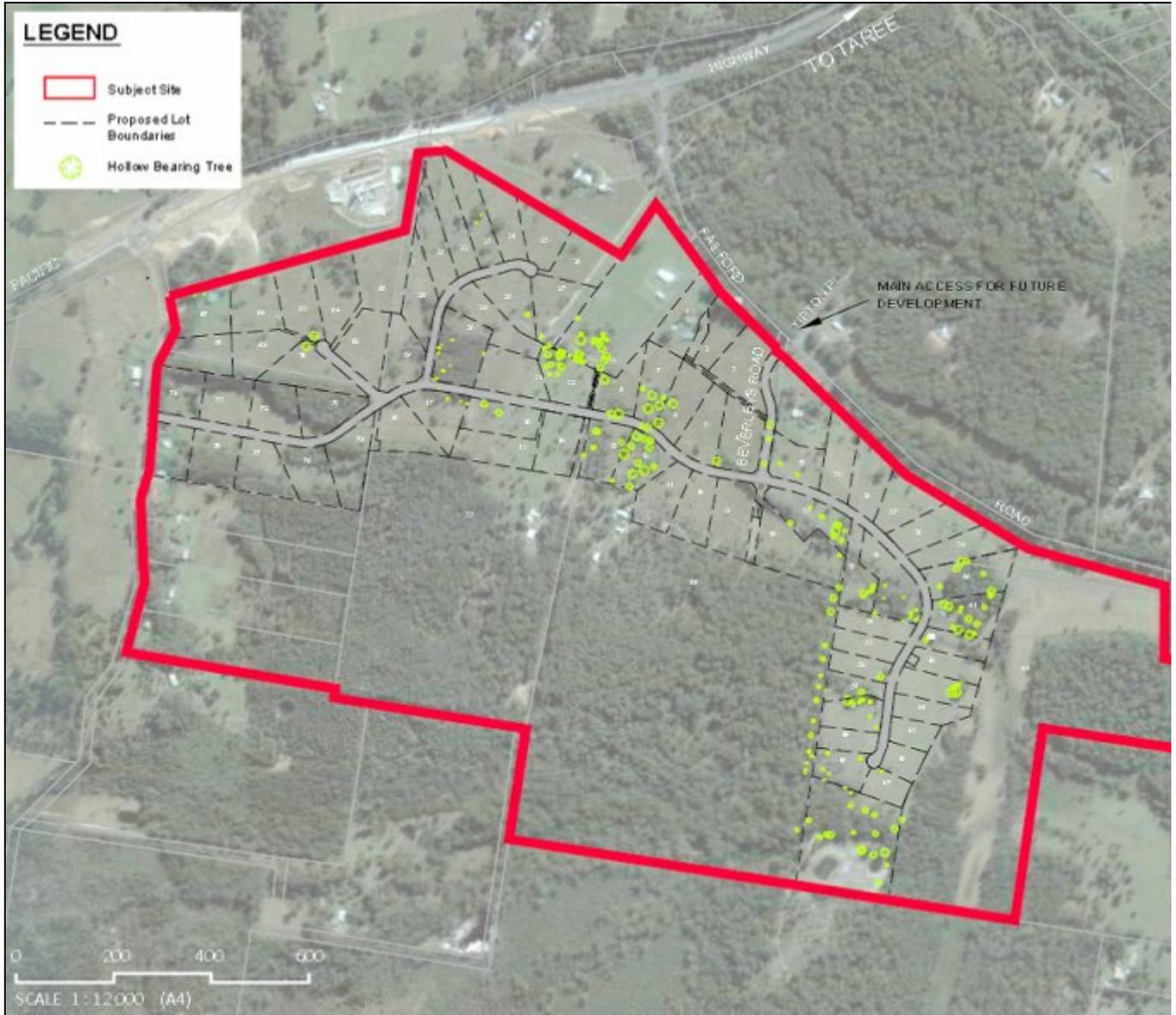
- (2) The part of the land shown as “conservation area” in Conservation and Wildlife Corridor Map is also to be contained in a single lot and must also to be fenced to exclude stock.
- (3) Full details of the legal mechanism, fencing and planting and management of the wildlife corridor as referred to above are to be submitted, for Council's approval, with the first development application for subdivision of Lot 64.
- (4) The southern extremity of Lot 64 that is zoned for environmental conservation and which is not contained in the “conservation area” may be included in one of the lots in the adjoining development zone subject to approval under SEPP No. 1.

Conservation and Wildlife Corridors

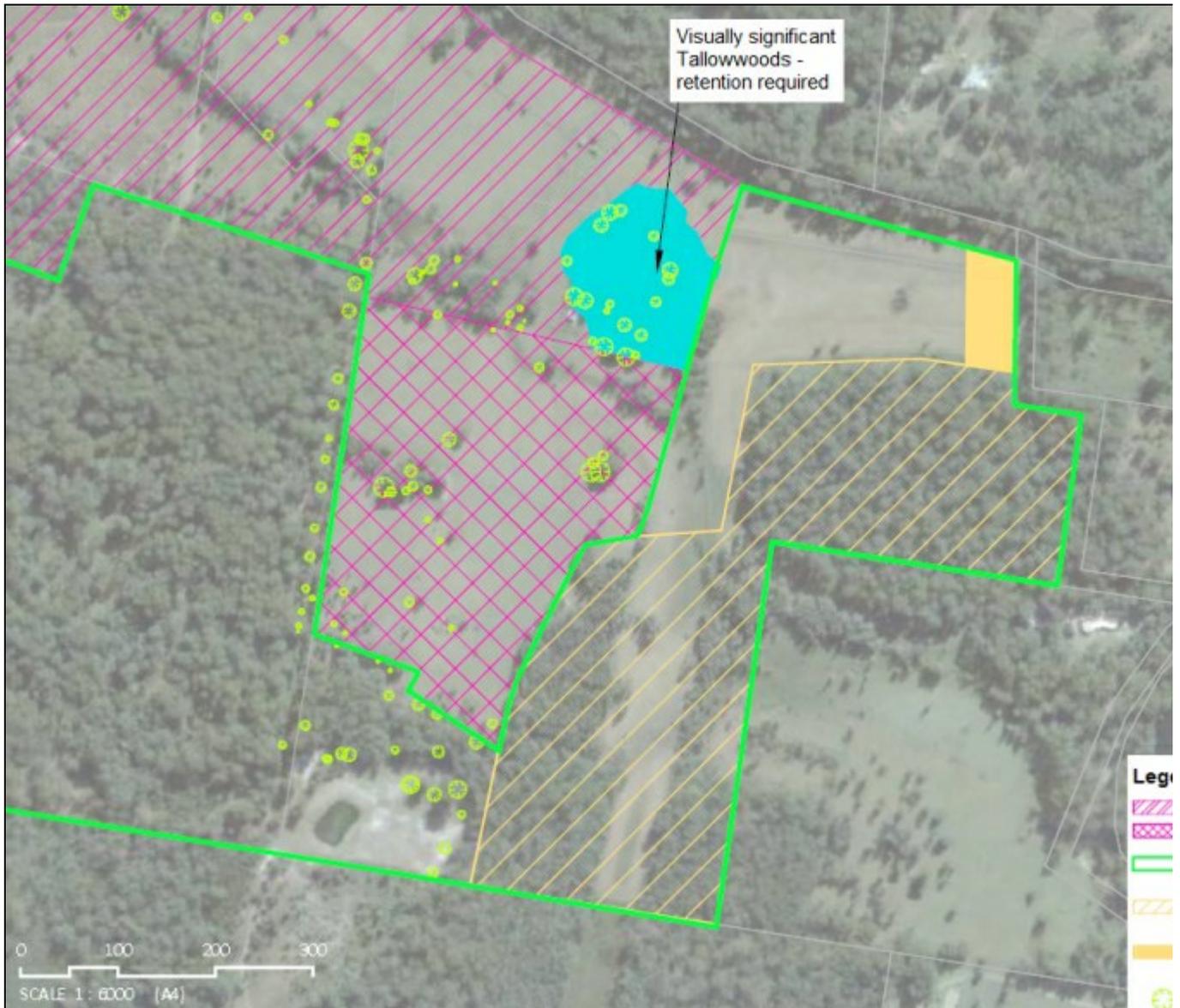
- (1) All development proposals are to have due regard to the maintenance of wildlife corridors as identified in the [Precinct Structure Plan](#).
- (2) Appropriate buffers and management of development sites shall be used to preserve and protect adjoining wildlife habitat features of environmental or aesthetic significance.
- (3) Much of the southern part of the land to which this part applies is covered by Open Forest, Swamp Mahogany Forest and Swamp Sclerophyll Forest (towards the south east). The majority of this land has been zoned to Environmental Conservation as it provides habitat and movement corridors for animals and birds, including threatened species. The Conservation and Wildlife Corridor map identifies a nominated building envelope within the E2 zone on Lot 4 DP 259557. Any buildings are only to be erected within this envelope.
- (4) An area of visually significant Tallowwoods, as shown in the [Precinct Structure Plan](#) and [Conservation and Wildlife Corridor Map](#), exists in the north eastern corner of land identified as large lot residential. The trees in this area are to be protected. Any development application for subdivision that affects the area shown in the Precinct Structure Plan and Conservation and Wildlife Corridor Map must include information detailing how the proposed subdivision layout and any future dwellings and associated bushfire Asset Protection Zones will ensure the protection and management of these trees as well as the measures, such as covenants on land title, to prevent the removal of any trees in this area.
- (5) The habitat trees shown in the [Hollow Bearing Trees Plan](#) are to be retained. A plan is to be submitted with the development application for subdivision and erection of buildings showing the location of trees relative to all development works. Measures to ensure the protection of the trees are to also to be submitted with the

development application.

Hollow Bearing Tree Plan



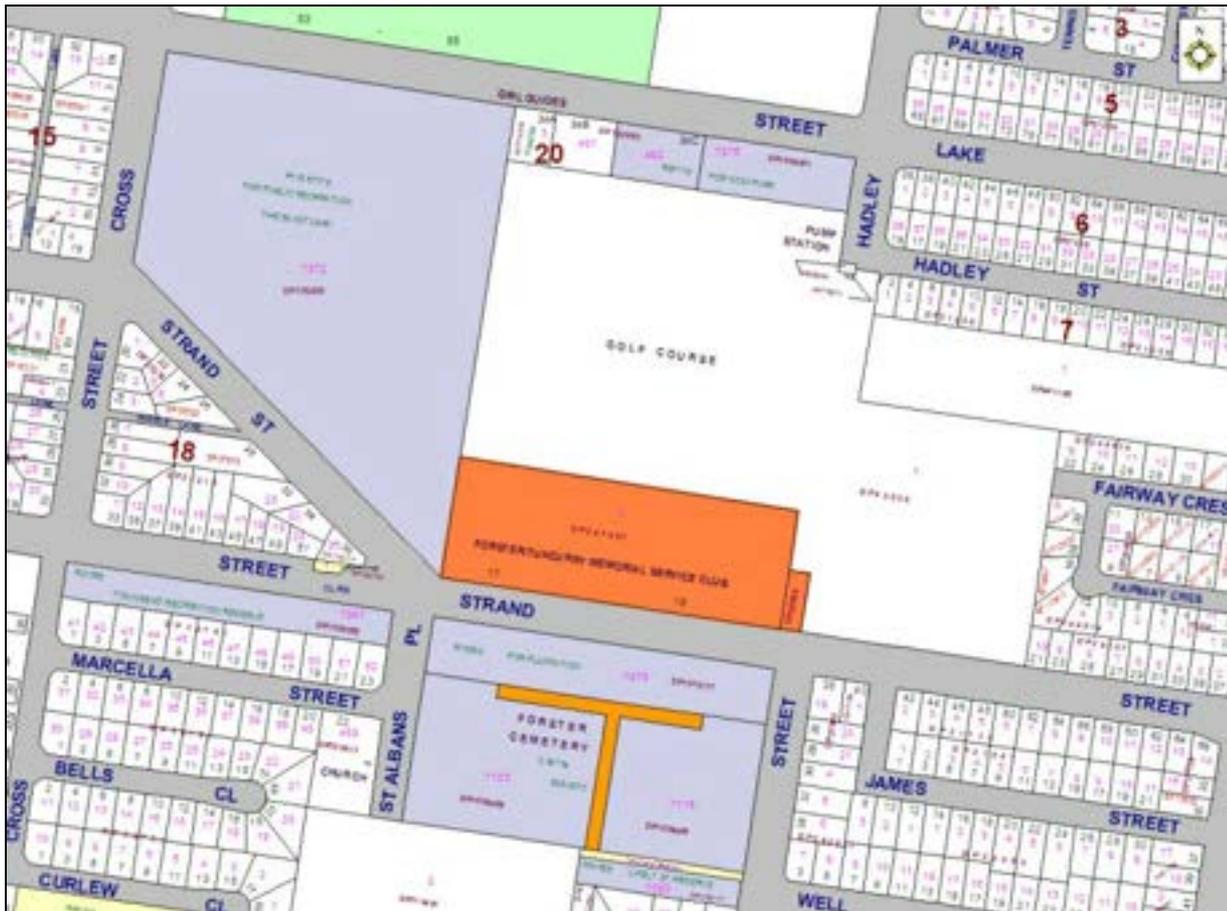
Failford Road West and Carefree Road Failford hollow bearing tree plan (click here to view [original image](#))



Failford Road West and Carefree Road Failford conservation and wildlife corridor map ([click here to view original image](#))

16.10 Forster / Tuncurry Memorial Services Club, Forster

The subject land comprises of Lot 1, DP 247867 and Lot 1, DP 43068 Strand Street, Forster as shown in the Site Location Plan below.



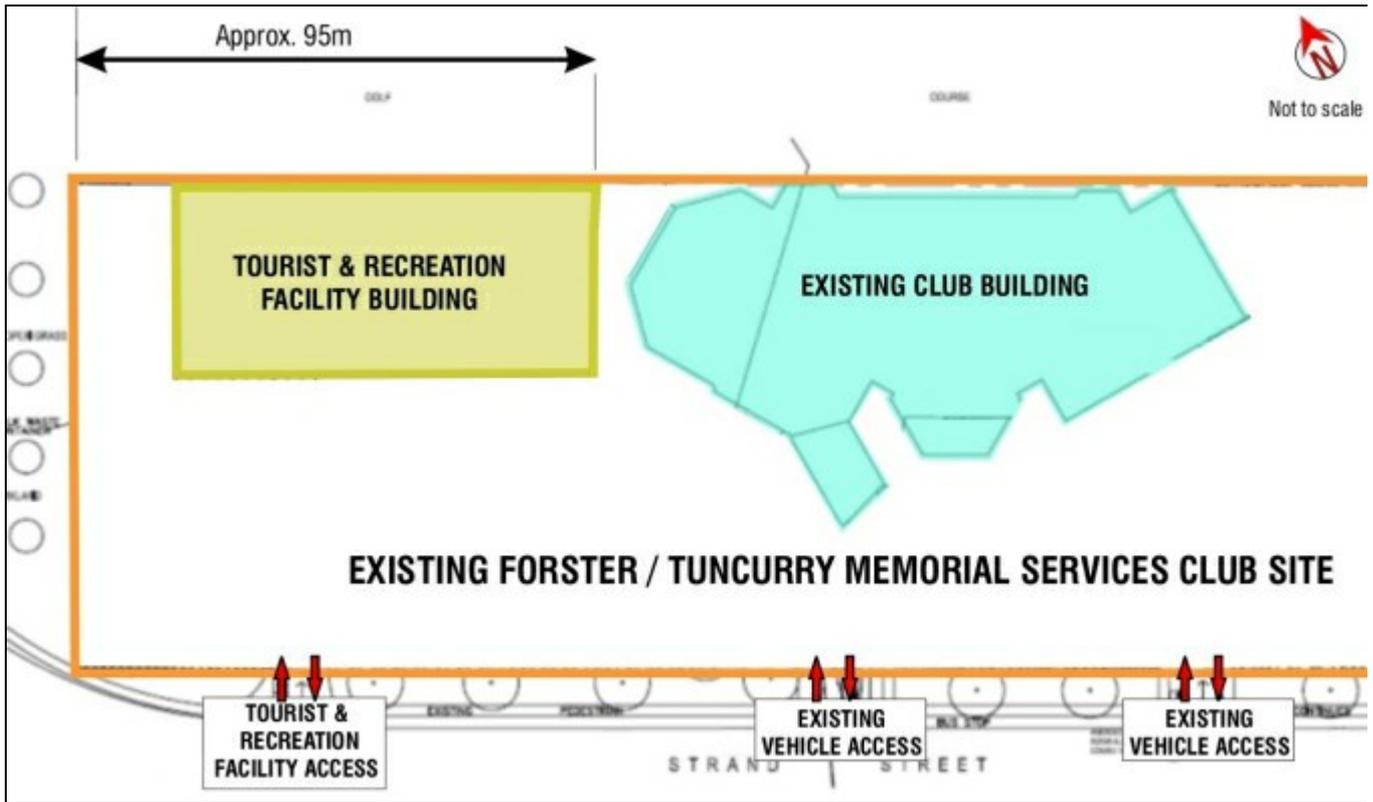
Forster / Tuncurry Memorial Services Club site location plan (click here to view [original image](#))

16.10.1 Objectives

- To ensure that a tourist and recreation facility:
 - is sited in the most appropriate location having regard to the existing Forster Tuncurry Memorial Services Club, including its vehicular access and car parking;
 - has a height consistent with the existing Memorial Services Club building located upon the site.

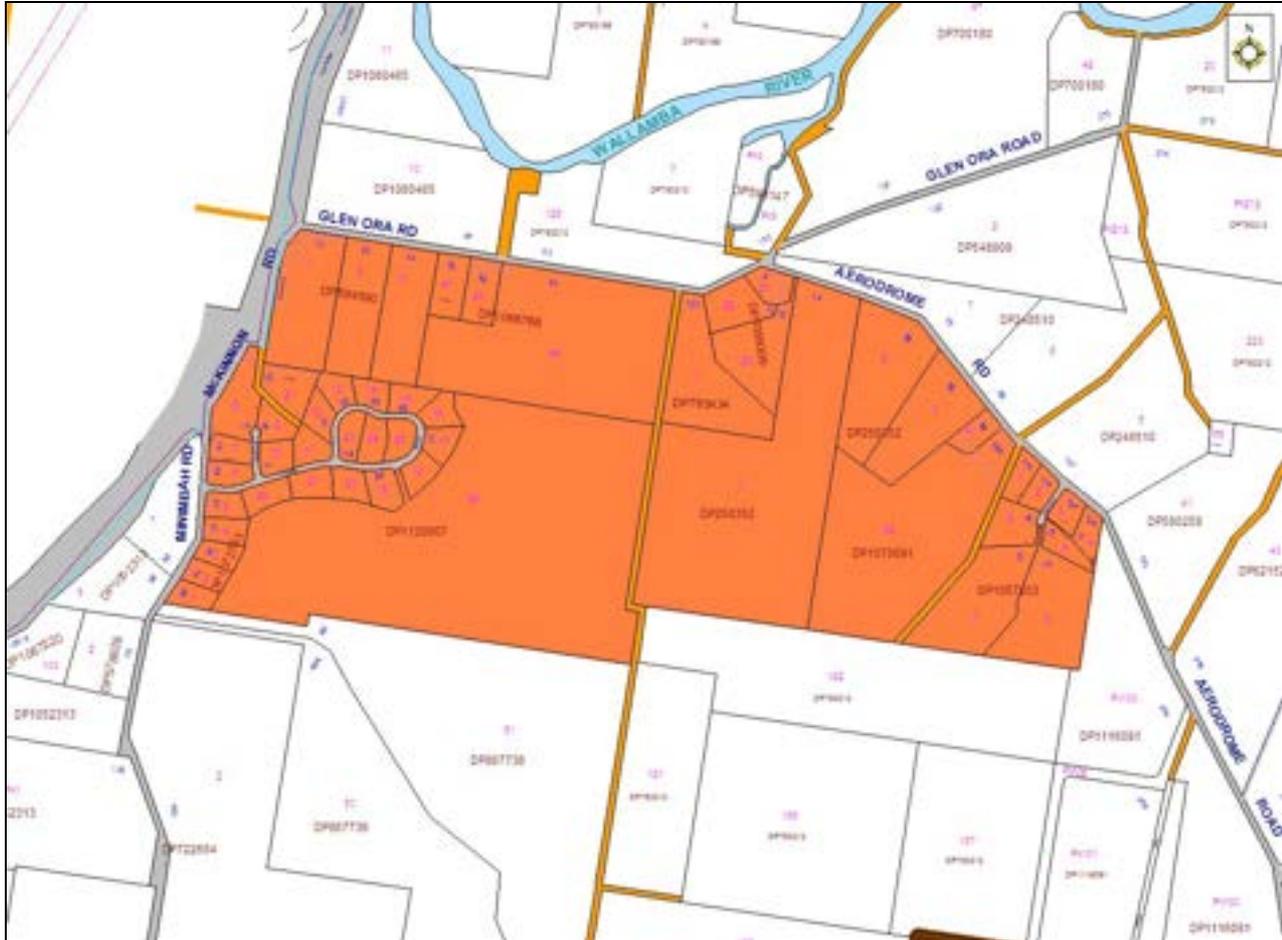
16.10.2 Development Controls

- (1) Any tourist and recreation facility is only to be located in the north-western corner of Lot 1, DP247867, generally in accordance with the area indicated on the Concept Plan.
- (2) The building height of any tourist and recreation facility on the site is to be measured from current ground level of 4.4AHD to the ceiling level of the top most floor with an allowance for
 - (a) roof structure up to 12.4m as measured from ground level of 4.4AHD, and
 - (b) a lift over run to 14.2m as measured from ground level of 4.4AHD.



Forster / Tuncurry Memorial Services Club Forster concept plan (click here to view [original image](#))

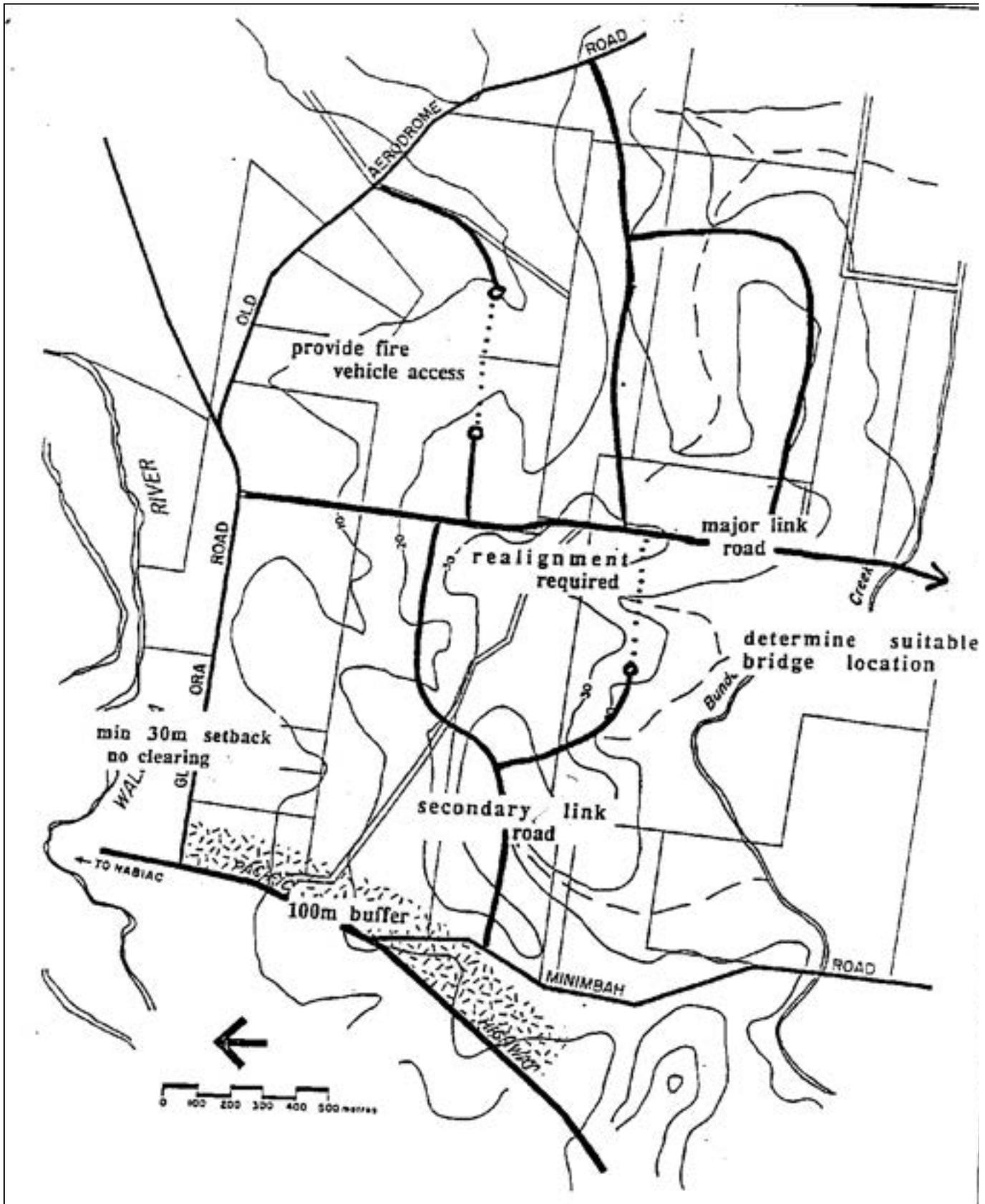
16.11 Glen Ora, Old Aerodrome and Minimbah Roads, Nabiac



Glen Ora, Old Aerodrome and Minimbah Roads Nabiac site location plan (click here to view [original image](#))

16.11.1 Development Principles

- (1) Except as otherwise provided by this Plan, the development of the land shall be in accordance with the Principles for Development diagram in relation to:
 - (a) general location of major link road and secondary link roads;
 - (b) minimum building setback of 30m;
 - (c) restriction on clearing vegetation;
 - (d) 50m highway buffer in which no dwellings or other structures are permitted and no clearing is permitted except with Council approval.



Glen Ora, Old Aerodrome and Minimbah Roads, Nabiac principles for development (click here to view [original image](#))

16.11.2 Controls

- (1) In order to assist in bushfire fighting, it will be necessary to provide access for fire trucks between the rear of properties. This shall be provided through the provision of unlocked gates at locations determined by Council.

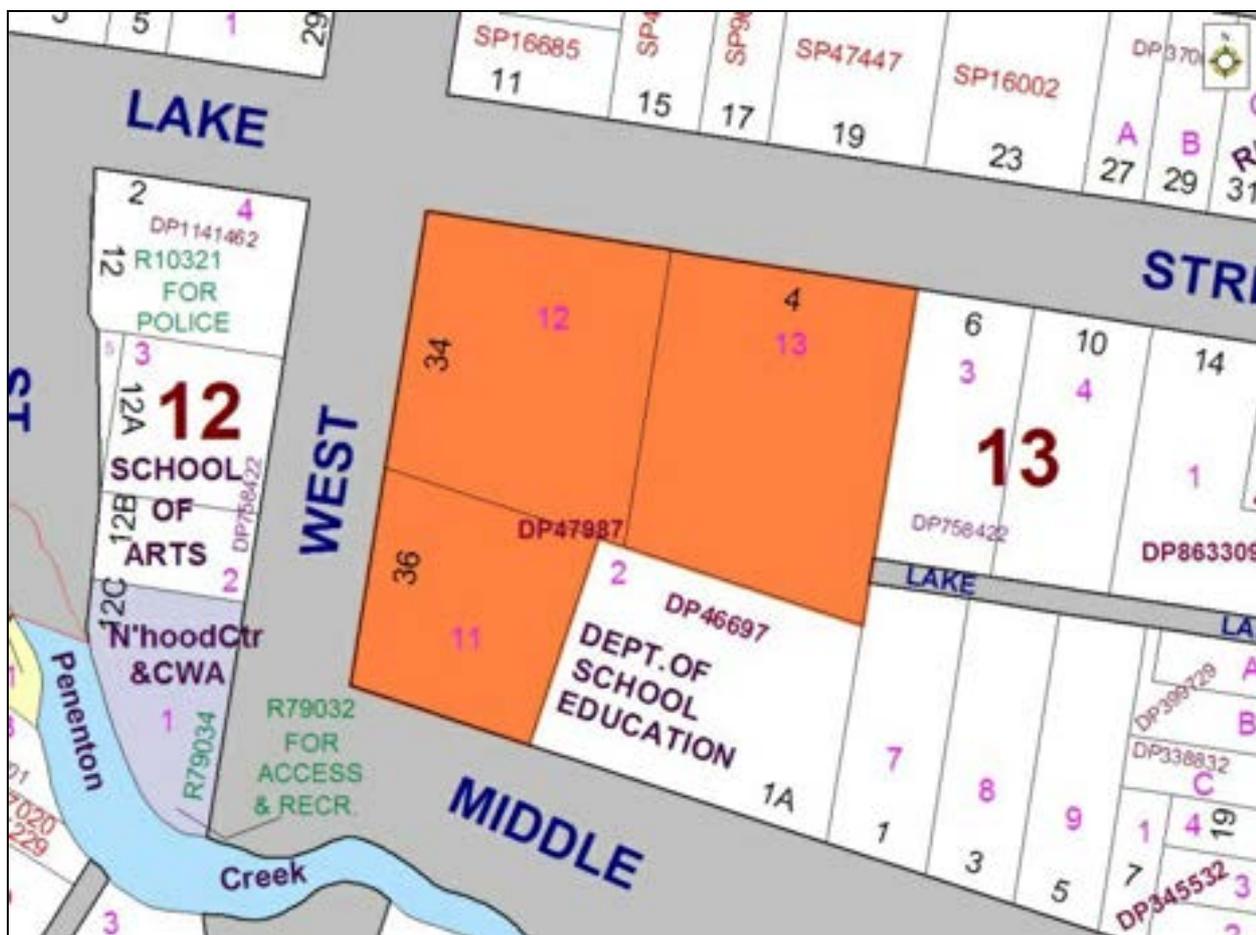
- (2) It will be a requirement of development consent for each dwelling to provide a minimum rainwater storage of 45,000 litres.
- (3) Prior to the construction of roads, an applicant shall consult with the National Parks and Wildlife Service to ascertain the likelihood of any aboriginal relics and artefacts in the area.

16.11.3 Conservation Measures

- (1) The following conservation and environmental protection measure shall apply to development of the land:
 - (a) Vegetation is to be maintained within 30 metres of drainage lines. The removal or destruction of vegetation requires Council's approval in accordance with the [Tree and Vegetation Preservation](#) section.
 - (b) Soil conservation measures are to be taken to protect construction sites during the development of the subdivision and subsequent erection of dwelling houses. These measures shall be detailed as part of any development or subdivision application.
 - (c) Preparation of an erosion and sediment control plan for the road works to the satisfaction of Council prior to granting of subdivision approval. This is to be the responsibility of any applicant for development consent for subdivision.

16.12 Lake and West Streets, Forster

The site is located at the junction between Forster's Civic Precinct (to the west), the "tall buildings" precinct (to north) and the medium-density residential precinct (to the south). The site is situated at the south-eastern end of the business district. The site comprises three large vacant lots covering 1.2 hectares as shown in the Site Location Plan



Lake and West Streets Forster site location plan ([click here to view original image](#))

16.12.1 Objectives

- The general objective of these site specific controls is to encourage an environmentally sustainable redevelopment of the site for the purposes of a comprehensive high density, mixed use development which achieves a strong sense of identity and provides the setting for attractive living with high levels of amenity.
- The aim of the controls is to provide guidelines to achieve this objective and to promote appropriate urban design to:
 - Ensure site design meets the strategic objectives of its context.
 - Optimise development potential.
 - Provide a high level of amenity within the site and reduce amenity impacts to adjoining sites.
 - Improve legibility of the townscape.
 - Improve the quality of the surrounding public domain.
 - Achieve environmentally sustainable design.
 - Address demographic trends including design for an aging population.
 - Encourage a range of accommodation opportunities that address prevailing demographic trends within a high quality residential environment.
 - Achieve a built environment that is sympathetic to climate comfort and promotes a high level of social comfort and residential amenity.
 - Maximise opportunities for public domain improvements and architectural and design excellence through development bonuses.

16.12.2 Development Controls

- (1) Development Concept
 - (a) The site is to be developed generally in accordance with the [Master Plan](#) as shown. The principal features include:
 - (i) Four separate buildings in a perimeter block configuration built close to the existing and proposed road alignments;
 - (ii) The introduction of ground floor commercial/retail uses at the corner of Lake Street and West Street;
 - (iii) The introduction of a new vehicle linkage between Lake Street and Lake Lane;
 - (iv) Building height to emphasise the topography as seen in [Building Height Concept Plan](#);
 - (v) The articulation of the Lakes St/West St corner by building height and form;
 - (vi) Preserving most existing trees on the site.
- (2) Site Permeability
 - (a) The development is to provide a through site link from Lake Street to Middle Street to improve the connection between Lake Street and the recreation area on Penenton Creek .
 - (b) The vehicle access link from Lake Street to Lake Lane will improve access and amenity of this currently undesirable dead-end.
 - (c) The pedestrian linkage from Lake Lane to Middle Street is to be finished in high quality and durable materials and incorporate an attractive, pleasant and safe landscaped environment.
- (3) Street Address
 - (a) The building frontage at the corner of Lake Street and West Street shall incorporate active street frontages through the introduction of ground floor shops and cafes/restaurants.
 - (b) Shopfronts should be glazed along both frontages to allow views into and out of shops.
 - (c) Ground level outdoor dining is supported subject to appropriate noise and pollution abatement measures (i.e. ventilation/exhaust; and hours of operation).
- (4) Building Setbacks
 - (a) The building setbacks should take in consideration the retention of existing trees on site.
 - (b) The street setback at the ground floor level for retail uses shall be a maximum of 2 metres if this does

not affect existing trees.

- (c) The street setback at the ground floor level for residential uses shall be in the range of 4.5 - 5 metres, if this does not affect existing trees.
- (d) The side boundary setback for the first three levels shall be a minimum of 3 metres.
- (e) The side boundary setback for any level above three storeys shall be 9 metres.
- (f) The internal separation between buildings with habitable rooms/balconies facing habitable rooms/balconies shall be a minimum of 18 metres.



Lake and West Streets Forster site master plan (click here to view [original image](#))

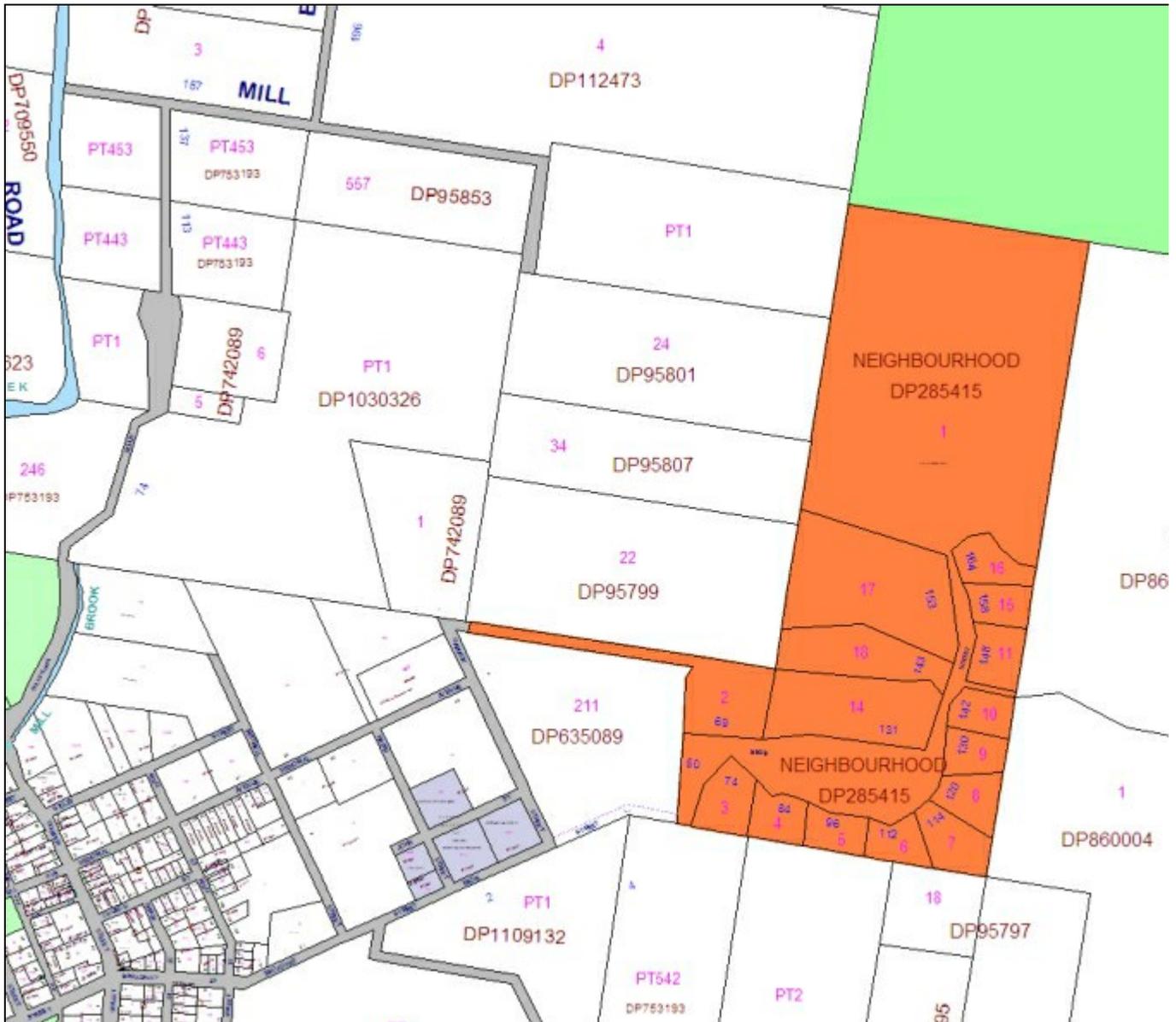


Lake and West Streets Forster building height concept plan (click here to view [original image](#))

16.13 Listening Hill, Stroud

This Part applies to Lots 1-16, DP 285415, including private road off the north eastern end of Bede Street as shown below. Development on land to which this Part applies must be undertaken in an ecologically sustainable manner which will not have serious or irreversible impacts on:

- Water quality;
- Native flora and fauna;
- Air quality; and
- The visual attractiveness of the area.



Listening Hill Stroud site location plan (click here to view [original image](#))

16.13.1 Subdivision

Community Subdivision

- (1) Subdivision of the land is to be undertaken under the Community Land Development Act.
- (2) Each lot is designed to have a minimum of one building envelope with a minimum area of 1000m² and minimum width of 30m, avoiding:
 - (a) Slopes in excess of 14° (25%);
 - (b) Areas containing vegetation with a height of 3m or more and a percentage foliage cover of 30% or more;
 - (c) Land which is classified as having a high bushfire hazard potential Land which can only be accessed by constructing driveways over land with slopes of 14° (25%) or more; and
 - (d) Land within 50m of any intermittent or permanent watercourse.
- (3) The perimeter of the building envelopes are located a minimum distance of 5m from the boundaries of the lot with the exception of an 18m setback applying to the road frontage.
- (4) Building envelopes for each lot are nominated on the plan of subdivision.

- (5) Allotment boundaries relate to the topography of the site, as much as possible, with fence lines parallel with or perpendicular to slopes, not diagonally across them, and allotment boundaries following creeks rather than crossing them.
- (6) Land generally to the west of the 120m contour is included in the Neighbourhood Property Lot.

Neighbourhood Property

- (1) No retail sales are to occur from community buildings erected on the Neighbourhood Property lot, or from buildings on private lots.
- (2) Community buildings are to be erected on sites with slopes of 11° (12%) or less and accessible from the internal roadway without needing to construct a driveway over land with a slope of 11° (12%) or greater.
- (3) Community buildings are to be located on previously cleared sites in areas classified on Council's Bush Fire Hazard maps as having low to medium bushfire hazard.
- (4) Community buildings are to be located no closer than 20m to the internal roadway or the boundary of a private lot and no closer than 50m to an intermittent or permanent watercourse.
- (5) Details of roof and wall colours are to be submitted for approval with the required building application. Roof colours to avoid include white, off-white, blue, red and plain zincalume. Wall colours to avoid include white and off-white.
- (6) Full details of waste disposal methods are to be submitted for approval with the required development application. As a guide, effluent disposal areas and roof stormwater disposal systems are not to discharge any closer than 50m to an intermittent or permanent watercourse.
- (7) The Neighbourhood Association is to establish, control, operate and manage the 'Arts and Crafts Centre' or other community buildings on the Neighbourhood Property lot.
- (8) The Neighbourhood Association is to be responsible for the control, management, operation and maintenance of the Neighbourhood Property, including the internal access road, perimeter fencing and the communal garbage receptacle storage area.
- (9) Access is to be provided between properties for fire fighting vehicles by way of gates at locations selected by the NSW Rural Fire Service. Where these gates are intended to be locked, a separate lock is to be purchased from the local fire brigade and utilised on the gate so that the brigade has access.
- (10) Any discoveries of Aboriginal relics during building construction are to be reported to the Director of National Parks & Wildlife Service. Where works may damage, deface or destroy the relic, such works are to cease until the written approval of the Director General is given to the destruction, removal or otherwise of these relics.

16.13.2 Development Controls

Services and Waste

- (1) Electricity supply and telecommunication services are to be provided to each allotment. Provision of these services is to be within existing service corridors or within a shared corridor alongside the internal road.
- (2) A combined garbage receptacle storage area is to be provided at the entry to the property with access available for a garbage collection vehicle.

Building Location

- (1) Buildings are to be located within the building envelopes nominated on the plan of subdivision.
- (2) Buildings are not to be located on slopes in excess of 14° (25%).
- (3) Where buildings and driveways are proposed on slopes between 11° (20%) and 14° (25%), the application is to

be accompanied by a soil erosion and sediment control plan and the driveway is to be bitumen or concrete sealed.

Building Design

- (1) Building designs are to be stepped to follow the contours of the site rather than requiring extensive cut and fill to enable 'slab on ground' construction. Cuts and fills are to be a maximum of 1.0m and 2.0m respectively and are to be battered down to a slope of 2H:1V and 2.5H:1V respectively and protected from erosion.
- (2) Buildings on slopes between 11° (20%) and 14° (25%) are to be of 'pole frame' or 'pole platform' construction to minimise earthworks.
- (3) Appropriate bushfire hazard reduction measures are to be included in the design of this style of house to eliminate the accumulation of wind borne litter and fire embers beneath the house.
- (4) The waste disposal area for the building is to be located within the building envelope nominated on the subdivision plan.
- (5) Dwelling-houses are to generally be orientated with a north to north-easterly aspect to:
 - (a) Maximise warmth from winter sun;
 - (b) Maximise shade from summer sun by use of awnings, pergolas, etc;
 - (c) Gain advantage of north-easterly breezes; and
 - (d) Make best advantage of north facing outdoor living areas.
- (6) Each dwelling-house is to be provided with a minimum of 1 water storage tank with a capacity of 20,000 litres or more. One outlet per tank is to be provided with a 38mm minimum diameter ball or gate valve to allow water transfer or for fire fighting purposes. Water storage tanks are to be screened and painted any colour other than white, off-white or plain zincalume. Galvanised finishes which will develop a matt colour may be permitted.
- (7) New buildings should have a simple rectilinear plan, wherever possible and a simple broad hipped or gable roof
- (8) Strongly coloured, heavily mottled or textured bricks should not be used.
- (9) Roof tiles of a simple profile and a consistent colour without contrasting ridge tiles should be used.

Flora and Fauna

- (1) The proprietor or occupier of any lot, including the Neighbourhood Property lot, shall not remove, fell or destroy any trees or under storey shrubs which occur on slopes in excess of 18° (32%) or within a setback of 10m from the edge of slopes in excess of 18° (32%);
- (2) The proprietor or occupier of any lot, including any Neighbourhood Property lot, shall not remove, fell, damage or destroy any trees growing within 30m of the centreline of any intermittent or permanent watercourse. Understorey shrubs should be retained as far as possible to provide shelter and a food source for native fauna.
- (3) No sewerage disposal system or roof water disposal system is to be constructed so as to discharge within 50m of any intermittent or permanent watercourse.
- (4) Dogs, other than those used as guide dogs, for vision or hearing impaired occupiers, are to be confined to private lots between dusk and dawn and all cats shall be confined to dwellings or buildings associated with dwellings on private lots between dusk and dawn. (This requirement is to be incorporated into the management statement for land subdivided under the Community Land Development Act. The aim of this requirement is to confine 'predator type' domestic animals during the period when native fauna are most active.)

16.14 Macwood Road, Smiths Lake

The following site specific controls are in addition to the general and specific controls contained in previous sections of this Plan. These controls have been developed as a result of the preparation of a master plan for the nominated sites

which have been adopted by Council.

This plan applies to land at Macwood Road, Smiths Lake identified as Lot 1 and Lot 2 DP 1103357 as shown on the plan below.



Macwood Road Smiths Lake site location plan (click here to view [original image](#))

Council formally recognised that the land had development potential when it was nominated as a Category 1 Development precinct in the Forster/Tuncurry Conservation and Development Strategy (CDS). The CDS was adopted by Council in September 2003 and stated the following in relation to the site:

"Smiths Lake Planning Study

The Smiths Lake Planning Study was prepared for Great Lakes Council by consultants WBM Oceanics in 2000. Based mainly on environmental constraints, it identified a range of precincts that could potentially support urban development. The study provided details of suggested development in each precinct, including an assessment of the implications of fragmented development across the 10 different precincts identified. The majority of land identified as suitable for urban development was located outside existing urban areas and much of it is already developed. On this basis, the precincts within or adjacent to Smiths Lake Village have been identified as most suitable to meet future land requirements in Smiths Lake. This includes "The Lodge" (5 hectares) and "Macwood" (4 hectares) precincts. These precincts contain some medium value habitat that will need to be assessed prior to development. Refer to Figure 3.23 for these areas.

Macwood Rd Precinct

The final development area for this precinct will be identified through more detailed environmental assessment of the site and resolution of Bushfire Asset Protection zones. All significant conservation areas outside the potential development area should be rezoned for environmental protection, while allowing the development of community facilities in certain areas where it can be demonstrated there will be minimal environmental impact.

Land identified in the Strategy

Land identified as being potentially suitable for urban development and conservation purposes include an area of 9 hectares in the Smiths Lake Village, as indicated in Figure 3.25. This land has been classified as Category 1 areas, and includes:

- (a) Land at Macwood Road Smiths Lake including Parts Lot 1 DP 121352, however the final development

area will be identified through detailed environmental assessment of the site and resolution of required asset protection zones for the site. All significant conservation areas on the site outside the potential development area at the 'Macwood Precinct' be zoned for conservation purposes, while allowing the development of community facilities in certain areas where it can be demonstrated there will be minimal environmental impact.

These are areas with a relatively high degree of certainty/support and for which delegations will be provided with endorsement of the Strategy. Current land zoning is indicated in Figure 3.26."

Since the adoption of the CDS considerable work has been undertaken on creating a sustainable form of development that is "tailor made" to the site and which integrates the built form with the natural and cultural environment.

Included in this DCP is a Conservation and Land Use Management Plan which will guide the development of the site. This, in conjunction with the other provisions of the DCP will be used to assess development applications and to monitor ongoing performance.

16.14.1 Aims and Objectives

The aim of this part of the DCP is to provide a guideline for the sustainable development of the land so that the future development responds to, and integrates with, the significant natural features of the land and which will provide a pleasant living environment based on sound urban design principles.

The objectives of this part of the DCP are:

- (1) to protect significant ecological values of the land, in particular the Palm Forests and habitat areas for the Grey Headed Flying Fox,
- (2) to incorporate water sensitive urban design principles and other energy efficiency measures into the development of the land,
- (3) to set out the requirements for storm water management so as to achieve the water quality objectives for discharge from the land to Smiths Lake,
- (4) to ensure buildings are sympathetically designed to suit the topography of the site and to be of lightweight form and appearance to reflect modern coastal design,
- (5) to ensure adequate protection for the occupiers of the land and their property from the threat of bushfires,
- (6) to provide a range of low density lot sizes to create a reasonable mix of dwelling types and consequential social mix,
- (7) to provide a high degree of livability for residents of the land while protecting the amenity of adjoining residences,
- (8) to identify the environmental enhancement and rehabilitation activities that are to be undertaken as part of the development.

The key environmental and bushfire outcomes of the this part of the DCP include:

- (1) An ecologically sustainable development which responds to ecological, cultural, bushfire and landscape constraints
- (2) Retention of the Foreshore Reserve and Palm Gully vegetation as development excluded zones
- (3) Protection of Grey-headed Flying-fox (*Pteropus poliocephalus*) habitat (food and roost trees)
- (4) Protection of habitats and nesting hollows for the Masked Owl (*Tyto novaehollandiae*)
- (5) Protection of potential habitat for threatened plants including *Cynanchum elegans*, *Senna acclinus* and *Syzygium paniculatum*

- (6) A Community Management Statement for the implementation of:
 - (a) The Bushland Management Plan, Bushfire Protection Assessment, Bushfire Emergency Response Plan, Bushfire Contingency Plan, Fuel Management Plan and Grey-headed, Flying-fox Management Plan through the Ecological Site Management Plan; and
 - (b) Maintenance of landscape, infrastructure and community facilities - Management of environmental and bushfire regimes
- (7) Integration of urban infrastructure within the local context and provision of community facilities and access
- (8) Protection for the proposed development from bushfire threats and provisions of adequate facilities to passively defend property and infrastructure, including evacuation planning initiatives
- (9) Minimised significant environmental impacts
- (10) A restoration program to offset negative environmental impacts.

To ensure that the above outcomes are sufficiently considered, a series of development application documents should be prepared. These include;

1. Environmental Validation Assessment
2. Bushfire Contingency Plan
3. Bushfire Protection Assessment, and
4. Bushfire Evacuation Plan
5. Fuel Management Plan
6. Draft Community Management Statement

These documents are to be submitted with the Development Application to ensure both ecological and bushfire outcomes are effectively implemented. These documents should:

- Effectively integrate residential, bushfire and ecological objectives to achieve an environmentally sustainable development;
- Establish integral roles for the developer, community and Great Lakes Council in implementing, maintaining and reviewing the progress of the development;
- Establish a community management statement incorporating a framework that will achieve residential, ecological and hazard reduction outcomes in perpetuity;
- Provide a financial framework that provides effective resources to manage the development landscape in perpetuity.

16.14.2 Conservation and Land Use Management Plan

A Conservation and Land Use Management Plan (CLUMP) forms part of this section.

The CLUMP is an important planning document that Council will consider when determining any proposed development on the land. The comprehensive nature of the CLUMP, in the way it integrates the LEP and the DCP, is of significance to the scheme proposed.

For example, the CLUMP provides for:

- The identification of detailed conservation strategies to manage the land in perpetuity.
- The identification of clear character statements.
- The CLUMP also specifically deals with the following matters:
 - The conservation values of the site including vegetation communities, threatened species, natural wildlife corridors, riparian matters and other natural features of the site.
 - The scale of any development and its integration with existing landscape, and phasing of the development.
 - The implementation of the development together with the ongoing obligations for conservation, maintenance and protection of the environment.
 - The verification that requirements, obligations and environmental targets and outcomes are achieved and maintained during the life of the development.

Development proposed on land to which this plan applies must be consistent with the DCP and the CLUMP.

Council must not grant consent to a development application in relation to land to which this part applies, unless the development of the land will achieve the water quality objective of restricting post development pollutant export loads to existing levels, utilising current best practice treatment methods applicable to the site, both structural and non-structural.

The CLUMP has reviewed the proposed land use at Macwood Rd and made recommendations in respect of matters that require consideration prior to any decision being made by Great Lakes Council on development potential.

Thirty two (32) considerations have been identified and they require analysis against the 'primary outcomes' (Section 6).

The appropriate method to undertake this assessment is via an Environmental Validation Assessment (EVA). This process will allow the Great Lakes Council to directly compare the proposed development with the requirements of this chapter of the DCP, including the CLUMP. The EVA should also enable Council to monitor the performance of the development against the requirements of this chapter of the DCP. Any development application submitted for the land is to include an outline of the matters to be reported on in the EVA. The EVA shall identify a reporting mechanism, including frequency of reporting, for the performance of the development.

Environmental Considerations

- Protection of ecological values
- Ecological functioning of habitat corridors
- Ecological functioning of Palm Forest, Blackbutt Open Forest/Woodland, Tallowood Open Forest, Blue Gum Open Forest, Rainforest Species/Swamp Oak Regrowth, Ironbark/Tallowood Open Forest, Ironbark Open Forest/Woodland and Grassland with Scattered Trees
- Connectivity with surrounding remnant vegetation and reserves
- Ecological integrity of buffer zones
- Protection and maintenance of the sites cultural significance
- Protection of habitat for Grey-headed Flying-fox (*Pteropus poliocephalus*) and Masked Owls (*Tyto novaehollandiae*)
- Protection of potential habitat for *Cynanchum elegans*, *Senna acclinus* and *Syzygium paniculatum*
- Protection of habitat links and within lot refugia
- Effective control of pest species
- Visual absorption capacity and enrichment of the site's visual significance
- Integration of urban infrastructure within local social, ecological and economic context
- Environmental impacts of urban infrastructure
- Environmental impacts of cut and fill operations
- Performance of the stormwater management system bushfire considerations
- Implementation of impact reduction measures
- Building in a bushfire-prone environment
- Settlement design and form
- Managing bushfire hazard
- Providing fire suppression measures
- Development of a bushfire contingency plan
- Providing adequate access, egress and evacuation capability
- Monitoring of fire protection measures
- Protection from neighbouring land use
- Managing hazard without compromising ecological and scenic values
- Fuel management responsibility
- Conservation of biodiversity values subject to hazard reduction burns
- Developing and maintaining community awareness
- Maintaining liaison with the NSW Rural Fire Service

Variations or non-compliances with this part of the DCP and/or CLUMP will only be allowed where:

- the amendments will satisfy the objectives of the zone in the LEP; and
- the amendments will satisfy the Planning Principles and Site Compliance Requirements of this part of the DCP and
- the amendments relate to building changes and locations, lot dimensions, proposed uses or engineering or construction details; and
- there will be no increase to the density or scale of development on land to which this part of the DCP applies; and
- there will be no increased or additional adverse impacts on the environment including vegetation and habitat for fauna; and
- there will be no increase in the likely demand for, or loss of, water; and
- there will no increase to the bushfire hazard.

Council may, upon the submission of detailed engineering details for the development, require modifications to be made to the form and layout of the development. Council may also require modifications to ensure the development complies with the Planning for Bush Fire Protection Guidelines, 2006 (or other subsequent guidelines) whilst ensuring there is no significant increased impact upon the land zoned E2 Environmental Conservation.

16.14.3 Planning Principles

The following Principles and Compliance Requirements are to be satisfied for any development proposal for the land. Details are to be submitted with the development application which specifically identify how the Planning Principles and Compliance Requirements are to be met.

Site Planning Compliance Requirements

Planning Principles	Site Planning Considerations	Development
<p>1. Ecology</p> <p>To protect the significant ecological values of the land, in particular the Palm Forests and habitat for the Grey Headed Flying Fox.</p>	<p>Identification of a site's ecological features and establishment of conservation zones and measurements to protect them.</p>	<p>Any Cabbage relocated with ratio of 3:1 with</p> <p>Dwellings and encroachments</p>
<p>To identify the environmental enhancement and rehabilitation activities that are to be undertaken as part of the development.</p>	<p>Natural features and identified vegetation to be protected to ensure that the local character is predominantly maintained.</p> <p>Restoration of faunal habitat within conservation areas and as native landscaping within the development.</p>	<p>Prior to the commencement of the development zone shall be submitted with</p> <p>Those parts of the development occupied by the indigenous species bush fire may revegetation in accordance with the guidelines, 2006</p>
	<p>Existing tree canopy to remain as a dominant feature with supplementary landscaping.</p>	<p>An Environmentally Sensitive Area to be prepared as part of the development application. The</p>
	<p>Conservation of flora and fauna through the provision of habitat corridors, open space, asset protection zones, and the retention where possible of identified canopy trees within development zones.</p>	<p>The development shall retain those trees identified in the</p> <p>Tree hollows and snags to be retained where appropriate and</p>

The keeping of cats and dogs is to be prohibited other than for those covered by the Companion Animals Act.

that identifies removed and application for

The EMP is to management environmental responsibilities

Mechanisms are in place, including funding, monitoring, and auditing mechanisms, to ensure the ongoing implementation and effectiveness of the environmental management measures set out in the CLUMP.

Any Subdivision 1989. A draft development i. include provisions ii. include provisions to be demonstrated and iii. include provisions which, domestic iv. ensure that the requirements given effect in

Any subdivision 1989 with a full funding mechanism application for

The funding for landscaping, landscape performance

2. Stormwater Management

To incorporate water sensitive urban design principles and other energy efficiency measures into the development of the land.

Application of Ecologically Sustainable Development (ESD) principles.

Maximise rainfall dwelling, maximum irrigation.

3. Water Management

To set out the requirements for stormwater management so as to achieve the water quality objectives for discharge from the land to Smiths Lake.

Any development must not result in a net increase in nitrogen, phosphorous and suspended sediments, as predicted at 1 January 2007, entering the receiving waters of Smiths Lake.

Minimise the effect of the development on the quality of the receiving waters, Smiths Lake, through the use of appropriate facilities that may include but not be limited to rainwater tanks, gross pollutant traps and bio-retention systems.

A Water Qual application th

A water qualit the performar program are t

Minimise "bui maximising 's

Maximise rair dwelling, max irrigation.

Provide an or detention zon

In the case of of suspended greater than 1

Restrict runoff

4. Design

To ensure buildings are sympathetically designed to suit the topography of the site and to be of lightweight form and appearance to reflect modern coastal designs.

Subdivision pattern and streetscape to be dictated by the natural site features, including topography, remnant vegetation and landscaping.

A legal structure is to be developed which incorporates codes for control and siting of buildings, to protect natural features and identified important vegetation.

Access netwrc canopy trees,

A draft Comm Development includes prov

The subdivisi

To provide a high degree of liveability for residents of the development while protecting the amenity of adjoining residences.

Access to An

5. Bush Fire Management

To ensure adequate protection for the occupiers of the land and their property from the threat of bushfires.

A community management scheme (under the CLD Act) to be implemented to manage community property and natural hazards.

A Bush Fire l application th of this DCP. 1 Community a development

A draft Comm application w Management

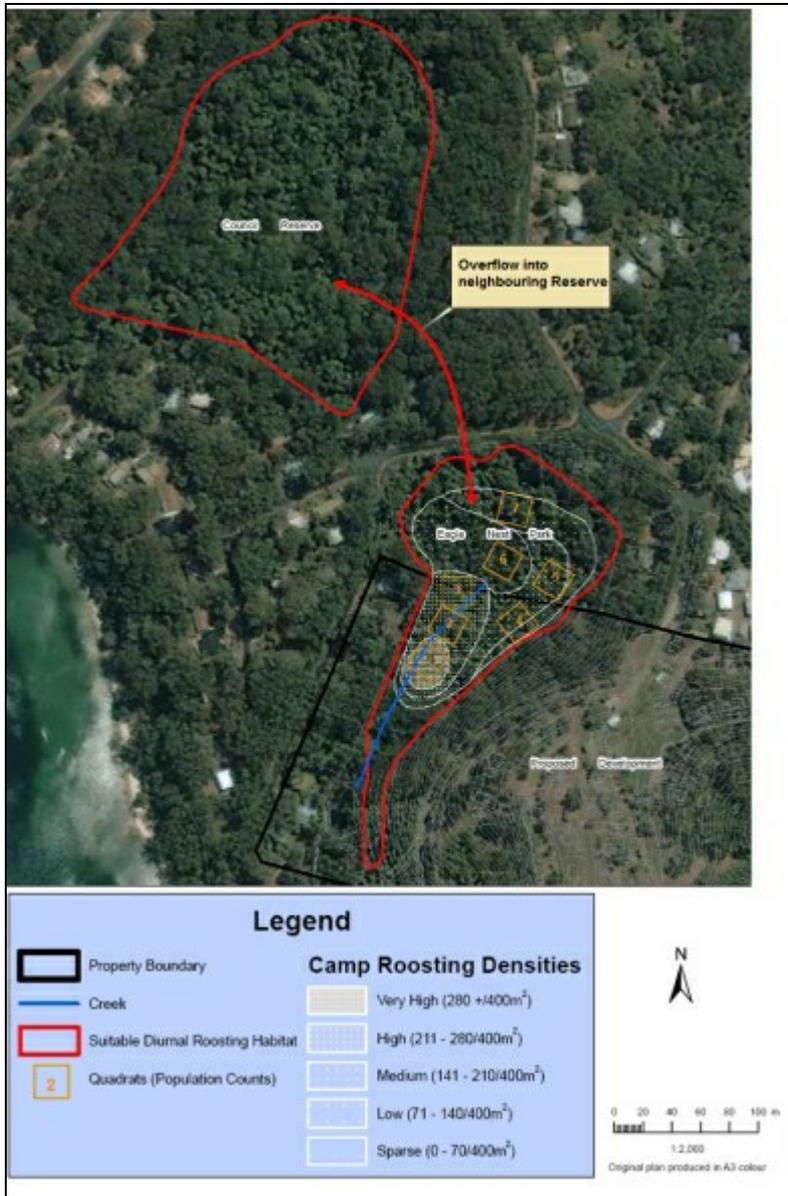
Specific Actions - Flying Fox Protection

Any development of the land is to ensure that the following objectives and strategies are achieved with respect to the protection and management of the Flying-fox roosting habitat shown in the image below:

- To retain, protect and regenerate the known Flying-fox habitat and the Palm Forest, within the site; and
- To enhance foraging habitat through the use of suitable winter species in landscape works, particularly including nectar and fruit bearing plants and winter flowering species.
- To facilitate and ensure the local awareness of the flying fox habitat so as to identify the low risk of

transmission of disease to humans, raise awareness of Grey-headed Flying-foxes and their behavior and to promote positive attitudes toward the protection of Flying-foxes within the local area.

The following actions are to be taken to protect the Flying Fox colony that intermittently roosts on the part of the land shown below.



Macwood Road Smiths Lake flying fox roosting areas (click here to view [original image](#))

Environmental Management

- (1) Figure 2 "Flying Fox Roosting Habitat" which accompanied the Flying Fox Management Plan, May 2008, prepared by Travers Environmental and which was submitted in support of the rezoning is to be included with the community title documentation for the land. A copy of the draft Community Management Statement, under the Community Land Development Act, 1989, that includes Figure 2 is to be submitted with the development application.
- (2) A Flying fox Habitat Management Plan (FFHMP) is to be included in the Environmental Management Plan. The FFHMP is to include details on the following actions and measures required to protect and manage the Flying fox habitat:
 - (a) Weed removal and management techniques to maintain the integrity of Flying fox habitat shown below.

- (b) The prohibition of bush regeneration works within the habitat area between October and December, to minimise disturbance to birthing females and the weaning of the young.
- (c) Replanting of the site with suitable, native species to provide foraging resources. Plants should be selected from the published list of native flora recorded from the land and with particular use if the following.

	Species
Trees	<i>Angophora costata</i>
	<i>Eucalyptus saligna</i>
	<i>Eucalyptus pilularis</i>
	<i>Corymbia maculata</i>
	<i>Eucalyptus paniculata</i>
	<i>Livistonia australis</i>
	<i>Lophostemon confertus</i>
	<i>Eucalyptus microcrys</i>
Shrubs	<i>Acacia maideni</i>
	<i>Eupomatia laurina</i>
	<i>Ficus coronata</i>
	<i>Notelaea longifolia</i>
	<i>Neolitsea dealbata</i>
	<i>Acmena smithi</i>

- (3) Fencing to delineate the Flying-fox habitat.
- (4) Interpretive signage to be erected at suitable locations to advise that the Grey Headed Flying Species is a threatened species, to inform of the importance of the habitat to the survival of the species, the importance of its proper management and the low potential for transmission of disease to humans.
- (5) Any other actions that are considered relevant to the protection and management of the flying fox colony and habitat as set out in the Grey-headed Flying fox Management Plan, May 2008, prepared by Travers Environmental and which was submitted to Council in support of the rezoning of the land. The Management Plan may be amended, with Council's approval, to account for any changes or reductions in the flying fox colony or habitat.

Community Education

- (1) Full details are to be submitted with the development application of the following:
 - (a) A community extension program to inform prospective purchasers of the presence of the flying foxes, including the preparation of fact sheets and a local display providing information relating to Grey-headed Flying-foxes within the local area.
 - (b) The draft Management Statement to be submitted with the development application is to include information on the flying fox colony and the obligations of the owners in the protection and management of the animals.

Monitoring and Annual Reporting

- (1) Details are to be submitted with the development application of a monitoring and annual reporting program to Council on the flying fox colony and habitat. The program is to provide for:
 - (a) The monitoring of seasonal fluctuation in numbers of Flying foxes. Annual population estimates to identify any significant changes in the population size using the camp. The report is to keep a cumulative record of activities and monitoring so as to allow for cumulative analysis of data collected in

previous monitoring.

- (b) Any necessary recruitment and establishment of vegetation within the Flying fox management area.
- (c) How the program is to be given effect upon the commencement of development works and thereafter for a period of ten years after full occupation of the development.
- (d) Actions taken every 12 months to protect and manage the flying fox habitat.
- (e) Any other actions that are considered relevant to the protection and management of the Flying fox colony and habitat as set out in the Grey-headed Flying fox Management Plan, May 2008, prepared by Travers Environmental and which was submitted in support of the rezoning of the land.
- (f) Any recommended revisions to the management actions identified in the Grey-headed Flying fox Management.

Environmental Management Plan

- (1) An Environmental Management Plan (EMP) is to be submitted with any development application for the land. The EMP is to:
 - (a) Include a Flying Fox Habitat Management Plan that defines the actions and responsibilities with regard to the protection and management of the flying fox colony and its habitat on the land.
 - (b) Define the actions and responsibilities for management of the part of the land zoned E2 under Great Lakes Local Environmental Plan 2014 with regard to:
 - (i) Bushfire management;
 - (ii) Weed management;
 - (iii) Restoration of degraded and cleared areas with locally occurring indigenous species. A plan showing restoration areas is to be included in the EMP.
 - (c) Prescribe that trees that are to be removed for the development are to be replaced at a ratio of 3:1 with locally occurring indigenous species. In the case of Cabbage Tree Palms these may be relocated to elsewhere on the land. The EMP is to show trees that are to be removed and whether they are to be relocated or replaced along with details of their relocation or replacement.
 - (d) Provide for controlled access to the foreshore of Smiths Lake. The access routes and measures to restrict access to these routes are to be outlined.
 - (e) Details of and actions and responsibilities for the replacement of any tree hollows that are removed for the development. Any hollows are to be replaced, at the ratio of 4:1 with nest/den boxes of size and type.
 - (f) Any other environmental management measures required to be carried out under the Conservation and Land Use Management Plan.
- (2) A Project Ecologist approved by Council is to be engaged to undertake inspections and provide to Council an annual report on the performance of the development against the requirements of the EMP and to recommend any management actions for the purposes of ensuring compliance with the EMP. The assessment report will be incorporated into the Community Association's Annual Report.
- (3) The name, qualifications and experience of the Project Ecologist are to be submitted for Council's approval with the development application.

16.14.4 Architectural Design Statement

This part sets out sympathetic and environmentally aware residential community within a unique lakeside setting adjacent an existing residential precinct.

The development site is to be managed to ensure the natural and introduced landscapes are protected and maintained for maximum aesthetic and recreation benefit.

The developed area comprises of community and recreation facilities, maintenance facility, distinct detached housing precincts of varying character to suit the natural topography and existing environmental characteristics, a higher density townhouse precinct with associated recreation facilities such as swimming pool and playground, and a designated area of future development. A new lot (Lot 111) is to be developed under this section but become a separate lot excluded from the community plan.

Represented as a predominantly pictorial document, the section forms the basis for developing the site in the most appropriate way. It describes the constraints upon the development as a whole, and within each precinct, to create the most aesthetic and environmentally responsive outcome.

All buildings are to utilise ESD principles whilst being responsive to their natural site constraints. All dwellings are to utilise rainwater catchment via individual or shared tanks for use in toilets, laundries and yards.

Community facilities are to have disabled access and facilities.

A strong unifying architectural and landscape concept is employed across the site providing a connection between precincts. The architectural language is to be consistent throughout the site producing a unified development with a variety of housing options.

Building designs, material palettes and landscaping are then adapted to each precinct providing a unique character and sense of place for residents.

All master planning and architectural building design has been closely integrated with the landscape design to provide a coherent natural living environment.



Precinct plan (click here to view [original image](#))

Lot 111

- (1) Regulated by an RU5 Village Zone.
- (2) The aesthetics of these buildings are to be consistent with those of the surrounding community precincts.

Future Development (Proposed Lot 11)

- (1) The aesthetics of these buildings are to be consistent with those of the surrounding precincts.

Conservation Precinct

- (1) No built works except for community centre and facilities, fire and walking trails, park equipment, landscaping and general infrastructure.
- (2) All works to be sympathetic to surrounding existing and introduced landscaping.
- (3) The aesthetics of all buildings are to be consistent to those of the surrounding community precincts.

The Community Centre

- (1) The Community Centre provides a meeting place and recreation facility for the development, excluding Lot 111. A large meeting room, affording lake views, is to be divisible into a series of smaller multi-purpose rooms which can be utilised by residents or guests.
- (2) Recreation facilities include lap pool, plunge pool, spa, games room, playground and outdoor amphitheatre. All areas are to be accessible under the disability code AS1428.2. Disabled access is provided from residential zones and a lift provides access to the lower level facilities. Vehicular access to the community centre is by means of a shared vehicular/pedestrian road enabling delivery and waste collection.

The Gateway

- (1) The built forms are crucial to the initial visual impact of the development and are to represent the overall character of the site. Houses abutting the entry road are to be a maximum of three stories, taking advantage of lakeside views. No vehicular access from the main entry road is to be provided to these houses.

The Hilltop

- (1) The Hilltop precinct is a visually definable area that can be seen at various points throughout the site, hence necessitating a dramatic and unique architectural solution.
- (2) The built character like that of the natural character of the precinct expresses a solidity and permanence. Hence careful siting of the building related only to maximising the ESD potential of each dwelling and capitalising on the unsurpassed views present from this vantage point.

The Hillside

- (1) The Hillside dwellings are to be of lightweight framed construction allowing the built form to follow the contours of the hillside.
- (2) Excavation cuts are to be minimised where possible.
- (3) Where access roads occur on the high side of the house, bridges are to be used to access garages, and dwellings are to have a single storey appearance from this road.

The Lakeside

- (1) The Lakeside is to comprise of attached housing to the North of the main access road around the site, supported by recreational facilities such as covered outdoor shelters as well as private outdoor spaces. This

precinct represents a more relaxed leisurely mode of living.

16.14.5 Development Built Form Controls

The following built form controls have been adopted to create a framework for building design within the site and to complement the specific objectives of each precinct as set out in the Architectural and Landscape Character Plans and the Conservation Land Use Management Plan (CLUMP).

The built form controls set out below do not comprise of a prescriptive deemed to comply solution, and are to be read in conjunction with the DCP Objectives, the CLUMP, Council requirements, the BCA, BASIX and the Residential Flat Design Code where applicable.

16.14.5.1 Ecologically Sensitive Design

Controls

- (1) The siting and planning of buildings acknowledges the principles of ESD. Buildings have been sited to allow for optimum passive design opportunities such as natural interior day lighting and controlled solar access through all seasons. Open planning is utilised to promote cross flow ventilation and provide light spacious interiors. Consideration has been given to maintaining solar access to neighbouring properties and protecting the lifestyle and amenity of neighbours in regards to privacy.
- (2) Dwellings are sited to take advantage of views to either the lake or the surrounding vegetated palm gullies and hillsides. Site lines are provided between dwellings and neighbouring properties to ensure visual amenity to all residences. Fixed or retractable solar screens are to be provided to East and West facing window walls that enable the view corridors to be maintained.
- (3) All habitable dwellings are to comply with the NSW BASIX requirements for water reduction, thermal comfort and energy efficiency.
- (4) Recyclable materials will be used where possible. Appropriate levels of insulation will be employed and high levels of quality and finish in materials will be specified.
- (5) Features such as service courts containing natural clothes drying facilities and individual rainwater tanks will reduce power and natural resource consumption. Water reduction management techniques will be employed utilising water efficient AAA rating appliances such as toilets, showers and taps. Energy efficient appliances and equipment will be utilised throughout.

16.14.5.2 Building Design

Controls

- (1) Typical building plans for dwelling houses, town houses and community facilities are provided in the [Site Masterplan](#).
- (2) Future building design work for the site is to be undertaken by suitably qualified architectural firm/s.
- (3) The setback from the boundary with the Public Road Reserve to Community Title built works is to be a minimum of 1.5m throughout the development.
- (4) To encourage the sharing of views whilst not restricting the reasonable development potential of a site.
- (5) To site and design buildings to meet projected user requirements for visual and acoustic privacy.
- (6) To protect the visual and acoustic privacy of nearby buildings and open private space.
- (7) Off street carparking requirements for dwelling houses, townhouses and community facilities.
- (8) On street visitor carparking to be provided on site at a rate of 1 space per 3 dwellings.

Conservation Precinct

Controls

- (1) No built works except for community facilities, fire and walking trails, park equipment, landscaping and general infrastructure.
- (2) All works to be sympathetic to surrounding existing and introduced landscaping.
- (3) The aesthetics of all buildings are to be consistent to those of the surrounding community precincts.

The Community Centre

Controls

- (1) No building element shall extend into buffers reserved for the habitat trees.

The Gateway

Controls

- (1) Comprised of predominately detached dwelling houses.
- (2) Maximum of 16 dwellings permissible
- (3) Maximum dwelling footprint of 55% of the lot area.
- (4) Side setback - Zero lot lines not permissible, Minimum setback in accordance with the BCA
- (5) Minimum 2 space per dwelling to be provided on site.

The Hilltop

Controls

- (1) Comprised of predominantly detached dwelling houses.
- (2) Maximum of 18 dwellings permissible.
- (3) Maximum dwelling footprint of 40% of the lot area.
- (4) Side setback - Zero lot line not permissible, minimum setback in accordance with the BCA.
Front setback - Minimum of 4m from wall of dwelling to front boundary. The setback is relaxed where natural site features are accommodated and the impact on existing tree locations are minimised.
- (5) Minimum of 1m from wall of garage / carport structure to front boundary.
- (6) Minimum 2 spaces per dwelling to be provided on site. Provision for visitor parking on driveway to be provided where possible.

The Hillside

Controls

- (1) Comprised of detached dwelling houses.
- (2) Maximum of 21 dwellings permissible.
- (3) Maximum dwelling footprint of 45% of the lot area.
- (4) Side setback - Minimum setback and zero lot line in accordance with the BCA.
- (5) Buffer setback - No building element shall extend into bushfire and wildlife buffers except unroofed decks, pools, carports, garages and non-habitable structures. No building element shall extend into buffers reserved for habitat trees.
- (6) Minimum 2 spaces per dwelling to be provided on site.

The Lakeside

Controls

- (1) Attached housing.
- (2) Maximum Density of 8 dwellings permissible.
- (3) Maximum dwelling footprint of 60% of the lot area.
- (4) Side setback - Zero lot line.
- (5) Buffer setback - No building element shall extend into bushfire and wildlife buffers except decks, pools, and detached non-habitable structures.
- (6) Minimum 2 spaces per dwelling to be provided on site.

Future Development (Precinct 7)

Controls

The following provisions apply to any dual occupancy, residential flat building or multiple dwellings erected in this Precinct and do not apply to any additions to or the rebuilding of the existing dwelling:

- (1) Comprised of detached dwelling houses.
- (2) Maximum of 5 dwellings permissible including the replacement of the existing dwelling.
- (3) Maximum dwelling footprint of 40% of the lot area.
- (4) Side setback - Zero lot line not permissible. Minimum setback in accordance with the BCA. Buildings and structures shall be no closer than 3m to the adjoining public reserve.
- (5) Front setback - Minimum of 4 m from any structure to front street boundary.
- (6) No bush fire asset protection zones for buildings or structures shall extend into the environmental protection zone.
- (7) No buildings or hard surfaces, including roads and driveways, are to be located under the drip line of trees on the environmental protection zone.
- (8) Minimum 2 spaces per dwelling to be provided on site.

16.14.6 Site Masterplan



Macwood Road Smiths Lake Site Master Plan ([click here to view original image](#))

Typical Building Plans (refer to Site Masterplan for location):

- [Typical building plans - A1a and A2](#)
- [Typical building plans - B1 and B6](#)
- [Typical building plans - C, C1, C2 and C3](#)
- [Typical building plans - C4, D, E and E1](#)
- [Typical building plans - E2, F1 and F2](#)
- [Typical building plans - G1, G2 and G3](#)
- [Typical building plans - G4, G6 and G7](#)
- [Typical building plans - H1, H2 and H3](#)

16.14.7 Site Context Analysis



Macwood Road Smiths Lake aerial overview ([click here to view original image](#))

Smiths Lake forms part of the Great Lakes system, located approximately 310km North of Sydney (about 3 hours drive), between Newcastle and Port Macquarie. Smiths Lake village was a large farming area prior to becoming a residential development initiated by Charles Degotardi. The boatshed on the shores of Smiths Lake was constructed in the early sixties under the guidance of Charles Degotardi to assist passengers arriving by sea plane to buy this newly released residential land.

The boatshed still exists today and is known as "Frothy Coffee", it is a kiosk adjacent to the public boat ramp of De Bert's Reserve.

A natural sand bar at the entrance of Smiths Lake separates the lake from the Pacific Ocean for most of the year.

Macwood Road, Smiths Lake is accessed off the Lakes Way, a scenic stretch of road which diverges east from the Pacific Highway, connecting Bulahdelah, Forster and Taree via the scenic attractions of the Myall Lakes, Seal Rocks, Boomerang Beach, Wallis Lake, Green Point, Seven Mile Beach and Cape Hawke.

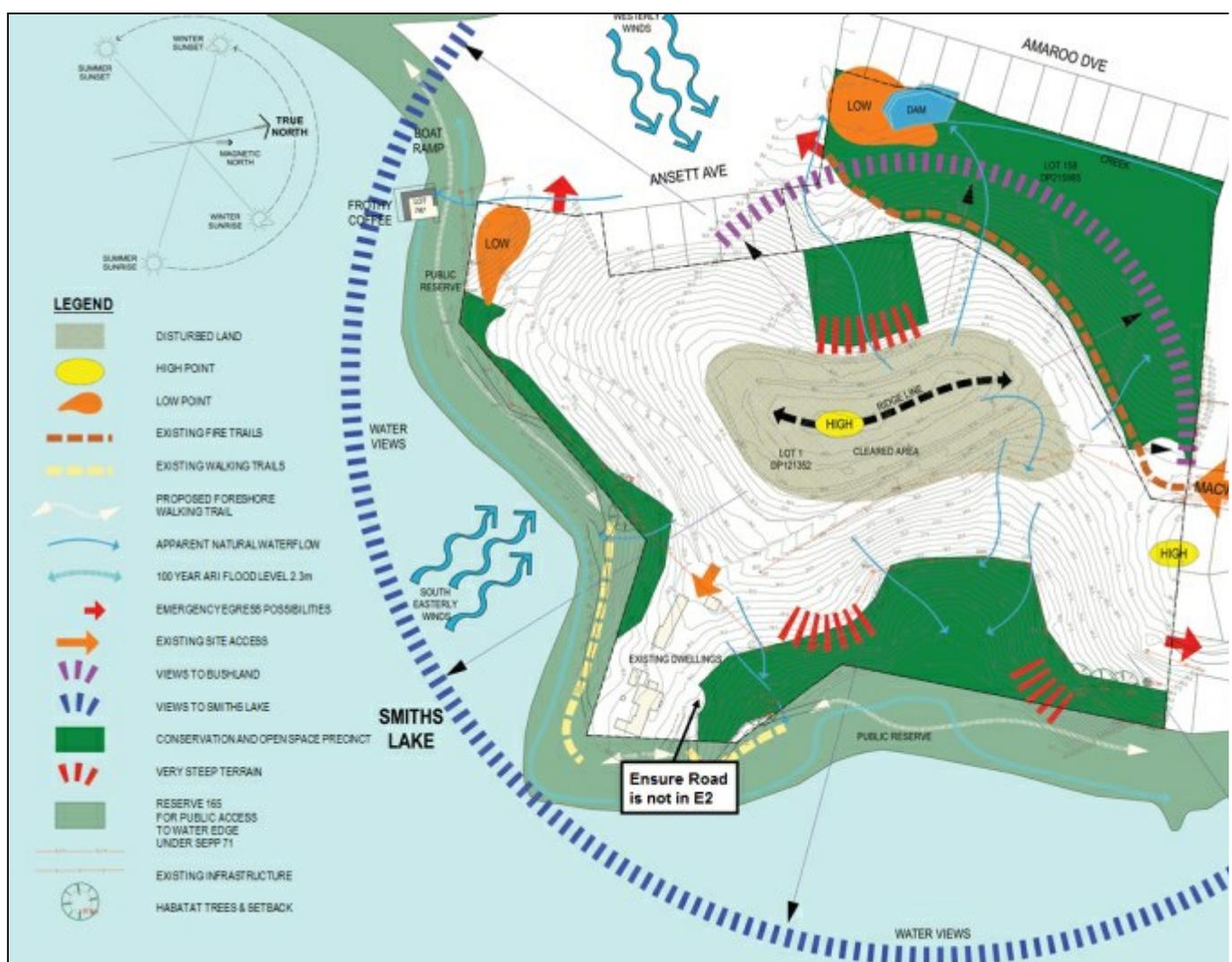
Within the Smiths Lake Planning District and the Great Lakes Shire, the site, currently known as the 'Macwood Precinct', provides opportunity for a distinct integrated and managed residential development. The development is to become known as 'Oyster Point'.

The site is approximately 10 hectares of which approximately 45% is being set aside as a managed conservation precinct.

Abutting the reserve at the water's edge of Smiths Lake, the site offers spectacular water views extending across the Lake to the Myall Lakes National Park to the South and the unique sand bar of Cellito Beach to the East.

With the Myall Lakes National Park to the South, Wallingat National Park to the North, Booti Booti National Park to the North East, and fringed by De Bert's Reserve along the Lakes Edge, there is plenty of bushwalking and nearby picnic opportunities.

In addition, the site enjoys the amenity of water recreation at both the adjacent Smiths Lake and the nearby Cellito Beach. The nearby parklands and nature reserves provide plentiful opportunity for recreation and walks along the lake foreshore. Boating and fishing opportunities are extensive both upon the surrounding Smiths Lake and the nearby Myall Lakes system to the South and the Wallis Lakes system to the North.



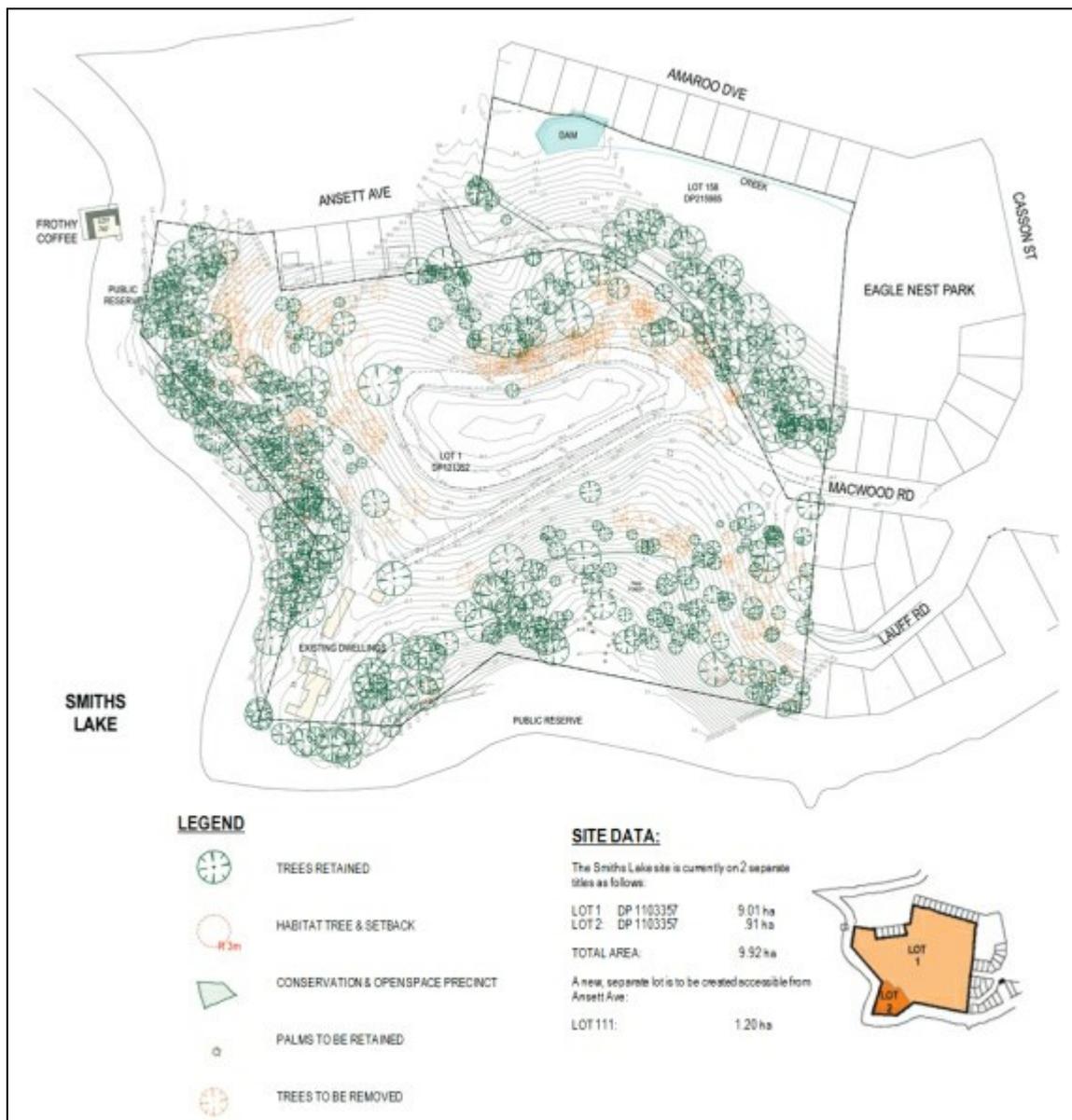
Macwood Road Smiths Lake site context analysis plan (click here to view [original image](#))

The site sits at the edge of the lake, surrounded by a 30m foreshore reserve and adjacent to existing residential development. Currently zoned as 1(c) Urban Investigation and showing evidence of disturbance upon the hill top, the proposed development site aims to integrate the site into the residential neighbourhood. It will also provide a greater diversity of housing options, whilst simultaneously ensuring management of the surrounding natural resources under a Community Title Management Scheme.

The proposed innovative development integrates the managed residential zone in an ecologically sensitive fashion whilst providing additional managed conservation precincts, including the adjacent reserve which is currently weed infested.

The area capable of sustaining development has been defined with regard to existing site disturbance and ecological management recommendations.

Smiths Lake surrounds the site from the North East, around the existing residence on the South East point, to the South West, adjacent the "Frothy Coffee" boat shed and kiosk. Residential development abuts the site along the Northern and Western boundaries. A public reserve, Eagle Nest Park, is situated between these residential areas along the Northern boundary with a playground and picnic area available.



Macwood Road Smiths Lake existing trees and palms (click here to view [original image](#))

Site access is provided at the terminus of Macwood Road, the main road into and out of Smiths Lake, requiring a portion of public road to be constructed on site to enable vehicle turning prior to the gated site entry.

The proposed development site is predominantly sloping land rising upwards from the surrounding Smiths Lake edge to a bare knoll (RL 41.00), central to the site.

The varying slope of the land requires the need for numerous housing styles to be developed specifically for the

morphology of the site.

A conservation area has been noted in the North Western portion of the site, the Palm Gully Forest within this conservation area is a known habitat for the Grey Headed Flying Fox community. It is a zone which requires minimal disturbance.

The contour survey plan shows the existence of the fire trails to the North and West of the site, and the existing road to the residence on the South Eastern point of the Lake. The existing residence will be accessed by the new development road network.

A 20m public reserve buffer runs around the site adjacent to the lake providing continued public access to the lakes edge as required under SEPP 71.

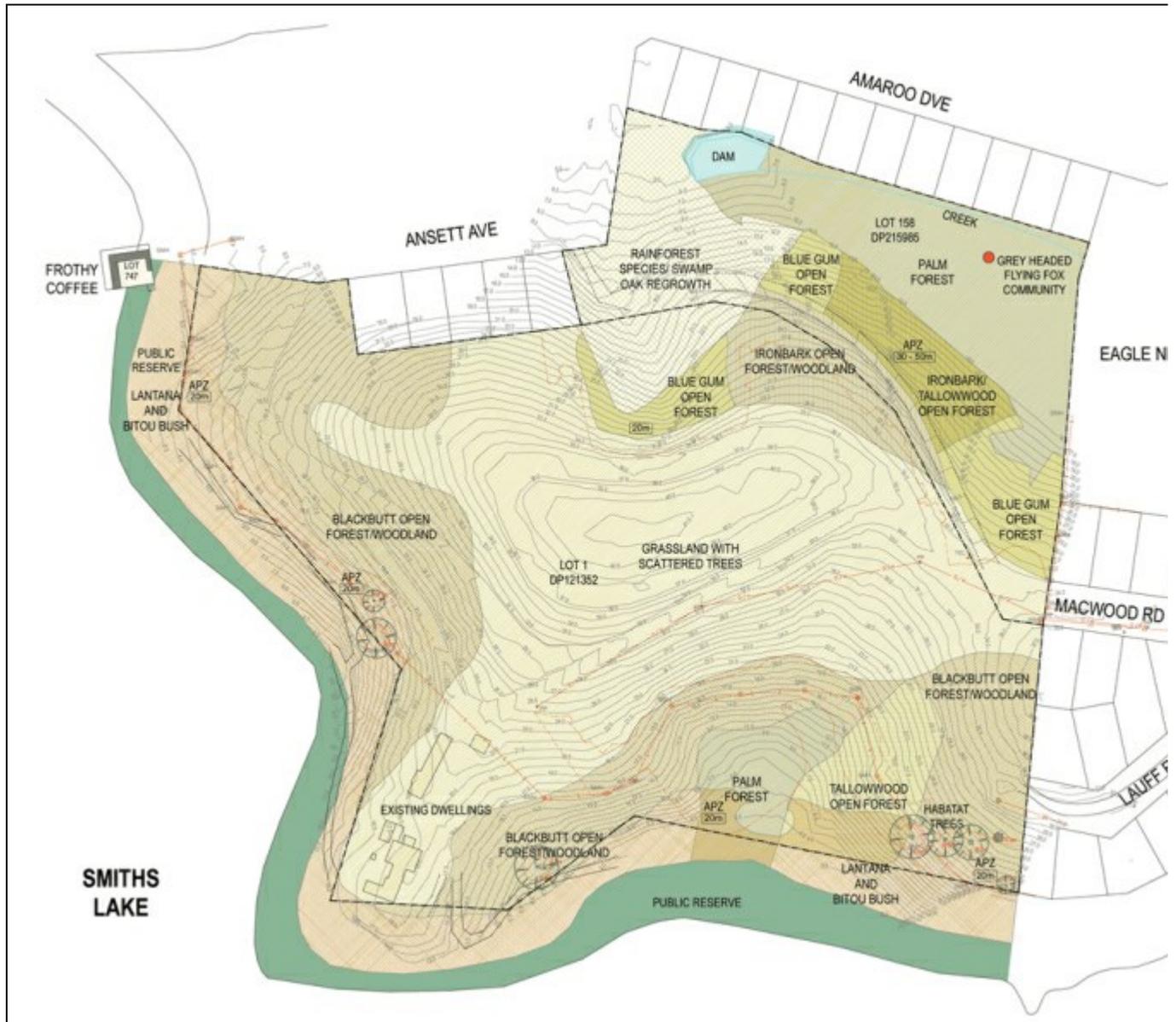
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Macwood Road Smiths Lakes constraints and opportunities map (click here to view [original image](#))

Constraints

The extent of the developable area within the site has been determined during various Council, Authority and Consultant meetings, predominantly utilising the previously cleared and disturbed woodland area.

Areas buffering the public reserve along the Smiths Lake frontage require clearing of Lantana and Bitou Bush weed species as ongoing maintenance of the site.

Areas of Blue Gum Open Forest and Tallowwood Open Forest are to be retained as areas of recreation. The Palm Forest to the North West of the development is to be maintained in its natural habitat.

A number of habitat trees have been identified and located by survey on site, as noted on the drawings. These are to be retained with a minimum setback, as noted, to ensure adequate protection to the tree both during construction and for future growth.

The Ironbark Open Forest, North of the existing fire trail, has been identified as potential habitat for gliders and owls, which needs to be retained.

The visual impact of the development from the lake and public foreshore is to be minimised such that the natural and introduced landscaping adequately screens the integrated architecture of the site.



Macwood Road Smiths Lake constraints map ([click here to view original image](#))

Opportunities

Removal and long term maintenance of weeds such as Lantana and Bitou Bush both within the site and into the foreshore reserves will ensure conservation of the natural ecology and enhance the aesthetic values of the public foreshore.

A predominantly cleared hill in the centre of the site provides opportunity for re-vegetation amidst lower height housing with larger footprints that can cater for a wider market.

Macwood Road, being the main road into the Smiths Lake township, provides an efficient and prominent site access point. The proximity to Lauff Road and Ansett Avenue provide opportunity for emergency egress points from the site which can be gated.

Retention of the Palm Forest area and foreshore reserves retains functioning habitat corridors which can be linked across the site through introduced low level landscaping which minimises bushfire risk.

Exclusion of the North West corner of the site from the development area will retain crucial habitat for the Grey Headed Flying Fox and will provide a recreational link from Eagle Nest Park. Dense vegetation maintained along Amaroo Drive and Macwood Road will screen travelers heading North and South along these roads.

Significant tree canopy retention upon the site provides visual shielding of the development from the adjacent public

reserve and lake's edge.

16.14.8 Landscape Design Philosophy

The landscape design for the proposed residential development will aim to recreate a natural environment from which the built environment emerges.

The major objectives of this landscape master plan are:

- (1) To maximise the existing canopy of indigenous trees;
- (2) To satisfy a number of Environmentally Sustainable Design principles in relation to the major project elements including:
 - (a) common open space;
 - (b) roadways;
 - (c) stormwater treatment/drainage & water catchment
 - (d) housing forms
- (3) To develop a landscape scheme and maintenance program that respects the sites location in relation to bushfire hazards.
- (4) To develop a native plant palette that will be consistent with the landscape design principles and objectives



Macwood Road Smiths Lake landscaping site plan (click here to view [original image](#))

Existing Trees

A detailed report of the flora and fauna together with an assessment of the existing trees has been prepared by Conacher Travers Environmental Consultants.

In summary the site is located within a canopy of scattered trees with a predominantly maintained grassland beneath. Generally the site slopes down to Smiths Lake. The landscape design will integrate the proposed development within the surrounding trees to preserve the existing visual character of both the site and the surrounding area.

Careful siting of future houses and roads has been considered to minimise the loss of significant and habitat trees. The natural environment of the site is a 'foil' to the built form of streets and housing. The proposed houses will appear to gently nestle within the natural landscape.

Common Open Space

Open spaces and parks will be designed to help achieve this with significant tree and shrub planting. The conservation Zone will retain and protect significant areas of vegetation and provide fauna habitats. Vegetation links provide corridors for habitat movement between the park areas the public reserve and the dedicated conservation zone.

Bushfire Control Asset Protection Zone (APZ) A detailed Bushfire Assessment has been prepared by Conacher Travers, Environmental Consultants. Landscape design for this area will reflect the adjacent reserve area. Tree and groundcover species indigenous to the area.

Housing

Landscaping associated with housing will be used to reduce the visual intrusion of buildings. Houses will be sited carefully in order to minimise the loss of existing trees. A cohesive landscape treatment to the housing lots will create continuity across the site. The primary use of indigenous plant material will help blend housing with the surrounding area.

Individual garden spaces will be designed within the overall structure planting, providing privacy and areas where residents can relax and enjoy the garden as an extension of internal spaces. Garden areas addressing the street will be treated more formally whilst private spaces to the rear will be less structured.

Privacy will be provided by dense shrub planting, terraces and level changes. Boundary definition will be achieved through stone pillars and retaining walls without the need for fences. Views from private open spaces will be concentrated to public open spaces and the Lake. Overlooking of adjacent private open space areas will be reduced by planting, pergolas and screens.

Streets

Streets will be designed to identify the importance of the residential amenity and to identify the hierarchy of the street pattern. Streets will emphasise the residential environment with vehicles being subservient. This will be achieved through narrower pavement widths and meandering alignment that slows traffic flow and allows pedestrians equal use.

Informal randomly grouped trees will reduce the impact of the roadways. Dense shrub planting will be used where required to screen residences from the road. Natural rock retaining walls associated with the entry road will be used as a design feature and an entry statement.

Road edges will be informal where the slope permits. Different tree themes will be used in the residential precincts based on their inherent character and existing tree species on the site.

Due to the sloping site retaining walls will be used to establish garden terraces at the street side that will reduce the amount of cut & fill and impacts of the roadworks. The limited supply of natural rock on site will be utilised for retaining walls to the top side of roads. Segmental concrete block retaining walls will be used on the lower side of roadways and screened with planting to reduce their visual impact.

Site Entry - The Gateway

Housing located adjacent to the site entry will be screened with dense shrub planting. A grove of canopy indigenous trees will be located at the site entry to create a sense of arrival that is indicative of the surrounding area. To allow for the necessary exposure and views to signage, planting will consist of a distinct tree canopy underplanted with low shrubs to provide a continuous native hedge.

Streetscape Design Elements

Throughout the development, within streetscapes and open space areas a number of streetscape design elements will be incorporated for public amenity. These will include:

- Walls
- Lighting
- Paving
- Signage & Street furniture

The principle objective for the design and selection of these items will be to provide a consistent and coherent landscape treatment throughout the common open space. Generally, they should be consistent in their design with the surrounding landscape and architectural character of the development.



Macwood Road Smiths Lake streetscape plan (click here to view [original image](#))

Stormwater

A detailed report on stormwater issues has been prepared by Boyden & Partners Engineering Consultants. The following aims and objectives provide the philosophy behind the stormwater management on the site:

- Collection and recycling of stormwater through the provision of rainwater tanks on every allotment
- The integration of a variety of water quality controls to ensure silt and nutrients do not leave the site.
- Provide controls to maintain a water quality to Smiths Lake that ensures its value as an environmental resource.
- Ensure engineering requirements of road drainage are treated in a landscape manner

Maintenance

The landscape design will take into consideration the maintenance requirements of the site for bushfire hazard reduction. Easy access to individual private spaces will allow for broad scale maintenance by the Community Association.

As plant selection will be predominantly indigenous, plants will be hardy and non invasive. All beds will be appropriately mulched to reduce on going maintenance.

Conclusion

The success of the landscape of this project relies on the reinstatement of indigenous scattered trees and shrubs in common and private open spaces throughout the site in order to integrate the proposed development within the surrounding lakeside location. All development and housing forms will appear 'carved out' of this natural landscape setting.

16.14.9 Site Concepts

Lot Plan



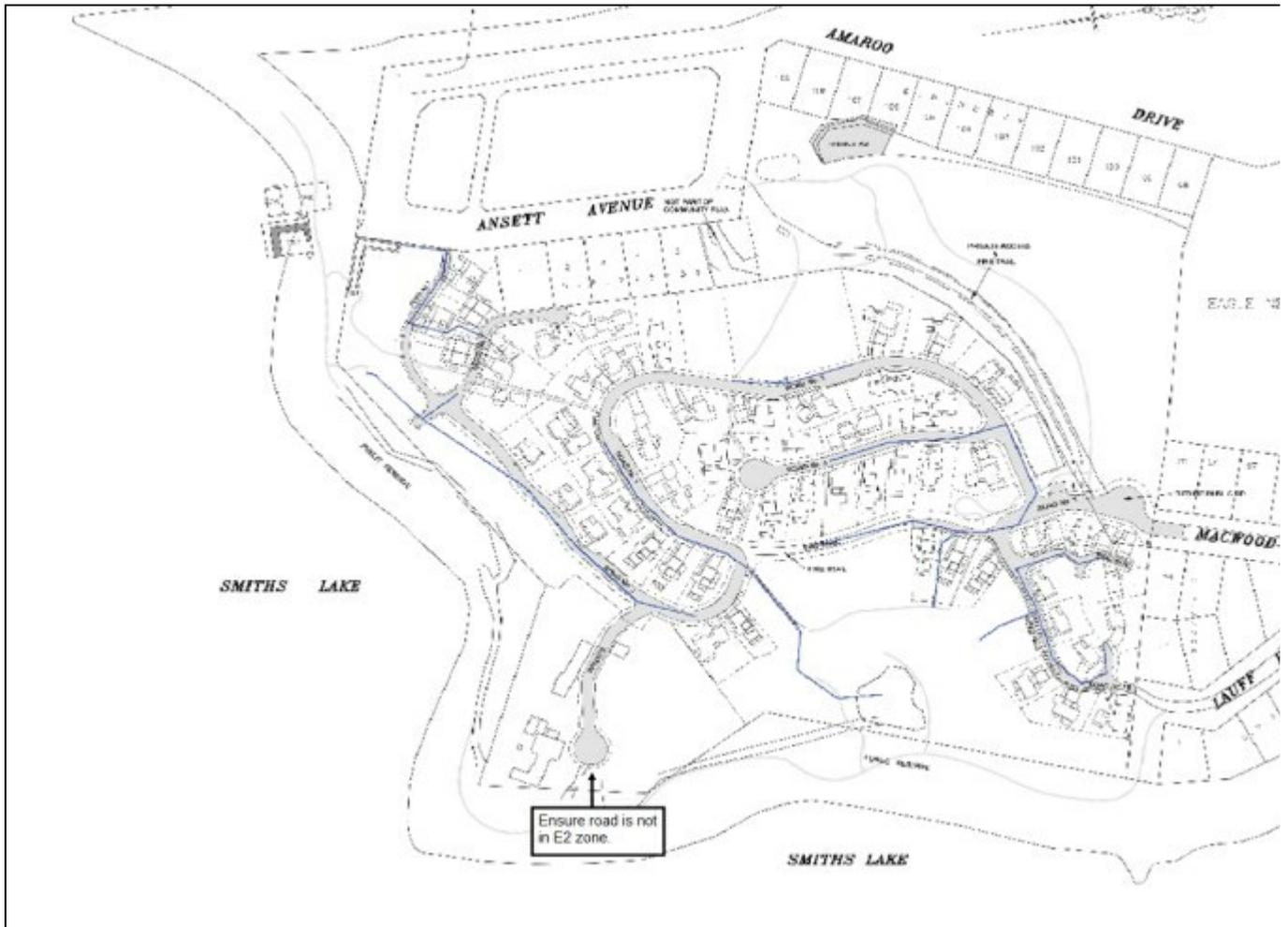
Macwood Road Smiths Lake lot plan (click here to view [original image](#))

Construction Staging Plan



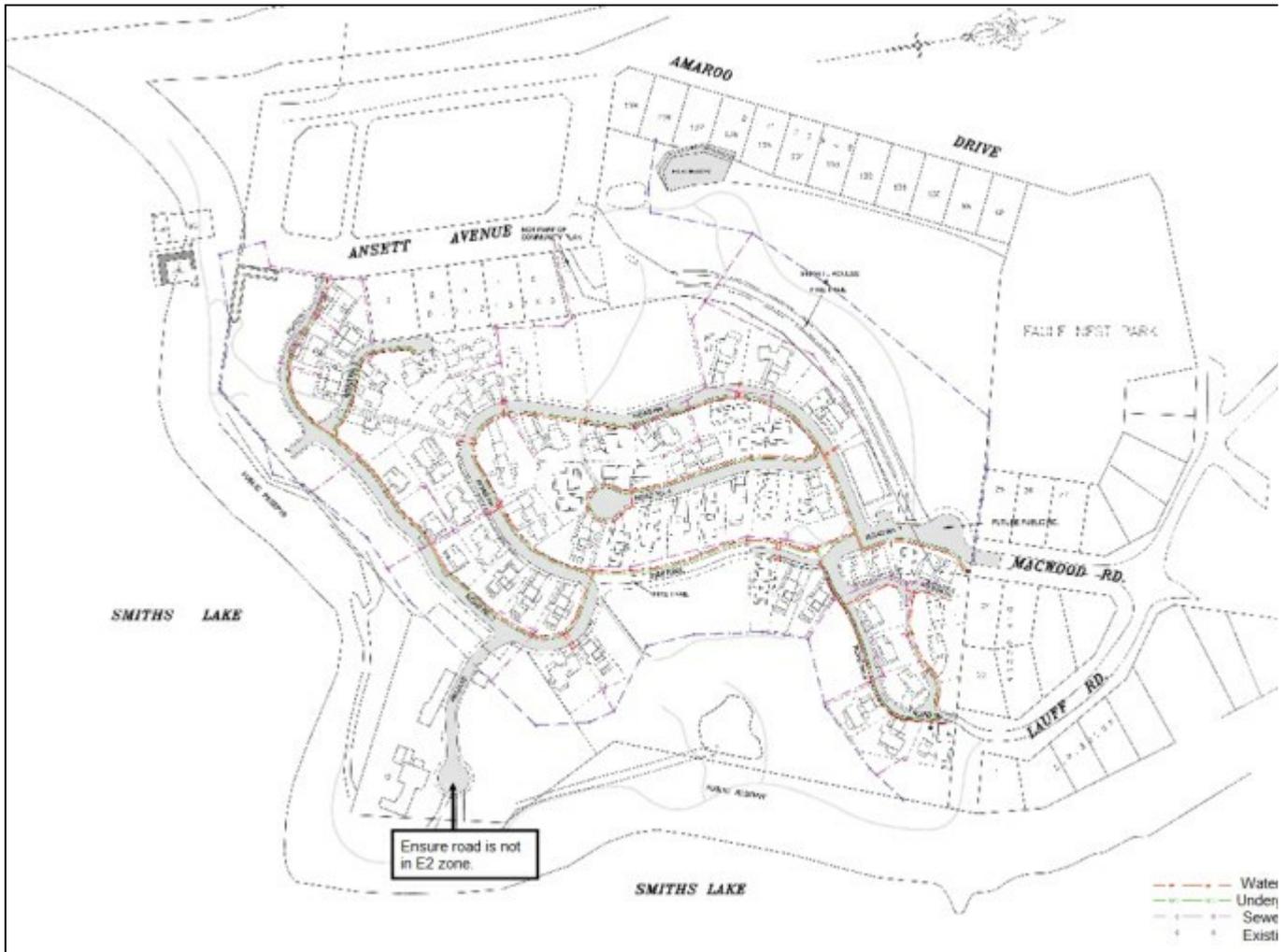
Macwood Road Smiths Lake construction staging plan (click here to view [original image](#))

Roads Plan



Macwood Road Smiths Lake roads plan (click here to view [original image](#))

Stormwater Concept Plan



Macwood Road Smiths Lake infrastructure plan (click here to view [original image](#))

16.14.10 Precinct Character

The Community Centre



Macwood Road Smiths Lake community centre (click here to view [original image](#))

Existing Character

The sloping terrain of this precinct creates a unique and private outlook toward the public reserve of open wooded forest and the scenic palm valley. A small area in the foreground of the Community Centre will enhance the outdoor usable space while maintaining the sense of intimacy and privacy. Natural lighting changes from the deeply shaded Palms to predominantly dappled light amongst the Open Forest gives an overall restful and subdued feeling to the precinct.

Concept

The siting of the building responds to the location of the trees, slope, orientation and valley views. The building is positioned along the contours to reduce the amount of cut to the site. The building is orientated to the north to provide good solar access all year and especially during the winter months.

The building sits on a masonry base, which ties the building to the ground and enables easy access from the roadway to both the upper and lower swimming pool level of the building. The pool will as much as possible be covered to enable efficient heating during the winter months to ensure round the year use.

A children's outdoor play area will be developed that will be easily supervised by parents from a strategically placed

relaxation area.

Materials

Materials are used to evoke the colours and textures of the surrounding forest. Textured materials are used to enhance the play of light and shade and to give visual interest. Low maintenance 'raw' materials. Minimal use of paint finishes.

- Stone feature walls, garden walls, paving.
- Face-Masonry cladding and retaining walls.
- Cladding of timber panels and boarding, CFC and profile metal sheeting.
- Timber decking, timber and steel external stairs.
- Steel, timber shade canopies.
- Prefinished steel, stainless and metalwork.
- Prefinished Aluminium doors and louvered windows.
- Prefinished metal water tanks.
- Translucent, prefinished steel roof sheeting.

Proposed Character

The Community Centre is designed to complement the low scale residential nature of the surrounding houses by adopting similar forms, materials and proportion. The footprint of the building is compact in design, utilising undercroft areas to accommodate the program where practicable.

The building is sited downslope and adjacent the entry. The building is located as a focal point for the community. The building acts as a series of platforms from which to engage with the surrounding natural environment of lake and bush at various levels. The inclusion of an indoor lap pool offers year round use to the community.

Architecture

The architecture incorporates ESD principles through optimised North orientation, canopy roofs that emit winter sun and exclude summer sun, cross and stack ventilation. Water tanks are used for water storage and recycling.

The building is composed of two levels, one for active use and one for passive use.

The upper level accommodates the community hall, kitchen, storage room and viewing deck. The architectural expression is lightweight, utilising cladding materials with the major structural frame expressed. The North East façade is fully glazed and protected by a large canopy roof. The lower level accommodates swimming pools, gym, change and games room. The utility function is expressed as a masonry retaining structure, whilst the pool area is extensively glazed to provide a more transparent expression to invite the outside in.

A series of timber decks form the ground plane of the children's play area, adjacent to the Palm Valley, responding to the changing slope of the site thereby minimising disturbance to the existing ground plane.

The Gateway

The Macwood Road address to the Oyster Point community is designed in keeping with the surrounding lakeside environment. The entry is defined by a security gate and detail stone wall 'threshold paving' lighting and accent planting and provides a sense of arrival and introduction to the character of the community. Materials reflect the colours of the lakeside environment and vegetation. Large canopy trees accent the entry and direct views into the site. Signature furniture elements such as directional lighting and signage and materials are introduced at the entry and continue as a hierarchy of elements throughout the site.

The entry statement visually includes a community park located within the Hilltop community. The informal character of the parks adjacent to the Gateway Precinct is created by indigenous tree canopy plantings' and open areas of maintained native grasses. Perimeter planting provides a visual backdrop to the space and privacy to the adjacent

allotments. Views into the park from the road will be maintained for safety surveillance. The park includes open grassed areas for informal recreation' a playground and picnic facilities providing a space for large and small community gatherings.

The neighbourhood park and vegetation community is linked by the fire trail and vegetation corridor on the western perimeter with the conservation zone and creek environment.

Siting of lots and buildings on this open plateau responds to terrain, slope, orientation and views. Lot positions stagger to provide view corridors, allowing each building the potential enjoyment of surrounding lake and bushland settings from their living and outdoor zones. Equally considered, ESD principles are also to be utilised through thoughtful design. Building positions step back to allow maximum solar penetration into living zones within each dwelling.

Where possible the existing clearing formed by the location of the existing dirt road is utilized to accommodate the building footprints thereby minimising the extent of cut to the site.



Macwood Road Smiths Lake - The Gateway proposed layout (click here to view [original image](#))

Existing Character

The Gateway defines the main entrance to the site off Macwood Road and is the smallest of the residential precincts

on the site. The Gateway is also on the periphery of an urban neighbourhood to the North.

The second highest vantage point within the site, the Gateway offers unobstructed views towards the West through a forested valley of Ironbarks and Sydney Blue Gum. Filtered views of the lake through the immediate Dry Blackbutt Open Forest canopies are also enjoyed from this vantage point.

Natural direct and dispersed lighting provides a varied ambient quality within each site, with a visible play of light and shade through the surrounding tree foliage.

Concept

The Gateway, acts as the transition between the existing neighbouring urban developments and the site proper where a more expansive bushland setting becomes the main character of the development.

Buildings densely occupy the precinct gesturing to the urban nature of the surrounding lots along Macwood and Lauff Roads. Compact planning develops smaller building footprints corresponding to the sites contours.

A single access point defines the entry into the developed area of this precinct. The general two-way road system funnels down to form a one-way loop road servicing the houses within this precinct.

Site amenities such as parks and walking paths designed into the overall master plan, gives this precinct an independent village like quality.

Materials

The Buildings use form and colour to articulate and emphasise the presence of the homes in the landscape. The colours selected are derived from the colours and textures of the surrounding bush and lake setting. Timber screens, decking and external stairs will be left to weather naturally. Pre-finished metal tanks will be strategically placed.



Macwood Road Smiths Lake - The Gateway proposed character (click here to view [original image](#))

Proposed Character

This precinct maintains a sense of separation from the rest of the development, both within its placement and architectural character. It is at The Gateway of a developed urban neighbourhood and a new open bush land development. It represents a transition between these two different modes of living.

The urban density is expressed through a fairly vertical projection of a small building footprint. The built form becoming in essence like a tree structure challenging the heights of the surrounding natural environment and becoming a marker of transition and entry to the site.

Although an urban quality is expressed by the density and massing of the buildings on this precinct, its materiality expresses qualities evoking the natural surrounding, similar to the other precincts on the site which also maintain a natural contemporary aesthetic.

House designs cater for the individual site constraints, primarily that of the slope, minimising the need for excavation into the subterranean rock shelf, maintaining the existing flow of water in and around the site.

Architecture

The architecture maintains ESD principles of an optimum Northerly orientation, architectural elements that obstruct summer sun whilst allowing maximum winter solar gain, cross and stack ventilation and the use of tanks for water storage and recycling.

Lightweight framed construction allows the buildings to float above the existing contoured ground, minimizing the need for excavation where possible.

Modestly sized rooms visually and physically extend beyond the external walls of the space through the incorporation of large glass doors and windows that allow the entire width of living spaces extending out onto the generous outdoor living spaces, taking full advantage of the views and the outdoor lifestyle offered by the site.

The Hilltop

The Hilltop residential neighbourhood is located on the central ridge and upper slopes of the site. The area currently consists of disturbed woodland and open grassed areas. The proposed design aims to locate the allotments amongst an open woodland character and informal roadside plantings.

The road layout of the Hilltop community provides a central spine and perimeter loop which integrate and link with the pedestrian network throughout the community. Footpaths are provided adjacent to the roads and link with the community open space network and Hillside communities. The streetscape design reinforces the existing vegetation character with additional informal canopy tree plantings.

Different road pavement textures in the cul-de-sac will give this precinct a unique character.

The residential gardens reflect the character of an informal bush garden with detail planting adjacent to the entry driveways and private courtyards. Vegetation will compliment the energy efficient built form, by preserving solar access and providing summer shade and protection from winds. East and west facing facades will be shaded by vegetation and where possible vegetation will be retained in front of the buildings to screen the visual impact of the houses. Perimeter planting including canopy trees, shrub and ground covers will provide privacy and boundary definition. Outside the building envelope native vegetation should be managed and or enhanced consistent with bushfire requirements. Predominant use of native species will encourage native fauna and reduce maintenance and water use. Permeable pavements and porous surfaces such as pebbles and gravel details to outdoor areas reduce surface run off and maximise infiltration



Macwood Road Smiths Lake - The Hilltop proposed layout (click here to view [original image](#))

Existing Character

A barren Hilltop best describes the state of this precinct. Severely impacted by previous clearing, it has not regenerated due to its exposed nature. Covered with a number of grasses, little else in respect to flora can be seen here.

The Hilltop is the highest section of the site with arguably the best vantage point of all the precincts.

A 360-degree view, unobstructed by immediate vegetation, reveals the entirety of the site and its surrounding natural features of open forests and lake beyond. Panoramic views of Smiths Lake can be enjoyed towards the South and West, with views of the Dry Blackbutt and Sydney Blue Gum Open Forests at the forefront. The canopies of the Tallowood, Blackbutt and Palm Forests of The Hillside precinct filter glimpses of the lake towards the East.

Exposed to direct sun and wind, this precinct enables ideal conditions for the use of Environmentally Sustainable Design (ESD), with unobstructed access to direct Northerly solar gain and natural ventilation.

Concept

Siting of lots and buildings on this open plateau responds to terrain, slope, orientation and views. Lot positions stagger to provide view corridors, allowing each building the potential enjoyment of surrounding lake and bushland settings from their living and outdoor zones. Equally considered, ESD principles are also to be utilised through thoughtful design. Building positions step back to allow maximum solar penetration into living zones within each dwelling.

Where possible the existing clearing formed by the location of the existing dirt road is utilized to accommodate the

building footprints thereby minimising the extent of cut to the site.

Materials

The natural forest and lake setting surrounding this precinct is evoked through the material and colour selection in the building types. Textures enhance the play of light and shade, creating visual interest. Low maintenance 'raw' materials utilised, with minimal painted finishes.

- Stone garden walls and paving
- Cladding of timber panels and boarding, CFC and profile metal sheeting
- Timber decking and external stairs
- Steel and/or timber shade canopies
- Pre-finished metal water tanks
- Pre-finished steel roof sheeting



Macwood Road Smiths Lake - The Hilltop proposed character (click here to view [original image](#))

Proposed Character

The openness of this precinct allows a relatively boundless architectural potential for the individual sites. Here careful siting of the buildings relates only to maximising the ESD potential of each dwelling and capitalising on

the unsurpassed views present from this vantage point.

The Hilltop precinct is a visually definable area that can be seen at various points throughout the site, hence necessitating a dramatic and unique architectural solution. The built character, like that of the natural character of the precinct expresses a solidity and permanence. This character is also expressed through the materials utilised.

The houses are designed to create both active and passive outdoor recreation areas, which become extensions of the internal living zones.

An introduced landscaped solution lessens the impact of this cleared plateau that is defined by the ring road around the precinct. The new vegetation becoming a blending zone, softening the solidity of the built forms and relating back to the natural character of the surrounding vegetated areas, whilst remaining low-lying, as not to obstruct views of the lake beyond.

Architecture

Pavilion style houses are designed to adapt to both North-South and East-West aspect blocks. Flexible planning allows a variety in building orientations, entry locations, car access points and solar access, which in turn responds to the different lot configurations and site contours.

The ESD principles incorporated into the design of the houses within The Hilltop precinct are; Northerly orientation, architectural elements that allow winter solar penetration and prevents summer solar gain, and cross ventilation. In addition water storage and recycling are to be integrated through the utilisation of water tanks within each lot.

The plateau that is formed by the existing dirt road allows most hilltop buildings to sit hard onto the land, thus providing a solid grounded aesthetic.

The outdoor living areas are envisaged as an extension of the internal living zones and become a transition between the natural and the built environment. They utilise materials that blend back into the natural ground, allowing the architecture to slowly emerge from the earth.

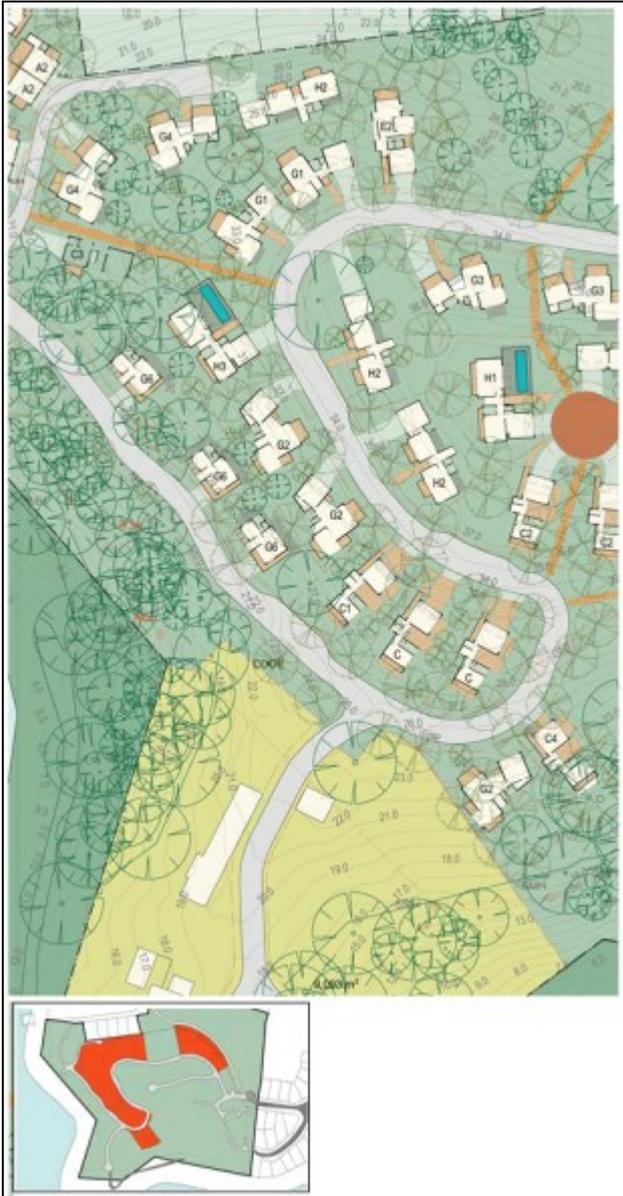
The Hillside

The Hillside precinct is characterised by the steeper slopes stepping down to the lake foreshore. The allotments have generally been located in disturbed woodland areas, enabling the retention of undisturbed vegetation communities for informal bush parks. Allotments on the western slopes have been sensitively integrated within the Sydney Blue Gum Open Forest.

The precinct is accessed by a series of meandering loop and perimeter roads. Informal groupings of medium height canopy trees create a precinct identity and help stabilise the slopes. The selection and placement of trees will also provide visual amenity, interest and shade to the road pavements. The verge plantings provide a visual link through the site and are under planted with a managed grass species. Where the road traverses retained vegetation of open space areas and gullies, verge plantings reflect and reinforce these communities highlighting the sites natural topography and microclimate. The loop road includes footpaths within the verges separated from the road with canopy trees to provide pedestrian comfort. The allotment design and location responds to and utilises natural view corridors and existing stands of vegetation. Vegetation is retained outside the building envelope to maintain soil stability. Perimeter planting including canopy trees, shrub and ground covers will provide privacy and boundary definition.

An area of Sydney Blue Gum Open Forest is located on the western slopes of the hillside precinct linking with the recreation areas of the boatshed. The park offers a passive recreation area and links with the community pedestrian open space network.

A system of low walls, paths and timber bridges defines circulation in the park and protects areas of natural vegetation.



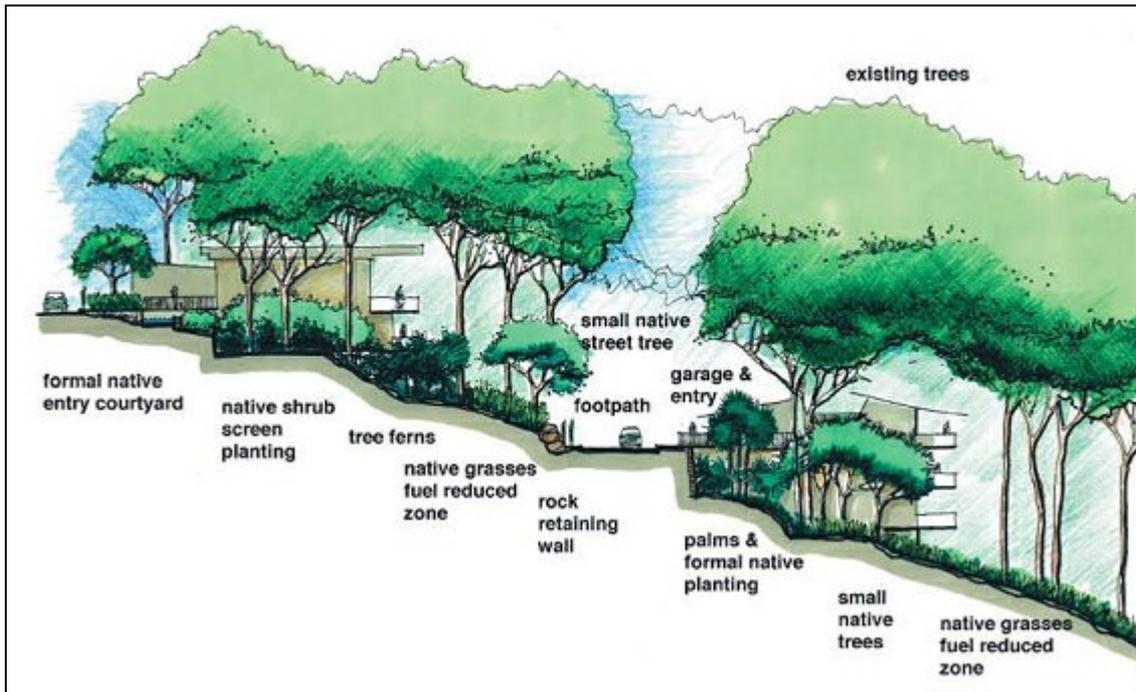
Macwood Road Smiths Lake - The Hillside concept layout (click here to view [original image](#))

Existing Character

The Hillside is the largest of the residential precincts within the development, covering most of the outer edges of the site. It contains four vegetation communities that present various unique ambient qualities as you move through the precinct. To the East, a Blackbutt and Tallowood Open Forest defines the lower sections of the building lots. The Blackbutt Open Forest extends to define the qualities of the Southern building lots. To the west a denser community of Sydney Blue Gum Open Forest and Ironbark Open Forest are observed.

All areas have been severely impacted by regular under-scrubbing, except for areas to the west within the Blue Gum and Ironbark Open Forest that also contains a severe spread of Lantana.

Filtered views of the lake beyond are revealed by glimpses through adjacent tree canopies. A mix of dappled light through the Open Forest and direct sunshine through more open areas gives each lot a distinctive winter/summer activity zone.



Macwood Road Smiths Lake - The Hillside concept layout (click here to view [original image](#))

Concept

Houses are inserted into the woodland setting with respect to road patterning, aspect and existing tree locations.

Flexible building footprints respond to the individual site constraints, maximising the dwelling's ability to gain a Northerly aspect, and make the most of available filtered lake and forest views, whilst maintaining a similar architectural aesthetic.

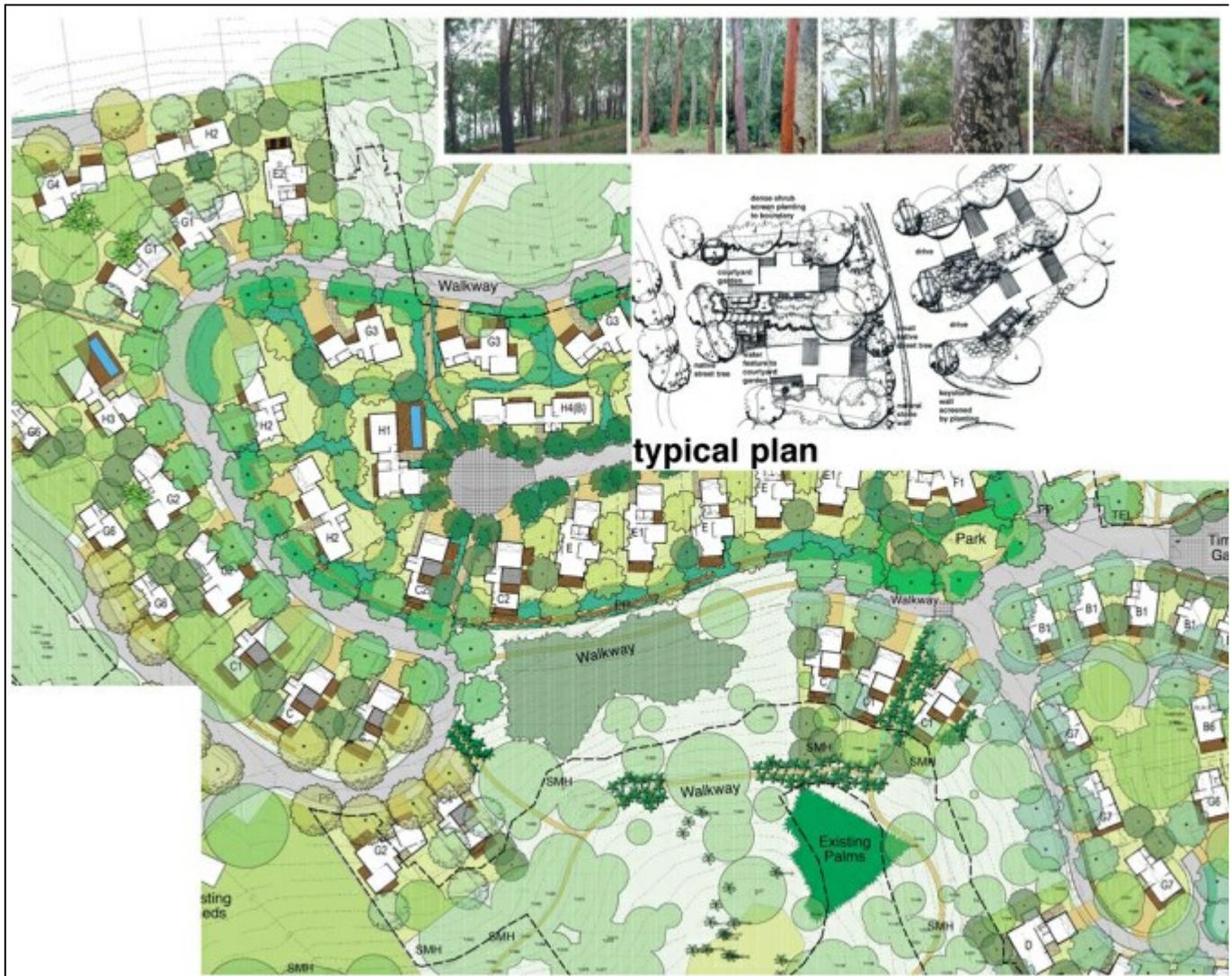
Buildings step with the contouring in an attempt to minimise the extent of cut to the site. Buildings sit raised and where possible allow the ground plane below to remain relatively untouched.

Pathways are designed to cross the precinct at various locations connecting houses to the surrounding bushland, cycle ways, recreation facilities and the lake.

Materials

Form and colour will be used to articulate the buildings in the landscape. The colours selected are derived from the colours and textures of the bush and lake setting.

- Cladding of timber panels and boarding, CFC and profile metal sheeting
- Timber decking and external stairs
- Steel and/or timber shade canopies
- Pre-finished metal water tanks



Macwood Road Smiths Lake - The Hillside proposed character (click here to view [original image](#))

Proposed Character

Houses within The Hillside precinct emerge from the empty pockets between the existing Open Forests of its surroundings. The play of light and shadow on the building's textured facades mimicking those of the dappled shadows through the tree canopies. The buildings disappear into their natural surroundings.

Hovering above the ground the buildings of this precinct create a unique relationship between the internal spaces and the surrounding Open Forest. Decks are located at tree canopy heights allowing a different discourse between the internal/outdoor living zones and the natural vegetation beyond. The need for outdoor living space increased due to the sloping terrain conditions.

Buildings within The Hillside precinct can be seen as a median architectural solution between those of The Gateway and Hilltop precincts. The scale of the buildings are comparable to that of The Hilltop, whilst the visual and constructional lightness are similar to those of The Gateway.

Adaptation of different materials, textures and colour, based on the various vegetation communities across this sizable precinct area, enhances the visual interest across the site, and documents a distinct change in the natural surrounding environment.

Architecture

The forms of aesthetic of buildings within The Hillside precinct comprise of boldly geometric shapes. The lightweight

construction method and materials used take a more sympathetic approach to the challenging sloping terrain and surrounding vegetation.

Split-level planning minimises the impact of the built form on the existing form of the land, reducing to a minimum the need to cut and fill.

House footprints are designed to respond to the individual site constraints, in regards to existing tree locations and ground slope.

ESD principles are observed through the design of these buildings. Orientation for maximum Northern solar gain, cross and stack ventilation and water storage and recycling were some of the ESD inclusions.

The Lakeside

The landscape design of the Lakeside precinct responds to the sloping site topography, aspect and existing vegetation. The cluster of town houses is nestled into the south facing hillside maximising the retention of canopy trees and views to the lake. The neighbourhood achieves an individual character achieved through the strong use of texture and form in plant selection and materials.

The landscape character of the Townhouse precinct reflects that of a resort with high quality finishes and details. Detail paving marks the entry threshold to the precinct and entry signage incorporating natural finishes of timber and stone. The character of the precinct is created by the detail treatment of the recreation area, the open space links and the pedestrian network system. Paved pedestrian paths, timber bridges and rock retaining walls provide intimate landscape courtyards and sitting areas providing views towards the lake. Lighting through out the space offers security and an attractive night time ambience.

The townhouses are located against the hillside and maximise the retention of canopy trees. The proposed planting consists of tall canopy trees and detail ground plantings of low shrubs and grasses to maintain the existing character of the precinct and maintain views towards the lake. Detail accent planting creates areas of interest along the pedestrian paths and adjacent to the roadway and private courtyards.

The swimming pool and associated facilities have been sited adjacent to the open space of the Lake foreshore to achieve maximum solar access and relate to adjacent recreation areas. Stone pathways and timber board walks connect with the Public Reserve and adjacent recreation facilities including the 'Frothy Coffee.'



Macwood Road Smiths Lake - The Lakeside concept layout (click here to view [original image](#))

Existing Character

The Lakeside precinct covers the lower South Western corner of the site. Surrounded by sparse remains of an Open Dry Blackbutt Forest and its proximity to the lakes foreshore, creates a relaxed holiday ambiance.

The public reserve along Smiths Lake that borders this precinct to the South, contains the same vegetation communities, however infestation by Lantana and Bitou Bush are evident along the lake's foreshore. An existing foreshore pedestrian link provides opportunity for access from The Lakeside Precinct. Views of the lake to the South are relatively unobstructed, the lake and foreshore becoming an extension of the shared outdoor recreation spaces.

Concept

House design and placement, respect road patterning, aspect and existing tree locations. Similar building footprints are slightly modified to follow the existing contouring. Houses opening out onto the shared outdoor recreation areas and take advantage of the view of the lake beyond.

Lot positions stagger to provide view corridors, allowing each building the potential enjoyment of the surrounding lake and bushland setting from their living and outdoor zones. Equally considered, ESD principles are also to be utilised

through thoughtful design.

Buildings step with the contouring in an attempt to minimise the extent of cut to the site. Buildings sit raised and where possible allow the ground plane below to remain relatively untouched.

The building groups are staggered and there is enough level difference to ensure views from all living areas.

Pathways are designed to cross the precinct connecting the attached houses towards the North and South to bushland, cycle ways, recreation facilities and the lake.

Materials

The material selection evokes the colour and texture of the lake setting. Textured materials and screens are utilised to break down the verticality of the buildings, enhancing the play of light and shade on their facades. Low maintenance materials are used where possible, with minimal use of painted finishes.

- Cladding of timber panels and boarding, CFC and profile metal sheeting
- Timber screens and decking
- Steel and/or timber shade canopies
- Pre-finished metal water tanks
- Pre-finished steel roof sheeting



Macwood Road Smiths Lake - The Lakeside proposed character (click here to view [original image](#))

Proposed Character

The buildings within The Lakeside precinct bring a unique style of living within the development. Consisting of attached dwellings the residences are provided with shared outdoor recreational facilities.

Like The Gateway precinct The Lakeside also maintains a sense of separation from the rest of the development, both within its placement and architectural character. It represents a more relaxed leisurely mode of living.

The dense cluster of vertically projecting structures is balanced through breaks in the form of the buildings, which allow view corridors for dwellings to the North of the lower development within the precinct. Access breaks are also provided allowing access to the outdoor pool and community facilities

Although the cluster of dwelling forms a fairly dense massing, its materiality expresses qualities evoking the natural surrounding, similar to the other precincts on the site which also maintain a natural contemporary aesthetic.

Architecture

The architecture maintains ESD principles of an optimum Northerly orientation, with building elements used to minimise summer sun whilst allowing maximum winter solar gain, cross ventilation and the use of tanks for water

storage and recycling.

Regular, rectangular building footprints that slightly change to follow the contours and roadway. Simple forms and massing elements create a visual varying composition of buildings.

A bold expression of building forms that uses earthy materials that emphasize the massing of these attached dwellings while using lightweight construction.

The incorporation of large glass doors and windows into the design of the lakeside dwellings allows the entire width of the internal living spaces to flow into the outdoor spaces, taking full advantage of the views of the adjacent lake.

Precinct 7 - Future Development

This precinct will be for future development that will integrate with the form and design of the development on the remainder of the land. It is atop the headland in the most south eastern part of the site with heavily vegetated foreshore reserve adjoining the precinct on three sides. Spectacular views over Smiths Lake, especially from the eastern most part of the precinct. Views are more filtered through the large, mostly Blackbutt trees on the reserve, as you move westwards.



Macwood Road Smiths Lake future development site (click here to view [original image](#))

To ensure that that there is no significant visual impact development on this part of the site will be of a low density. A

maximum of five dwellings will be permitted which equates to a density of approximately one dwelling per 1,200m² of cleared land in this precinct. Care will have to be taken to ensure that there is no impact on the foreshore vegetation. The design, location and construction materials will have to ensure that buildings maintain a background appearance when viewed from the lake. The colours of buildings are to be derived from the colours and textures in the adjoining bush. Building materials will typically comprise:

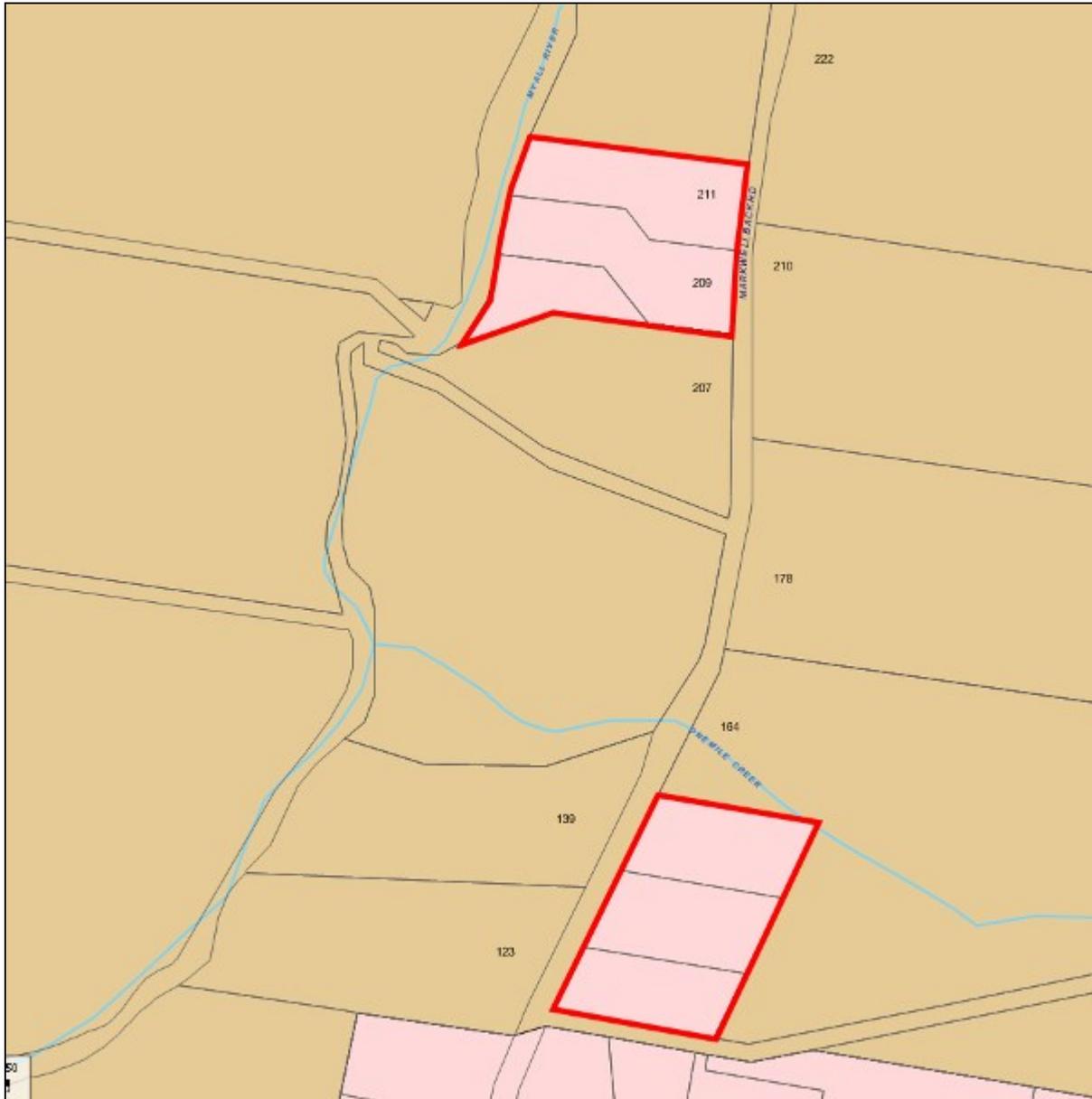
- Cladding of timber panels and boarding, CFC and profile metal sheeting
- Timber decking and external stairs
- Steel and/or timber shade canopies
- Pre-finished metal water tanks
- Pre-finished steel roof sheeting

The precinct will be part of the community title scheme and all future residents will participate in the management of the total site according to the obligations of the community management statement.

The development will have to incorporate the same ESD and water efficiency principles as the development on the remainder of the land. The architecture is also to be consistent with that of the other dwellings.

16.15 Markwell Back Road and Myall Forest Road, Markwell

Site Location



Markwell Back and Myall Forest Roads, Markwell site location plan ([click here to view original image](#))

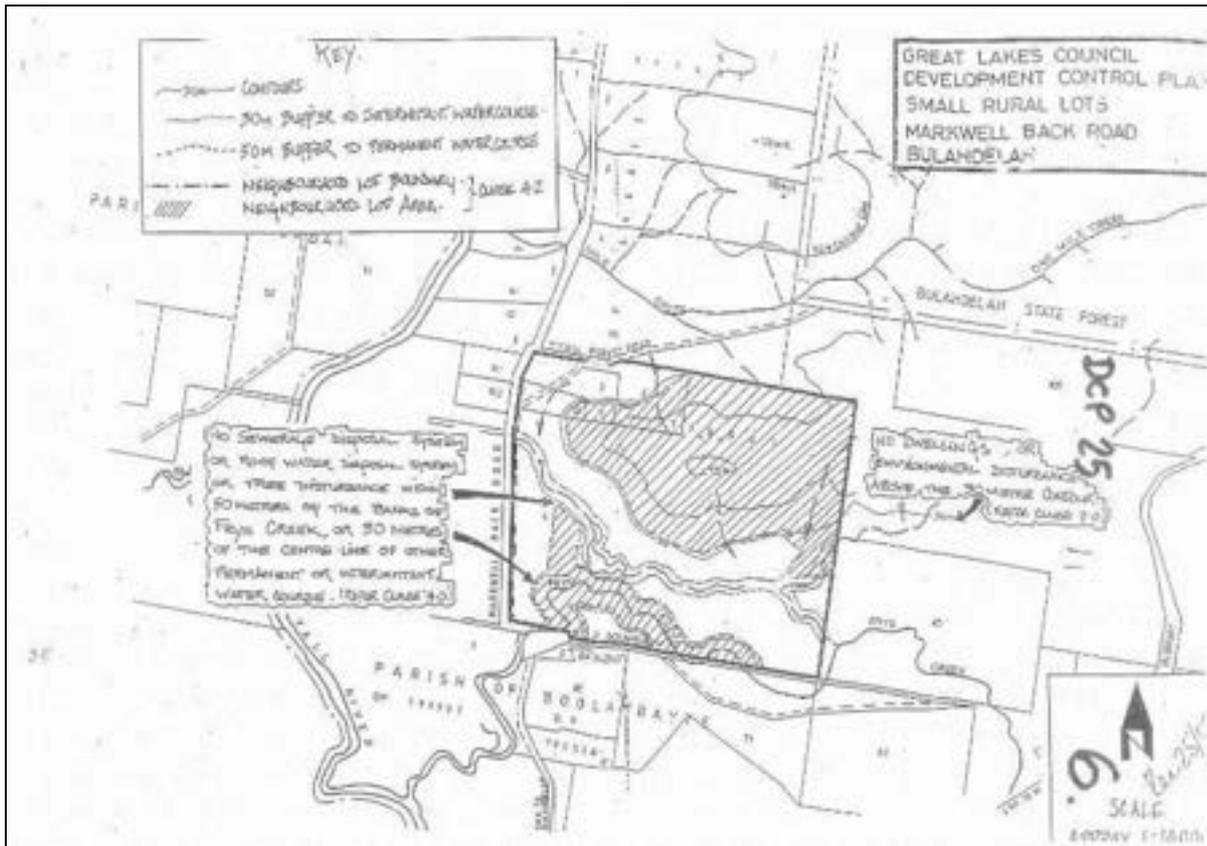
16.15.1 Controls

Flooding

- (1) All allotments to be created in a subdivision are to feature sufficient land at a minimum level of 10m AHD for a dwelling house to be accommodated. If this requirement is met it will not be necessary to substantiate that lots have "flood free" dwelling house sites.
- (2) All dwelling houses and other habitable structures are to be sited on land that has a level of 10m AHD or more. Any application that proposes to site a dwelling house on land having a level of less than 10m AHD shall be accompanied by appropriate documentation that proves that the dwelling house site is not subject to 1 in 100 year flooding.
- (3) Dwelling houses and other structures are not to be erected on land above the 50m AHD contour.

Bushfire Management and Access

- (1) In order to assist in bushfire fighting, it will be necessary to provide access for fire trucks between the rear of properties. This shall be provided through the provision of unlocked gates at locations determined by Council.



Markwell Back Road and Suncrest Close Markwell constraints and opportunities plan ([click here to view original image](#))

16.16.2 Subdivision

Objectives

- To ensure the subdivision, development and future maintenance occur in an orderly manner.
- That common property is properly identified and maintained.
- To ensure that items of historical significance are documented.
- To ensure suitable house sites are available on each lot created which:
 - Are not highly visible from the surrounding rural areas;
 - Will result in minimal disturbance of vegetation and soil on steep slopes and in ecologically sensitive areas;
 - Are not within low-lying, flood affected areas or high bushfire hazard areas;
 - Allow for disposal of household effluent in a manner which will not pollute nearby streams or water bodies; and
 - Will not be adversely affected by odours from Council's Sewerage Treatment Works.

Controls

- (1) Subdivision of land is to be undertaken under the Community Land Development Act.
- (2) Development lots are to be located generally below the 30m contour indicated in Constraints and Opportunities Diagram.
- (3) Land above the 30m contour is to become part of the Neighbourhood Property lot.
- (4) Lots are to have ratio of width to length of 1:3 or less. In exceptional circumstances, a maximum width to length ratio of 1:4 may be allowed.
- (5) Each lot is to be designed to have a minimum of one building envelope with a minimum area of 1000m² and a minimum width of 30m, avoiding:

- (a) Land which would be inundated by a 1% AEP flood in accordance with the Fry's Creek Flood Study.
 - (b) Land which is classified as having hazard bushfire potential (consultation with Council is necessary in this regard).
 - (c) Land within 50m of any other intermittent permanent watercourse.
- (6) The perimeter of the building envelopes shall be located a minimum distance of 5m from the boundaries of the lot with the exception of 18m setback to the road frontage.
 - (7) The building envelope or envelopes for each lot are to be nominated on the proposal of subdivision.
 - (8) Allotment boundaries are to relate to the topography of the site, as much as possible, with fence lines parallel with or perpendicular to slopes, not diagonally across them and allotment boundaries following creeks rather than crossing them.
 - (9) Where land is subdivided under the community Land Development Act, the Neighbourhood Association is to be responsible for the control, management, operation and maintenance of the Neighbourhood Property, including the internal access road, perimeter fencing, fire trail and communal garbage receptacle storage areas, where proposed.
 - (10) Any weed control. Management programs proposed for the steep (over 14° or 25%) sections of Neighbourhood Property lot are to incorporate practices utilised in the "Bradley method" of natural bushland regeneration.
 - (11) Any discoveries of aboriginal relics during subdivision or building construction are to be reported to the director of the National Parks & Wildlife Services. Where works may damage, deface or destroy the relic, such work are to cease until the written approval of the Director Of National Parks & Wildlife Services is given to the destruction, removal or otherwise of these relics.
 - (12) Access is to be provided between properties for fire fighting vehicles by way of gates at locations selected by Council. Where these gates are intended to be locked, a separate lock is to be purchased from the local fire brigade and utilised on the gate so that the brigade has access during times of a fire emergency.

16.16.3 Access

Objectives

- To ensure all weather access is available to all allotments while:
 - Minimising disturbance to vegetation and soil on steep slopes;
 - Being constructed to minimise dust nuisance to landowners; and
 - Incorporating erosion and sediment controls to minimise impact on nearby water courses and the needs for ongoing maintenance.

Controls

- (1) Markwell Back Road, for the full length of the plan area, is to be constructed and bitumen sealed to the following minimum standard:
 - (a) Formation - 8m
 - (b) Carriageway - 5.6m
- (2) Any new access roads are to be bitumen sealed for a carriageway width of 4m. Formation width will be variable to account for table drains, passing opportunities and to minimise the extent of earthworks.
- (3) Details of the road design, construction standard and erosion and sediment controls are required to be submitted for approval as part of the subdivision process.

16.16.4 Development Controls

Objectives

- To ensure buildings are located and designed in response to the topography of the site with minimal disturbance of vegetation and soil.
- To ensure buildings are located and designed to reduce visibility from the surrounding rural areas.
- To ensure buildings are located and designed in response to bushfire risk.
- To ensure buildings are designed have appropriate effluent disposal facilities, water supply and be energy efficient.

Controls

- (1) Buildings are to be located within the building envelopes nominated on the plan of subdivision.
- (2) Building are not to be located on slopes in excess of 14° (25%).
- (3) Where buildings and driveways are proposed on slopes between 11° (20%) and 14° (25%), the application is to be accompanied by soil erosion and sediment control plan and the driveway is to be bitumen or concrete sealed.
- (4) No dwelling- houses are to be located above the 30m contour.
- (5) Buildings must comply with setbacks from vegetation which poses a bushfire hazard in accordance with the document titled "NSW Planning for Bushfire Protection" (as amended).
- (6) Building designs are to be stepped to follow the contours of the site, rather than requiring existing extensive cut and fill to enable slab on ground construction. Cuts and fills are to be maximum of 1.0m and 2.0m respectively and protection from erosion.
- (7) Colours to be avoided for structure or buildings above the 30m contour are white, off- white, blue, red or plain zincalume. Galvanised finished which will develop a matt colour are acceptable.
- (8) The waste disposable area for the building is to be located within the building envelope nominated on the plan of subdivision.
- (9) Dwelling- houses are to generally be orientated with a north- easterly aspect to:
 - (a) Maximise warmth from winter sun;
 - (b) Maximise shade from summer sun by use of awnings, pergolas etc;
 - (c) Gain advantage of north- easterly breezes; and
 - (d) Make best advantage of north facing outdoor living areas.

16.16.5 Conservation Measures

Objectives

- To ensure the biological diversity and population levels of native flora and fauna on the land are maintained or improved;
- To ensure the 'visual' attractiveness of the land is maintained.

Note: The removal or destruction of vegetation on the subject land requires Council approval.

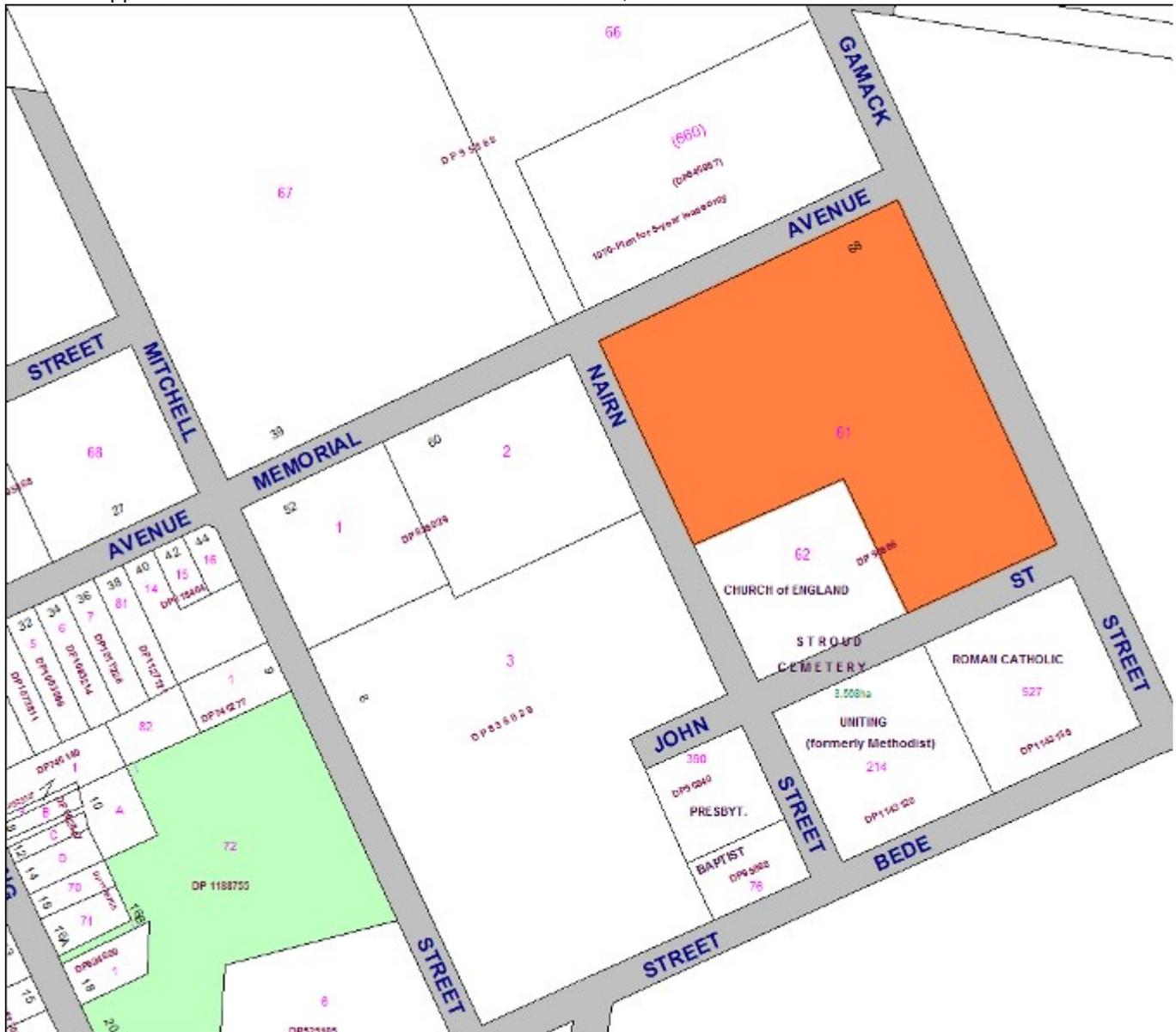
Controls

- (1) The proprietor or occupier of any lot, including any Neighbourhood Property lot, shall not remove, fell, damage or destroy any trees or understorey shrubs which occur on slopes in excess of 18°(32%) or within a setback of 10m from the edge of slopes in excess of 18°(32%);
- (2) There proprietor or occupier of any lots, including any Neighbour Property lot, shall not remove, fell, damage or destroy any trees growing within 50m of the banks of Fry's Creek, or 30m of the centreline of any other intermittent of permanent watercourse. Understorey shrubs should be retained as far as possible to provide shelter and food source for native fauna.
- (3) No sewerage disposal system or roof water system is to be constructed so as to discharge within 50m of any intermittent or permanent watercourse.

- (4) Dogs, other than those used as guide dogs for vision or hearing impaired occupiers, are to be confined to private lots between dusk and dawn, and cats are to be confined to dwellings or buildings associated with dwellings on private lots between dusk and dawn. This requirement is to be incorporated in the management statement for land subdivision under the [Community Land Development Act 1989](#). The aim of this requirement is to confine 'predator types' domestic animals during the period when native fauna are most active.

16.17 Memorial Avenue, Stroud

This Part applies to Lot 61 DP 95868 Memorial Avenue Stroud, as shown below.



Memorial Avenue Stroud site location plan (click here to view [original image](#))

16.17.1 Objectives

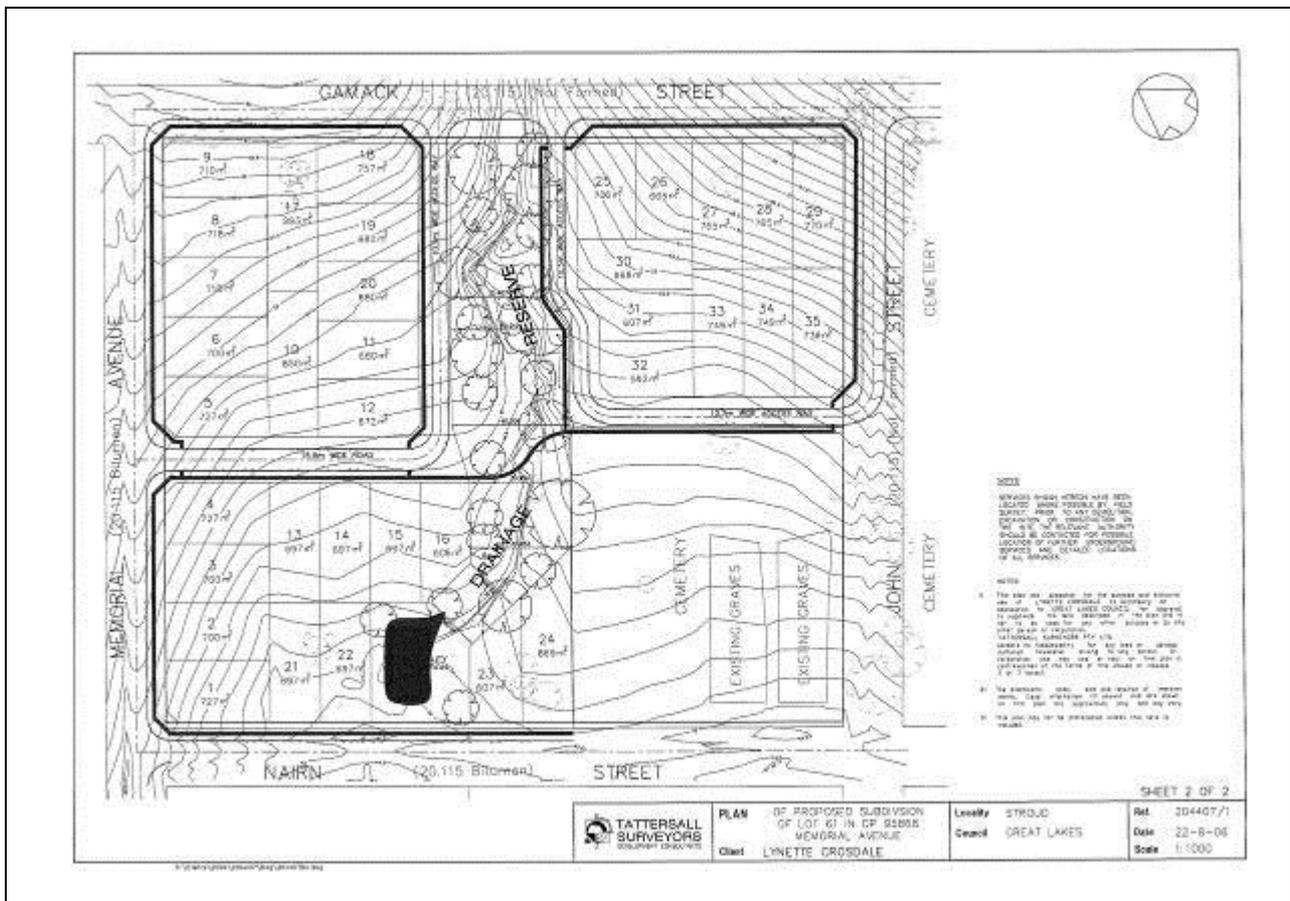
- Protect and enhance the environment.
- Ensure that development is carried out to a consistent standard.
- Protect the amenity of existing development by ensuring a high standard of design and construction and building within this subdivision.
- Provide an appropriate level of amenity for new and existing residential areas.
- Ensure appropriate levels of service are achieved by utilities and the road network.
- Ensure environmental constraints and impacts, such as flooding, drainage, vegetation, erosion etc are adequately considered.

- Encourage energy efficiency.
- Any new development must ensure that the significance and integrity of the Heritage Conservation Area and of Heritage Items is retained.

16.17.2 Allotment Orientation

Controls

- (1) Regular allotment shapes and extensive use of landscaping are encouraged to reduce adverse wind impacts and achieve maximum exposure to cooling breezes in summer, and create streetscape variety and interest.
- (2) Roads should run close to east west and provide for good orientation of allotments for solar access to dwellings. Should the development consent for the subdivision illustrated below lapse, the following general subdivision requirements shall apply:
 - (a) The minimum frontage of a newly created allotment is to be 20m;
 - (b) Subdivision should reflect the historic grid-pattern of roads and allotments within Stroud, wherever possible.



Memorial Avenue Stroud allotment orientation (click here to view [original image](#))

16.17.3 Setbacks

Controls

New dwellings on all allotments must:

- (1) have a minimum front boundary setback of 4.5m.

- (2) have one side boundary setback of at least 2.5m and one side boundary setback of at least 3.5m.
- (3) have a rear boundary setback of at least 4.5m.
- (4) All main living areas of buildings are to be setback 6m from the front building line.
- (5) Verandahs to the front of a dwelling are permitted to encroach up to 2m within the building line if the veranda width is > 25% of the width of the dwelling. Encroachments of up to 1m are permitted for any verandah/ front patio structure.

16.17.4 Car Parking and Access

Controls

- (1) Garages are to be set back a minimum of 900mm from the front alignment of the main dwelling.
- (2) All garages and carports must be setback a minimum 6m from the front property boundary to ensure another vehicle can be parked fully within the allotment.
- (3) Where garages are detached from the main dwelling they should:
 - (a) have a simple rectilinear plan; and
 - (b) be of a complementary design to the main house; and
 - (c) have a hipped or gable roof form with a pitch equal to or less than the main house.
- (4) Restrict garage doors to single car width, with multiple car garages having separate doors and posts in between.
- (5) A carport with a simple skillion roof form may be attached to the side of an existing house.

16.17.5 Road Design and Construction

Controls

- (1) Any technical information relating to road design which is provided in this section of the Development Control Plan is specific to the Memorial Avenue Precinct. Council's Design Specifications will take precedent in the event of any discrepancies, with the exception of the requirements for the construction of the main culvert on Gamack Street. The culvert in Gamack Street is to be constructed to a minimum width of 8.4m and utilised as a speed restriction device.
- (2) Minimum carriageway, verge and road reserve widths shall be in accordance with Council's Design Specifications or as amended below:
 - (a) Internal roads are to be a minimum width 10.5m (constructed width 5.5m).
 - (b) A 1m shoulder is to be provided on the Reserve or Cemetery side of the road.
 - (c) Memorial Avenue and Nairn Street are to be constructed to 7.5m width.
 - (d) Gamack and John Streets are to be constructed to a minimum 5.5m width.
- (3) Where an approved strategy exists, pedestrian and cyclist paths shall be provided in accordance with the Precinct Plan. Widths of footpaths is to be a minimum of 1.2m.

16.17.6 Building Design

Controls

- (1) The scale of any development is not to give the impression of overpowering the streetscape or adjoining dwellings.
- (2) Site cover is to be no greater than 40%.
- (3) Proposed two storey dwellings are to ensure that they adequately maintain the character of Stroud's historical

built form.

16.17.7 Visual Outlook

Controls

- (1) All dwellings are to provide an interesting and attractive streetscape. In this regard, front verandahs and patios should be located within the front building line.
- (2) Articulation of the front façade and in particular any front facing windows, or window/glass doors able to be viewed from a public space is also encouraged. Shade structures over any windows are afforded the same status as patios for construction within the front building line.
- (3) Roof pitches are to be maintained above 28° for all structures (dwellings and garages) erected on the lots and visible from public areas including the Open Space/Drainage Reserve and the Cemetery.
- (4) New buildings should:
 - (a) Have a simple rectilinear plan, wherever possible.
 - (b) Where new buildings are incorporating a verandah, the verandah must be either at the same or a lower pitch than the main roof.
 - (c) Where relocated houses are used, ensure the design and appearance is consistent with the above guidelines and the historic character of Stroud.
 - (d) Break up built form into massing elements of no greater than 12m (length) and 150m² (area).

16.17.8 Design and Materials

Controls

- (1) All new dwellings must respect the Heritage aspects of the Stroud locality. In recognition of this important historical area, the following material themes are permitted or are to be incorporated within any proposed dwelling:
 - (a) Timber weatherboards.
 - (b) Corrugated iron roofs.
 - (c) Timber fascias.
 - (d) Rendered, painted or bagged masonry (not textured).
 - (e) Unpainted face brick is to be used for minor elements.
 - (f) Roof tiles may be used.
 - (g) Reduced gables on roofs.
 - (h) Front verandahs.
 - (i) Articulated front fencing.
- (2) All window and door openings should be of simple design, arranged on a regular spacing and vertically proportioned.
- (3) Roof tiles of a simple profile and a consistent colour without contrasting ridge tiles should be used.

16.17.9 Fencing

Controls

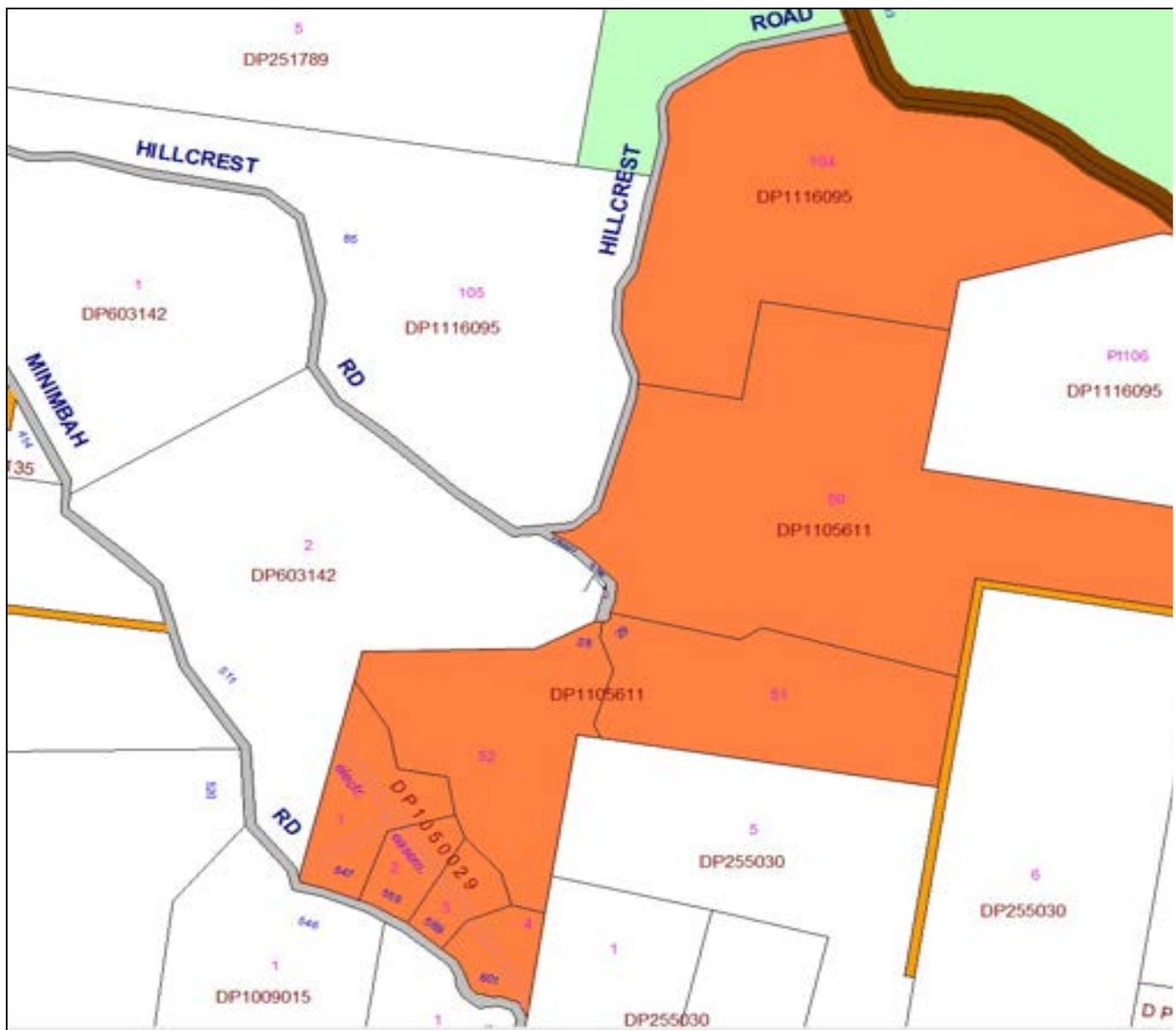
Attractive and articulated fencing is encouraged. In this regard, the following aspects are considered appropriate:

- (1) All fencing material/style shall be timber paling or similar in appearance and style
- (2) Front fencing is to be returned to the main building line of the dwelling

- (3) Articulation of the front fence is encouraged
- (4) Hedges and gardens may be incorporated within the front fencing arrangements
- (5) Front fences must not exceed a maximum height of 1.2m.
- (6) Fences behind the building line must not exceed a maximum height of 1.8m.
- (7) Fences on bush fire prone land must be constructed of non-combustible material or hardwood timbers.
- (8) Solid metal fences and mesh fencing are not permitted in front of the building line (front setback) on any boundary.
- (9) Where solid metal fences are proposed Council's colour palette must be considered to minimise the visual impact of these fences.
- (10) Landscaping must be provided within the front setback with all solid metal fencing to minimise the visual impact on the streetscape.

16.18 Minimbah Road and Hillcrest Road, Nabiac

Site Location



Minimbah Road and Hillcrest Road Nabiac site location plan (click here to view [original image](#))

16.18.1 Development Principles

The aim of the plan is to guide future subdivision and development of the land so that it is undertaken in an ecologically sustainable manner. Sustainable development of the land will ensure the quality of life to current and future generations while supporting the quality of the natural environment through conservation of biological diversity and ecological integrity.

This will be achieved by:

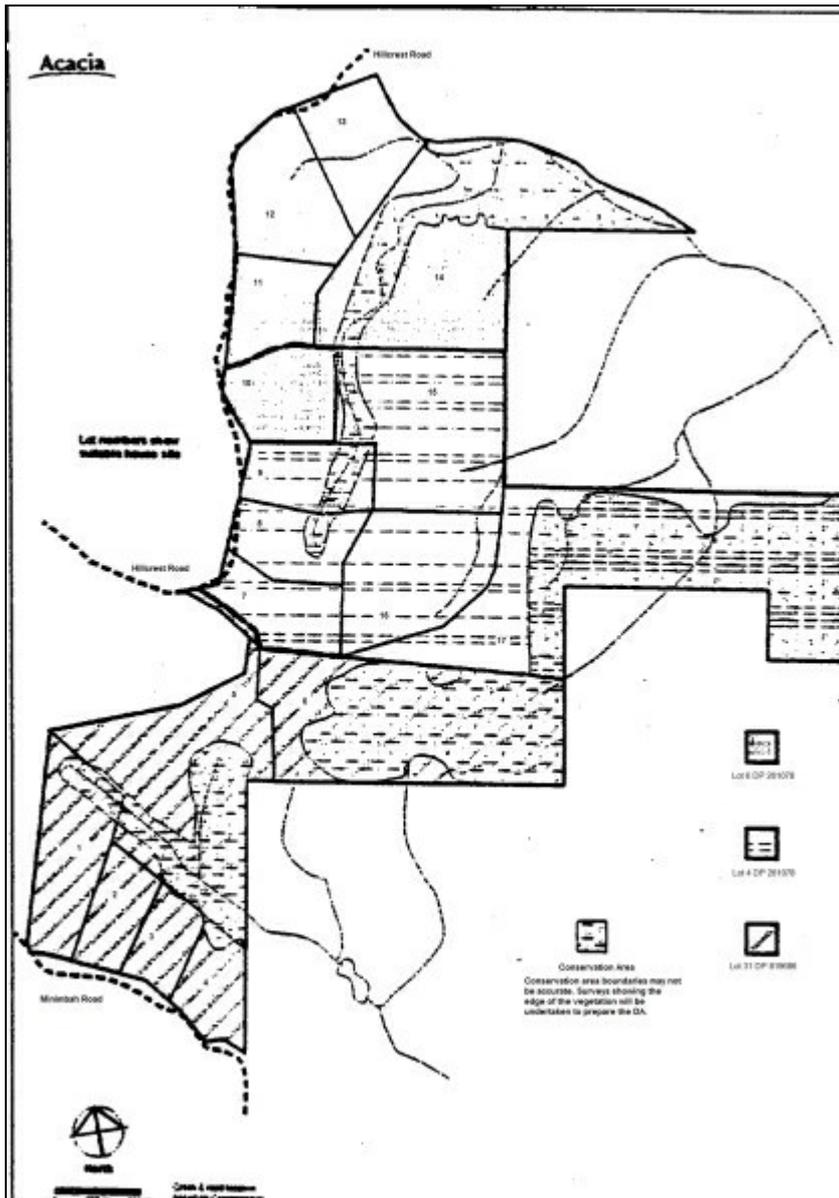
- appropriate planning guidelines to achieve integrated catchment management;
- appropriate management of development in the Wallis Lake catchment to maintain water quality;
- installation and maintenance of appropriate on-site effluent disposal systems which will not cause any environmental degradation;
- preservation and management of remnant vegetation and habitat for threatened species;
- preservation and management of corridors to facilitate fauna movement as part of a regional corridor network; and
- maintenance of an appropriate fire regime which takes into account impact on natural and cultural assets.

This Plan incorporates a [Concept Subdivision Plan](#) and refers to various planning and environmental investigations prepared by Acacia Environmental Planning relating to the land. Recommendations for the conservation of habitat and vegetation, management of fuel loads, clearing, domestic pet controls, building sites and effluent disposal are incorporated in the objectives and guidelines of this Plan.

One Development Application is to be lodged for the subdivision of Lots 4 and 6 DP 261078 and Lot 31 DP 819686. The subdivision may be either Community Title under the [Community Land Development Act 1989](#) or real property subdivision.

Community title subdivision would enable sustainable development of the site in terms of conservation and effluent management and would allow for land zoned for environmental conservation to be incorporated into the association property.

Subdivision of land to which this plan applies may be based on the concept subdivision plan prepared by Acacia Environmental Planning, however this does not constitute approval for the concept subdivision plan.



Minimbah Road and Hillcrest Road Nabiac concept subdivision plan (click here to view [original image](#))

16.18.2 Subdivision

The [Concept Subdivision Plan](#) identifies house sites for all lots. Nominated house sites avoid construction of houses on steep slopes or near water courses, minimise of water courses, avoid habitat conservation areas, minimise the clearing required for fuel free and fuel reduced zones, and provide safe access to Minimbah and Hillcrest Roads. The Plan indicates that proposed lots 1 - 4 gain access from Minimbah Road; Hillcrest Road will provide access to proposed lots 5 - 17; and access to proposed lots 14 and 15 will be gained via one access road between lots 10 and 11.

Objectives

To ensure suitable house sites are available on each lot to be created, which:

- are not visually obtrusive within the context of the surrounding rural area;
- will result in minimal disturbance of vegetation, and soil on steep slopes;
- will result in minimal disturbance of vegetation and soils in relation to water courses and within other ecologically sensitive areas;
- are not within high bushfire risk areas; and
- allow for the disposal of household effluent in a manner which will not pollute the catchment.

Controls

- (1) The subdivision plan will be based on the objectives and development standards of this Plan. Lot boundaries will be determined based on sites suitable for dwelling houses and effluent disposal areas, following natural land forms and contours. The plan of subdivision must generally follow the Acacia [Concept Subdivision Plan](#) or meet the objectives and performance criteria of this Plan.
- (2) Hillcrest Road is to be upgraded to a pavement width of 5.4m which permits all weather access by two-wheel drive vehicles. Hillcrest Road is to be speed limited to 60 kph.
- (3) The intersection of Hillcrest and Minimbah Roads is to be upgraded to a Type A intersection. The first 500m of Hillcrest Road from the intersection with Minimbah Road is to be sealed with a pavement width of 5.6m.
- (4) Details of road design, construction standards, erosion controls and drainage must be submitted for approval with the subdivision application(s).
- (5) The crossing of intermittent and permanent creek lines should be minimised. One crossing should provide access to multiple lots.
- (6) The plan of subdivision must nominate one 40m by 40m building envelope on each lot and the adjacent area to be used for effluent treatment and disposal. Each building envelope is to be enforced by a restrictive covenant. The covenant must prohibit construction of a house outside of the building envelope. Council must be nominated as the party with power to release, vary or modify the covenant.
- (7) Each lot to be created must contain a maximum of one building envelope, avoiding:
 - (a) slopes in excess of 15 degrees;
 - (b) areas zoned for environmental conservation; and
 - (c) land classified as having a high bushfire risk potential.
- (8) All dwellings must comply with the following minimum set back requirements:
 - (a) 100m from dwelling houses external to the proposed subdivision and 50m to internal dwellings;
 - (b) 20m to property boundaries; and
 - (c) 80m from conservation or land within the E2 Environmental Conservation zone, or 50m for proposed Lots 5 and 6 as shown on the conceptual subdivision plan.
- (9) All dwelling houses must be located in cleared areas or adjacent to areas that do not have significant conservation value;
- (10) Where houses and driveways are proposed on slopes greater than 10°, building applications must be accompanied by a sediment and erosion control plan and the driveway must be bitumen or concrete sealed.
- (11) The maximum depth of cut is limited to 1m and the maximum depth of fill is limited to 2m. Batter slopes must be a minimum of 2.5H to 1V. If a proposed house design cannot be accommodated within these limits, then Council will require the house design to be modified to meet these limits.

16.18.3 Effluent Disposal

Due to the presence of slopes greater than 10°, particular care will need to be taken with regard to on-site effluent disposal, especially on steep areas fronting to Hillcrest Road and areas fronting Minimbah Road. It should be noted that the land to which this plan applies forms the upper catchment area for several small intermittent creeks which drain into neighbouring dams and Minimbah Creek.

The geotechnical characteristics of the site indicate that it is unsuitable for conventional on-site effluent disposal. As such, innovative approaches to effluent disposal will need to be achieved which may involve a combination of self contained systems using imported materials, such as Dowmus or Ecomax, contour banks, reed beds or native vegetation to ensure effluent is treated equivalent to tertiary level prior to entering any surface water or groundwater system.

Acacia and Engineering Geology Specialists (1997) prepared a report examining the soil capability for on-site effluent disposal. The report recommends suitable locations for primary and secondary effluent disposal areas for each lot shown in the conceptual subdivision plan. Effluent disposal areas for each lot must be submitted to Council with the Development Application for the site.

Objectives

In accordance with the objectives of the above effluent disposal guidelines, the objectives of the plan are as follows:

- Prevention of public health risk by minimisation of contact with effluent, particularly for children. Residuals such as composted material, should be handled carefully. Treated sewerage should not be used on edible crops consumed raw.
- Protection of lands. On-site sewerage management systems are not to cause deterioration of land and vegetation quality through soil structure degradation, salinisation, waterlogging, chemical or soil erosion.
- Protection of surface waters. On-site sewerage management systems are to be selected, sited, designed, constructed, operated and maintained so that surface waters are not contaminated by any flow from treatment systems and land application areas (including effluent, rainfall run-off and contaminated groundwater flow). Treated effluent is to be entirely contained within the boundaries of the respective lot.
- Protection of groundwaters. On-site sewage management systems are to be selected, sited, designed, constructed, operated and maintained so that groundwaters are not contaminated by any flow from treatment systems and land application areas.
- Conservation and reuse of resources. The resources in domestic waste water (including nutrients, organic matter and water) should be identified and utilised as much as possible within the bounds posed by other performance objectives; water conservation should be practiced and waste water production should be minimised.
- Protection of community amenity. On-site sewage management systems should be selected, sited, designed, constructed, operated and maintained so that they do not unreasonably interfere with the quality of life, and, where possible, so that they add to the local amenity - special consideration should be given to aesthetics, odour, dust, vectors and excessive noise.

Controls

- (1) Plans and specifications for all proposed effluent disposal systems must be approved by Council in accordance with this Plan and other relevant guides and policies.
- (2) Effluent disposal systems are not to be located:
 - (a) below the 1 in 100 year flood contour;
 - (b) in sheltered areas in respect of sun and wind exposure;
 - (c) on slopes greater than 15degrees unless it can be demonstrated to Council's satisfaction that a sustainable and effective system can operate on greater slopes;
 - (d) on the following landforms where possible: concave side slopes and footslopes and should not be located on drainage plains or incised channels;
 - (e) should not occur on soils susceptible to erosion or where signs of erosion are present;
 - (f) where there is potential for run-on and upslope seepage. This should be diverted;
 - (g) on poorly drained soils, such as clay;
 - (h) where inadequate land area is available;
 - (i) where there is >20% rocks and rock outcrops occurring in the disposal area;
 - (j) less than 100 metres to permanent surface waters;
 - (k) less than 250 metres to domestic water sources; and

- (l) less than 40 metres for other waters.
- (3) Effluent disposal systems must have adequate storage for periods when rainfall exceeds evaporation and in the case of system failure.
- (4) Council will require as a condition of consent that a suitably qualified professional certify annually, at the owner's expense, that each effluent disposal system is operating according to the manufacturers specifications and any applicable policies or guidelines. This will include:
 - (a) land application areas;
 - (b) buffer distances;
 - (c) efficiency of all household fixtures;
 - (d) plumbing;
 - (e) septic tanks;
 - (f) pumps, blowers, and/or sensors;
 - (g) alarm systems;
 - (h) effluent storage systems;
 - (i) biosolids management; and
 - (j) risk management procedures.

Existing Lot 1 is exempt from this provision, being covered by new provisions of the Local Government Act.

- (5) Baseline water quality data will be submitted with the Development Application for the site, which will indicate levels Suspended solids, biological oxygen demand, faecal coliforms, total coliforms, E. coli, total phosphorous, total nitrogen, dissolved oxygen, pH, temperature, colour and odour.
- (6) Locations for monitoring will be at areas as agreed to by Council's Environmental Officer, including sensitive water environments, particularly water quality in catchment waterways on the site and adjoining properties.
- (7) Further monitoring for the above parameters will be required unless otherwise notified by Council as a condition of consent, to gauge the quality of any irrigated effluent at each lot. Monitoring will be undertaken at the following times:
 - (a) Two years of monitoring at six monthly intervals following operation of the first effluent disposal system; and
 - (b) Annual monitoring thereafter.

Results must be submitted within three months of testing to Council's Environmental Health Officer.

- (8) All systems must be accredited by NSW Health or equivalent. The disposal system and any irrigation area must be to the satisfaction of Council's Environmental Health Officer.
 - (a) Where the system is not found to comply with the above performance criteria following installation, Council may issue an order under the Local Government Act 1993 to prevent the continued use of the system.
- (9) Householders will be responsible for the safe operation of on-site sewerage management systems, ensuring they have a sound understanding of operating requirements, and the impact of household activities, (such as use of low phosphorous detergents, minimising use of household chemicals, avoiding shock loading and conserving water). These responsibilities are not diminished by a change of ownership

16.18.4 Conservation Measures

Investigations by Acacia and EcoPro (1997) have recommended that certain vegetation be conserved because of its value as habitat for either the threatened species Rudders Box or threatened fauna. Conservation areas are found along permanent creek lines and in important vegetation communities in the eastern sections of the land covered by this Plan.

Objectives

- To limit development to areas zoned for rural residential purposes;
- To protect existing vegetation and future development through provision for a fire management plan; and
- To limit fragmentation of habitat.

Controls

- (1) Vegetation within areas zoned E2 Environmental Conservation must not be cleared unless ordered by Council or as part of works for an approved fire management plan. The plan of subdivision must include a restrictive covenant prohibiting clearing of vegetation in conservation areas unless directed by Council or a public authority entitled to do so.
- (2) Vegetation zoned E2 Environmental Conservation should not form part of a Asset Protection Zone unless agreed to by the applicant and Council.
- (3) Fencing should not occur through areas zoned E2 Environmental Conservation where possible. Where necessary the following requirements should be met:
 - (a) use of materials which prevent the movement of fauna such as barbed wire should not be used; and
 - (b) clearing around fence lines should be limited to that necessary for construction and maintenance works. Clearing should not exceed 5m either side of the fence.
- (4) To ensure that settlement does not result in the introduction of domestic animals that are likely to harm threatened animals, the plan of subdivision must include a restrictive covenant that requires owners to securely confine dogs within the building envelope of each lot between dusk and dawn; and cats within the house on each lot between dusk and dawn.

16.18.5 Catchment Management

Catchment management is defined by the Catchment Management Act 1989 as:

"...the coordinated and sustainable use and management of land, water, vegetation and other natural resources on a water catchment basis so as to balance resource utilisation and conservation."

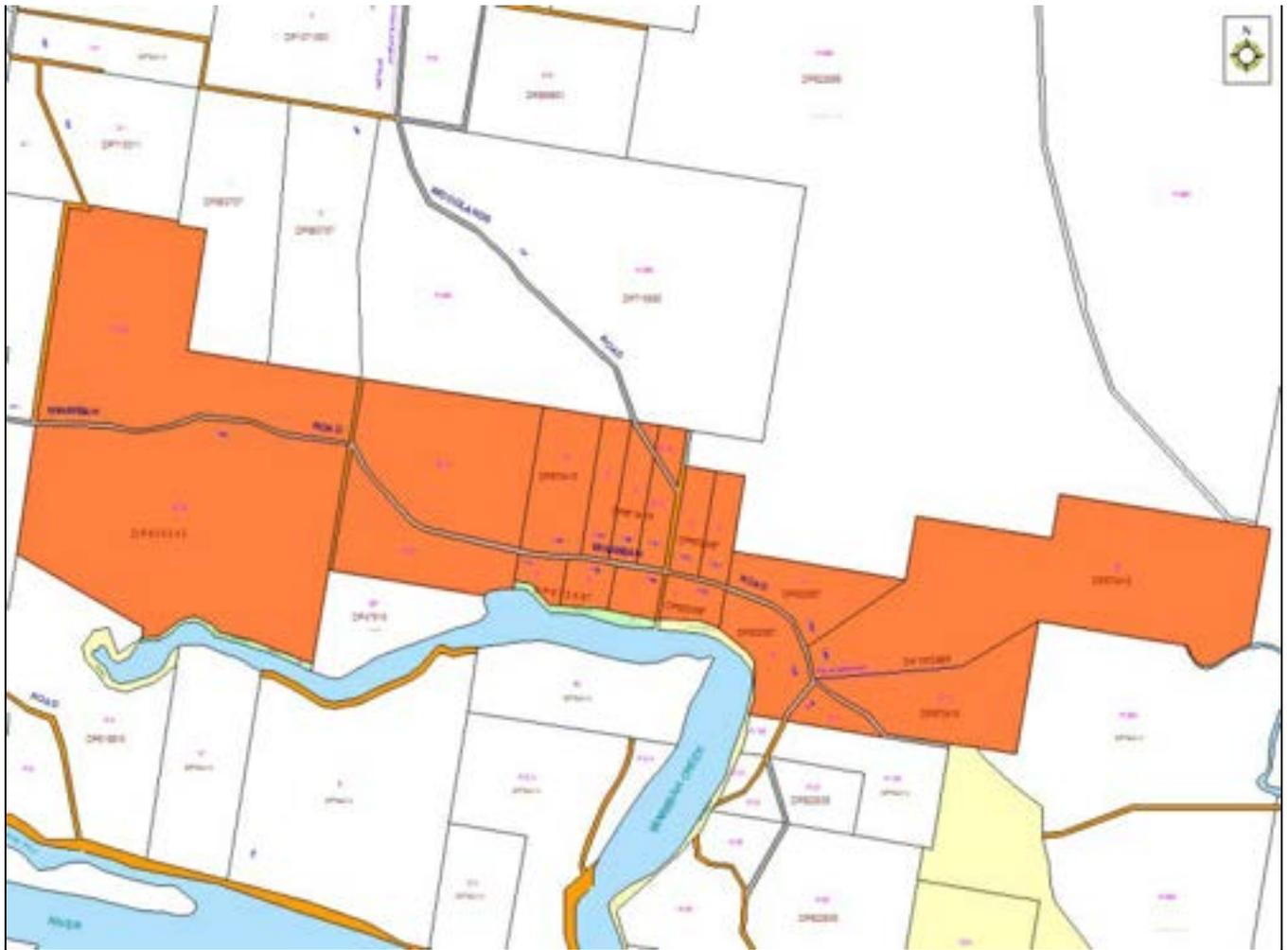
Objectives

- To identify and rectify natural resource degradation;
- To promote the ecologically sustainable use of natural resources; and
- To ensure stable and productive soils, high quality water, and the maintenance of a protective and productive vegetation cover within each catchment.

Controls

- (1) Disturbance of soils will be regulated by a sediment and erosion control plan submitted with the Development Application for the site, for use during any earth works or construction of dwellings.
- (2) Nutrients entering waterways will be minimised through appropriate stormwater and effluent disposal systems.
- (3) Existing habitat on the land will be protected by limiting development to cleared areas. All vegetated areas will be protected through an appropriate conservation zoning, the Tree Preservation Chapter of this Plan and applicable state legislation.
- (4) Provisions for flooding will be made through the limiting of structures to above the 1 in 100 year flood line, including dwellings and effluent disposal systems.
- (5) A fire management plan to the satisfaction of Council will be prepared for the land.

16.19 Minimbah Road near Minimbah Creek, Minimbah



Minimbah Road near Minimbah Creek, Minimbah site location plan (click here to view [original image](#))

16.19.1 Development Controls

- (1) In order to assist in bushfire fighting, it will be necessary to provide access for fire trucks between the rear of properties. This shall be provided through the provision of unlocked gates at locations determined by Council.
- (2) It will be a requirement of development consent for each dwelling to provide a minimum rainwater storage of 45,000 litres.
- (3) Prior to the construction of roads, an applicant shall consult with the National Parks and Wildlife Service to ascertain the likelihood of any aboriginal relics and artefacts in the area.
- (4) Dwellings are to be sited on land that is not subject to 1 in 100 year flooding or that is subject to poor drainage. As a guide, the 1989 Forster/Tuncurry Flood Study indicates that in the vicinity of this land, the 1 in 100 year flood level could range between 4.44m - 5.8m AHD.
- (5) Private jetties or boat ramps should only be located on land or in areas that are not identified as wetland under State Environmental Planning Policy No 14 - Coastal Wetlands;
- (6) Dwellings should only be located at a suitable distance outside of areas identified as State Environmental Planning Policy No 14 - Coastal Wetlands.

16.19.2 Conservation Measures

- (1) Vegetation is to be maintained within 30 metres of drainage lines and no clearing is to occur within 20 metres of SEPP No 14 wetlands. Further, no clearing, drainage or other works are to be undertaken within the existing Crown Foreshore Reserve and the dedicated foreshore Public Reserve;
- (2) Soil conservation measures are to be taken to protect construction sites during the development of the

subdivision and subsequent erection of dwelling houses. These measures shall be detailed as part of any development or subdivision application.

- (3) Preparation of an erosion and sediment control plan for the road works to the satisfaction of Council prior to granting of subdivision approval. This is to be the responsibility of any applicant for development consent for subdivision.

16.20 North Shearwater

This plan applies to the land shown below and should be considered in conjunction with Great Lakes Local Environmental Plan 2014 (Great Lakes LEP 2014) and any relevant State Environmental Planning Policies (SEPPs).



North Shearwater Urban Release Area ([click here to view original image](#))

The North Shearwater urban release area is divided into five individual development precincts that are framed by environmental and riparian corridors, as shown in the [Structure Plan](#). This section of the DCP is structured to fulfil the need for both generic and precinct specific development controls, as follows.

- The desired future character for each precinct has been developed with regard to site-specific opportunities and constraints.
- All development is subject to the controls in this section as well as relevant provisions within the remainder of the DCP.

- Some parts of the urban release area are subject to the additional controls and requirements contained in this part of the DCP.

This part of the DCP will prevail where there is any inconsistency between the requirements of this part and the requirements specified in the parts of the DCP in relation to subdivision and water sensitive design.

This section sets out “objectives” and performance “controls” for development in each Precinct. Some flexibility is provided in the application of the controls where strict compliance is unreasonable or unnecessary having regard to the objective and the circumstances of the case. Any proposal seeking a departure from the performance controls must achieve the stated objective.

16.20.1 Objectives

To ensure that:

- The local road layout addresses and incorporates the following:
 - Safe vehicular and pedestrian management
 - Maximisation of lot yield
 - Connectivity with existing Tea Gardens and future urban areas of Riverside
 - Suitable engineering principles
 - Site specific constraints, including topography
 - Safe movement of fauna
- All new allotments are adequately serviced to meet the needs of residents. Servicing shall include water, sewer, electricity and telecommunications.
- Subdivision is undertaken in a coordinated and logical manner.
- Development responds to the environmental constraints of the site and promotes the rehabilitation and maintenance of wildlife corridors, and natural bushland on the site.
- Landscaping is provided to make for a visually attractive environment and buildings are designed in an appropriate manner and are consistent with the surrounding environment.
- Appropriate management and mitigation measures are adopted for environmental issues, including stormwater, bushfire and flooding.
- Proper consideration is given to items of European heritage.
- All proposals for development implement an integrated approach to urban water management.

16.20.2 Vision

The vision for future development within North Shearwater is to enable sustainable development that enhances and protects the natural character of the site, responds to the environmental and topographical constraints, and provides for residential and tourist related development that promotes the natural setting of the Myall River.

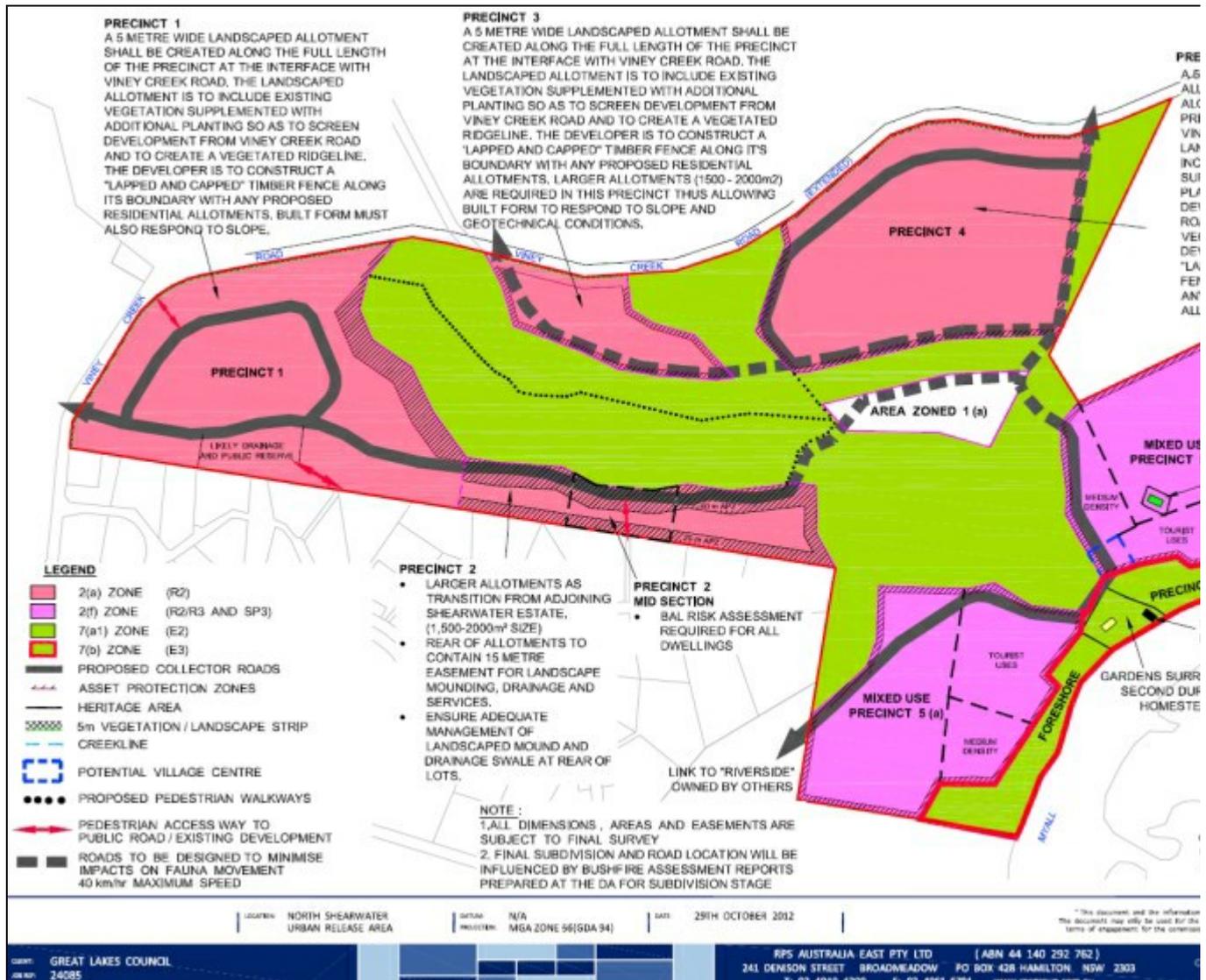
16.20.3 Structure Plan

The urban release area is divided into a number of different precincts, as shown in the Structure Plan. Development is to be generally consistent with the Structure Plan. The Structure Plan shows environmental and riparian corridors that intersect the site, framing the distinct development precincts. Each of the development precincts has a different desired future character. The desired future character for each precinct has been developed with regard to the site-specific opportunities and constraints and landscape features.

The Structure Plan shows indicative spine road locations for the internal road network throughout the site, as well as potential entry points into the estate from Viney Creek Road, Riverside Estate to the South and the extension of Viney Creek Road road to the north of the site. Potential pedestrian linkages throughout the site are also indicated on the plan, ultimately providing access to the Myall River Foreshore and a potential neighbourhood commercial centre. Two heritage areas, namely the site of the original Durness homestead and nearby Canary Island Palms and the gardens surrounding the second Durness homestead are identified near the foreshore precinct, and must be considered and integrated into any future development of the site.

The Structure Plan shows a large area of conservation land that provides habitat linkages between the foreshore and land to the north, west and east of the urban release area. These areas are zoned E2 – Environmental Conservation. The environmental conservation zone is provided to maintain and enhance the visual, environmental and water management values of the site. Dedication of all lands zoned E2 – Environmental Conservation will be required before any dwelling allotment is created in Precincts 3, 4 or 5.

Streets within the precincts should be interconnected to create a system that emphasises accessibility and connectivity. Subdivision design and collector roads should be located generally in accordance with the Structure Plan.



North Shearwater structure plan (click here to view [original image](#))

16.20.4 Integrated Water Management

Objectives

- To ensure all proposals for development implement an integrated approach to urban water management.

Controls

- All proposals for development are to implement an integrated urban water management strategy that applies to the whole of the North Shearwater urban release area and has been approved by Mid Coast Water.
- The integrated urban water management strategy is to:

- (a) Promote the efficient use and reuse of water;
- (b) Include reticulation of recycled effluent in accordance with the Integrated Water Management Strategy approved by Council and MidCoast Water
- (c) Minimise adverse impacts on the natural water cycle; and
- (d) Take into account site constraints and hazards.

16.20.5 Stormwater

Objectives

- To ensure people and assets are safeguarded from risks associated with stormwater flows.
- To ensure resultant development will maintain or improve the quality of storm water discharged from the site engaging the principles of water sensitive design techniques.

Controls

- (1) Water quality management facilities must be installed so as to maintain or improve the quality of stormwater discharged from the development.
- (2) Arrangements, satisfactory to Council, must be made for the maintenance of all water quality management facilities.
- (3) A water quality management strategy in accordance the [Water Sensitive Design](#) section of the DCP, demonstrating how the above will be achieved, is to be submitted for Council's approval with the development application. The strategy is to include an Operation and Maintenance Manual for all water quality treatment devices.
- (4) Development of Precincts 1 and 2 is to cause no change in quantity, frequency or velocity of discharge to the drainage lines in the adjoining Shearwater Estate to the south. The means of achieving this is to be clearly shown via the water management strategy submitted with the development application for subdivision of these precincts.

16.20.6 Bushfire

Objectives

- To ensure that all future residents and homes are adequately protected from the threat of bushfire.

Controls

- (1) All subdivision plans must take into account the Asset Protection Zones (APZ) identified within the [Structure Plan](#) and the statutory requirements of relevant legislation, in particular the measures for bushfire protection as outlined in "Planning for Bushfire Protection" 2006.
- (2) All APZs must be established within land R2 Low Density Residential, R3 Medium Density Residential and SP3 Tourist and shall not be established within land zoned E2 Environmental Conservation or E3 Environmental Management.
- (3) A Bushfire Hazard Assessment prepared by a suitably qualified Bushfire consultant must accompany any future subdivision application. Having regard for the elongated nature of Precinct 2 and its position between bushfire prone land to the north and south, allotments created in the "mid-section" of Precinct 2, will be required to contain a restriction as to use on the respective land title indicating that any subsequent Bushfire Attack Level (BAL) Risk Assessment carried out for a proposed dwelling on the allotment will restrict the dwelling construction to the standard specified within the dwelling BAL Risk Assessment.
- (4) A BAL Risk Assessment in accordance with Section 79BA of the EP&A Act will be required to be undertaken for dwellings that are proposed in the "mid-section" of Precinct 2.
- (5) Development shall not occur within Precinct 5(a) or 5(b) until such time as a road link has been constructed

adjoining these precincts to the “Riverside” project area to the south.

- (6) Development of Precinct 5(a) and 5(b) will be the subject of concurrence from the NSW Rural Fire Services.

16.20.7 Fauna Movement Corridors

Objectives

- To ensure habitat areas are available for the safe movement of native fauna
- To ensure that development protects and preserves wildlife habitat on adjoining land
- To ensure the road network is designed to minimise impacts on fauna movement.

Controls

- (1) All development proposals are to have due regard to the maintenance of Environmental Protection corridors as identified in the [Structure Plan](#).
- (2) Appropriate buffers and management of development shall be used to preserve and protect adjoining wildlife habitat features of environmental or aesthetic significance.
- (3) Road design standards, such as narrow pavement widths, and/or approved vehicle calming devices must be incorporated into subdivision designs, particularly along collector roads identified with dashed lines in the [Structure Plan](#), so as to achieve a design speed of 40km/hour.

16.20.8 Heritage

Objectives

- To maintain links with the past by reinforcing the historical landscape character of the North Shearwater heritage areas.

Controls - General

- (1) A Heritage Impact Statement prepared by a suitably qualified heritage consultant must be submitted to Council for any proposed development within or in the vicinity of the heritage areas.
- (2) Any new development must ensure that the significance and integrity of heritage items is retained or enhanced. Attention shall also be afforded to the curtilage of such heritage items and their relationship with surrounding developments and street/laneway systems.
- (3) The two areas are to be integrated into the development in a manner that preserves the historical landscape and character of the heritage features.

16.20.9 Precinct 1

Precinct 1 is located at the western extent of the site and is comprised of undulating and elevated land. The precinct is zoned R2 – Low Density Residential . Parts of the precinct have excellent panoramic views to the east and subdivision design should seek to optimise these.

Access to Precinct 1 from Viney Creek Road should be designed to optimise the distant panoramic views and create a strong sense of arrival into the estate. It is envisaged that low density residential development will best utilise natural character of the precinct by allowing flexibility of design in response to site characteristics such as topography, aspect and views.

Objectives

- To ensure that development respects the topographical and visual characteristics of the site whilst facilitating residential development.

Controls

- (1) Access to Precinct 1 will be via a constructed intersection with Viney Creek Road.
- (2) Lots along Viney Creek Road shall contain a 5m wide landscaped strip along the road frontage. The landscaped strip is to include existing vegetation supplemented with additional planting and is to be completed prior to the release of the subdivision certificate of the new allotments. A restriction as to use shall be placed on all land titles preventing vehicle access from Viney Creek Road and restricting any form of development on the affected land.
- (3) Access ways for pedestrians shall be provide to link this Precinct with Viney Creek Road and the existing access way and development within the adjoining Shearwater Estate.
- (4) A drainage and public reserve is to be provided within Precinct 1, with the likely location and size indicated on the [Structure Plan](#). The integrated urban water management strategy and resultant subdivision design must ensure there is no net increase in stormwater flows to the existing Shearwater Estate.

16.20.10 Precinct 2

Precinct 2

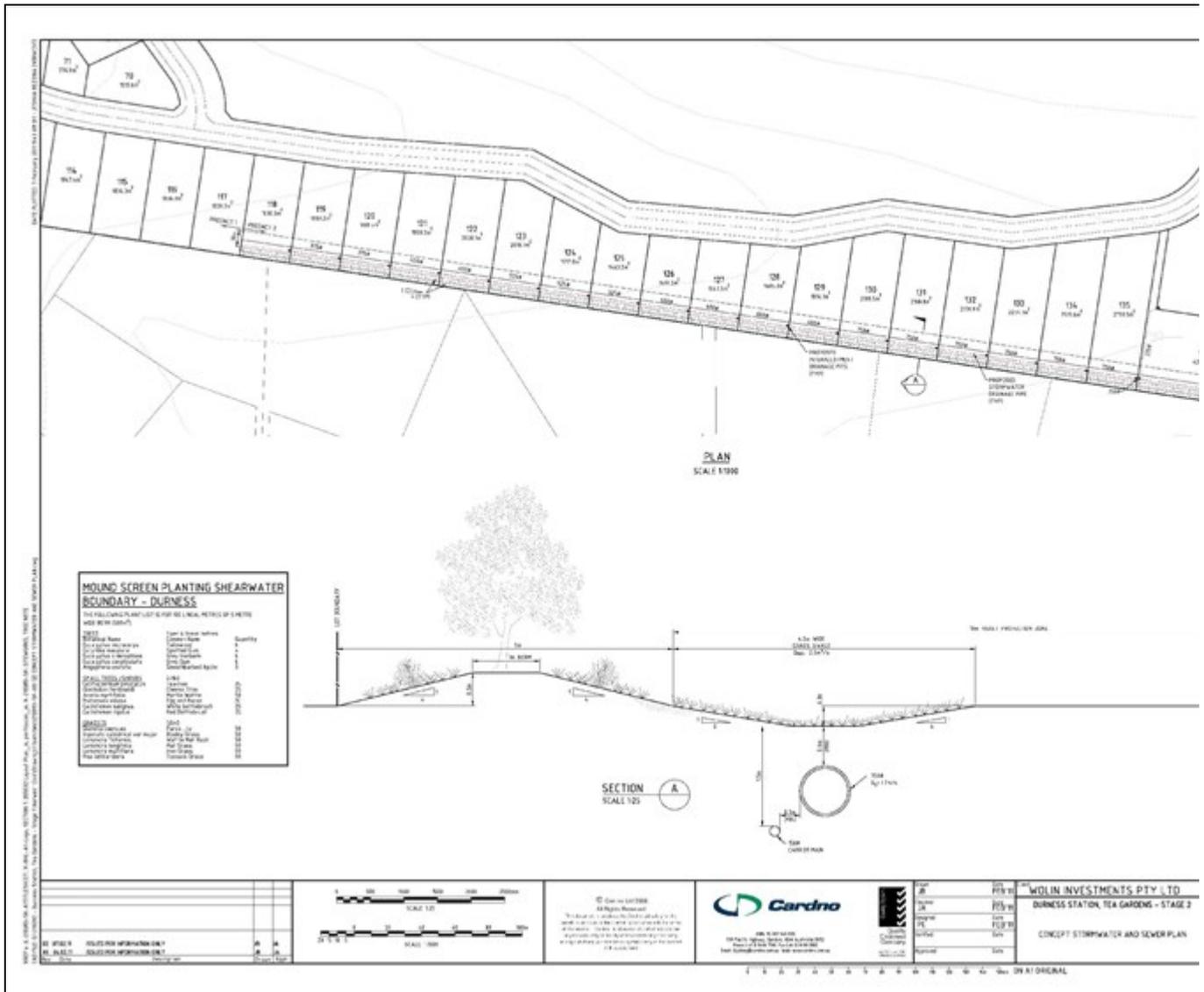
Precinct 2 runs along the southwest boundary of the site and is zoned R2 - Low Density Residential . This area shares a boundary with Shearwater Estate immediately to the south, which is zoned for Large Lot Residential. Shearwater Estate contains existing rural residential style development, including dwellings immediately to the south of the boundary. To ensure future development is compatible with existing development within the adjacent Shearwater Estate a landscaped mound and associated drainage swale is to be provided on the southern boundary of the precinct.

Controls

- (1) Precinct 2 is to provide larger sized allotments approximately 1500 – 2000m² in size with an indicative example of subdivision design provided below.
- (2) The rear of the each proposed allotment is to contain a landscaping mound included within a 15m easement for the provision of the landscaping mound, inter-allotment drainage and services.
- (3) Subdivision design must include provision of the planting, retention and maintenance in perpetuity of the landscaped mounding and drainage swale.
- (4) All allotments in the Precinct will have frontage to a new internal road on their northern aspect that will also act as a bushfire asset protection zone from the environmental zone to the north.

Objectives

- To ensure the subdivision design respects the topographical characteristics of the site and provides a satisfactory transition of lot sizes between existing allotments within the adjacent Shearwater Estate and new allotments with the site, whilst facilitating residential development.



Precinct 2 North Shearwater: indicative lot layout (click here to view [original image](#))

16.20.11 Precinct 3

Precinct 3

Precinct 3 is located north of the east west drainage and environmental corridor. The precinct is relatively steep and site-specific geotechnical investigations will need to be undertaken at the development application stage for subdivision. Larger allotments allowing built form to respond to slope and geotechnical conditions are the required form of development.

Objectives

- To ensure subdivision design respects the slope and geotechnical conditions of the site as well as the ecology of the identified fauna movement corridor immediately to the east whilst facilitating residential development.

Controls

- Precinct 3 is to provide larger sized allotments approximately 1,500 – 2,000m² in size.
- Development applications for subdivision will need to be accompanied with site-specific geotechnical investigations and make reference to the 2007 Australian Geomechanics Landslide Guidelines.
- Residential development is to be of suspended floor construction and is to consist of simple, lightweight materials and contemporary built forms that compliment the sloping terrain and visual character of the setting.

- (4) Road access should be via an access point in the north-west corner of the Precinct and intersecting with Viney Creek Road, as extended.
- (5) Lots along Viney Creek Road (as extended) shall contain a 5m wide landscaped strip along the road frontage. The landscaped strip is to include existing vegetation supplemented with additional planting and is to be completed prior to linen release of the new allotments. A restriction as to use shall be placed on all land titles preventing vehicle access from Viney Creek Road to these lots and restricting any form of development on the affected land.
- (6) Road design standards and/or approved vehicle calming devices must be incorporated into the collector road design that links Precinct 3 with Precinct 4 so as to achieve a design speed of 40km/hour along that section of the collector road.

16.20.12 Precinct 4

Precinct 4

Precinct 4 is located in the northeast of the site and consists of some steeper slopes in the north and relatively flat land in the south. The precinct is zoned R2 Low Density Residential and approximately 17 hectares in size.

Access to Precinct 4 will be from the extension of Viney Creek Road on the northern boundary of the site as well as via precincts 5(a) and 5(b) that link to the Riverside Estate. Access should be designed to optimise distant panoramic views and create a strong sense of arrival into the estate.

Objectives

- To ensure subdivision design respects the topographical and visual characteristics of the site whilst facilitating residential development.

Controls

- (1) Access to Precinct 4 will be via a constructed intersection with Viney Creek Road (as extended).
- (2) Lots along Viney Creek Road (as extended) shall contain a 5m wide landscaped strip along the road frontage. The landscaped strip is to include existing vegetation supplemented with additional planting and is to be completed prior to the issue of a subdivision certificate for new allotments. A restriction as to use shall be placed on all land titles preventing vehicle access from Viney Creek Road to these lots and restricting any form of development on the affected land.
- (3) Road design standards and/or approved vehicle calming devices must be incorporated into the collector road design that links Precinct 4 with Precinct 3 and the Mixed Use Precincts such that motor vehicles are restricted to a maximum speed of 40km/hour along that section of the collector road.
- (4) Residential development on the steeper areas of Precinct 4 is to consist of simple, lightweight materials and contemporary built forms that compliment the terrain and visual character of the setting.

16.20.13 Precinct 5(a)

Precinct 5a

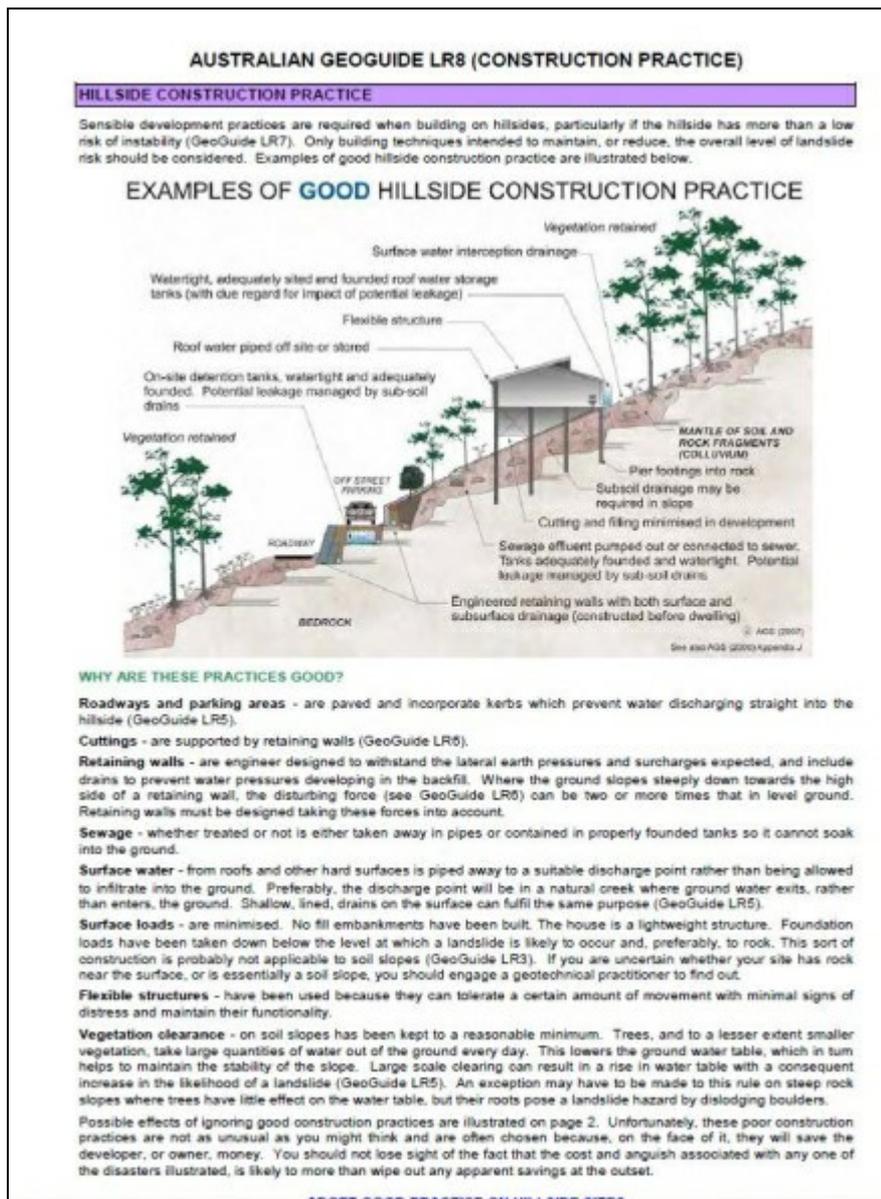
Precinct 5(a) is in close proximity to Durness Homestead, the Foreshore Precinct, the Myall River and the proposed "Riverside" development to the south. It has excellent opportunities to take advantage of the natural setting. It is envisaged that the precinct will provide a range of tourist, medium density and low density residential development with an emphasis on retention of large trees. Tourism and medium density development of this precinct should consider the opportunities for connection with the foreshore.

Objectives

- To ensure development respects the topographical, flooding and ecological characteristics of the site whilst facilitating residential (both low density and medium density) and tourist development.

Controls

- (1) Access to Precinct 5(a) will be via the collector road indicated in the [Structure Plan](#).
- (2) Development shall not occur within Precinct 5(a) until such time as the road link with the “Riverside” project area has been constructed.
- (3) The existing outbuildings and the large scattered Tallowood trees are to be taken into consideration in the subdivision layout and development design. Where possible, these features should be retained in any future use of the site.
- (4) Subdivision design and built form of buildings should have regard for the desired location of medium density and tourist uses. Tourism development should be limited to uses that have a strong ecological focus and follow sustainable practices and values. These should be designed to visually integrate with the proposed low and medium density residential areas and form a strong connection with the foreshore.
- (5) All controls for Multiple Dwellings, Tourist and Visitor Accommodation, Serviced Apartments and Residential Flat Buildings will be in accordance with the controls for Tea Gardens/Hawks Nest Town Centres except for the mapped prescriptions set out in the *Australian Geoguide LR8 (Construction Practice) Hillside Construction Practice*:
 - (a) [Tea Gardens – Hawks Nest Building Character](#)
 - (b) [Pedestrian Amenity](#)
 - (c) [Site permeability](#)
 - (d) [Building Configuration](#)
 - (e) [Building Amenity](#)
 - (f) [Building Performance](#)
- (6) Controls for buildings in the medium density sub-precinct (R3 Medium Density Residential) will be in accordance with the following medium density residential development controls for Tea Gardens / Hawks Nest:
 - (a) [Minimum Allotment Frontage](#)
 - (b) [Building Depth and Bulk](#)
 - (c) [Primary Street Setbacks](#)
 - (d) [Side and Rear Setbacks](#)



Australian Geoguide LR8 (construction practice) hillside construction practice (click here to view [original image](#))

16.20.14 Precinct 5(b)

Precinct 5(b) is in close proximity to Durness Homestead, the Foreshore Precinct and the Myall River and it has excellent opportunities to take advantage of the natural setting. It is envisaged that the precinct will provide a range of low density residential, medium density residential, open space, village centre and tourist uses. New subdivision development will need to incorporate the original homestead site and Canary Island Palms into their design. Tourism and medium density development of this precinct should consider the opportunities for connection with the foreshore and the proposed village centre.

The Foreshore Precinct is zoned E3 Environmental Management to provide a riparian buffer to the Myall River, to retain existing vegetation and to provide a fauna movement corridor along the foreshore. Large remnant trees define the precinct and these shall be retained in the conservation zone. The precinct also contains the existing Durness Homestead, which is surrounded by a large, established garden and is identified as a heritage area. It is essential that any development of the Foreshore Precinct preserves or enhances the environmental and heritage significance of the area. The Foreshore Precinct will provide a striking natural setting for recreation and habitat conservation in the future. An opportunity exists for the establishment by the developer of a public boat ramp north of the existing Durness Homestead.

A qualified consultant should be commissioned to provide advice on any future development in or adjacent to the heritage areas in order to preserve the historical landscape character.

A network of conservation precincts provides habitat linkages between the foreshore and land to the north, west and east of the urban release area. These areas are zoned E2 – Environmental Conservation. The conservation zones are provided to maintain and enhance the visual, environmental and water management values of the site. Remnant native vegetation is retained within the zones and some cleared areas will be re-vegetated with endemic native species to form continuous wildlife corridors through the estate. Endemic riparian vegetation will be used to regenerate existing watercourses. Opportunities for pedestrian tracks through the environmental areas are to be included.

The revegetation and management of the conservation zone is to be achieved by a Planning Agreement under s93F of the Environmental Planning and Assessment Act. Any development application for the land is to have regard to this Agreement.

Objectives

- To ensure development respects the topographical, flooding and European heritage characteristics of the site whilst facilitating residential (both low density and medium density), tourist and low scale commercial development.

Controls

- (1) Access to this precinct will be via the road collector road indicated in the [Structure Plan](#).
- (2) No development shall occur within this precinct until such time as the road link with the “Riverside” project area has been constructed.
- (3) The existing outbuildings and large Tallowood trees located along the proposed collector road as well as the site and surrounds (including existing Canary Island Palm Trees) of the original Durness Homestead are to be taken into consideration in the design of the subdivision and future development. Where possible, these features should be retained in any future subdivision design and use of the site.
- (4) Stormwater drainage design and water quality treatment facilities, including details of any proposed site re-grading, should be detailed with any future subdivision application.
- (5) Subdivision design and form of buildings shall have regard for the desired location of medium density and tourist uses as indicated on the Structure Plan. Tourism development should be limited to uses that have a strong ecological focus and follow sustainable practices and values. These should be designed to visually integrate with the proposed low and medium density residential areas and form a strong connection with the foreshore.
- (6) All controls for Multiple Dwellings, Tourist and Visitor Accommodation, Serviced Apartments and Residential Flat Buildings will be in accordance with the controls for Tea Gardens / Hawks Nest Town Centres except for the mapped prescriptions set out below in the *Australian Geoguide LR8 (Construction Practice) Hillside Construction Practice*:
 - (a) [Tea Gardens - Hawks Nest Building Character](#)
 - (b) [Pedestrian Amenity](#)
 - (c) [Site Permeability](#)
 - (d) [Building Configuration](#)
 - (e) [Building Amenity](#)
 - (f) [Building Performance](#)
- (7) Controls for buildings in the medium density sub-precinct (R3 Medium Density Residential) will be in accordance with the following medium density residential development controls for Tea Gardens / Hawks Nest:
 - (a) [Minimum Allotment Frontage](#)
 - (b) [Building Depth and Bulk](#)

- (c) [Primary Street Setbacks](#)
- (d) [Side and Rear Setbacks](#)

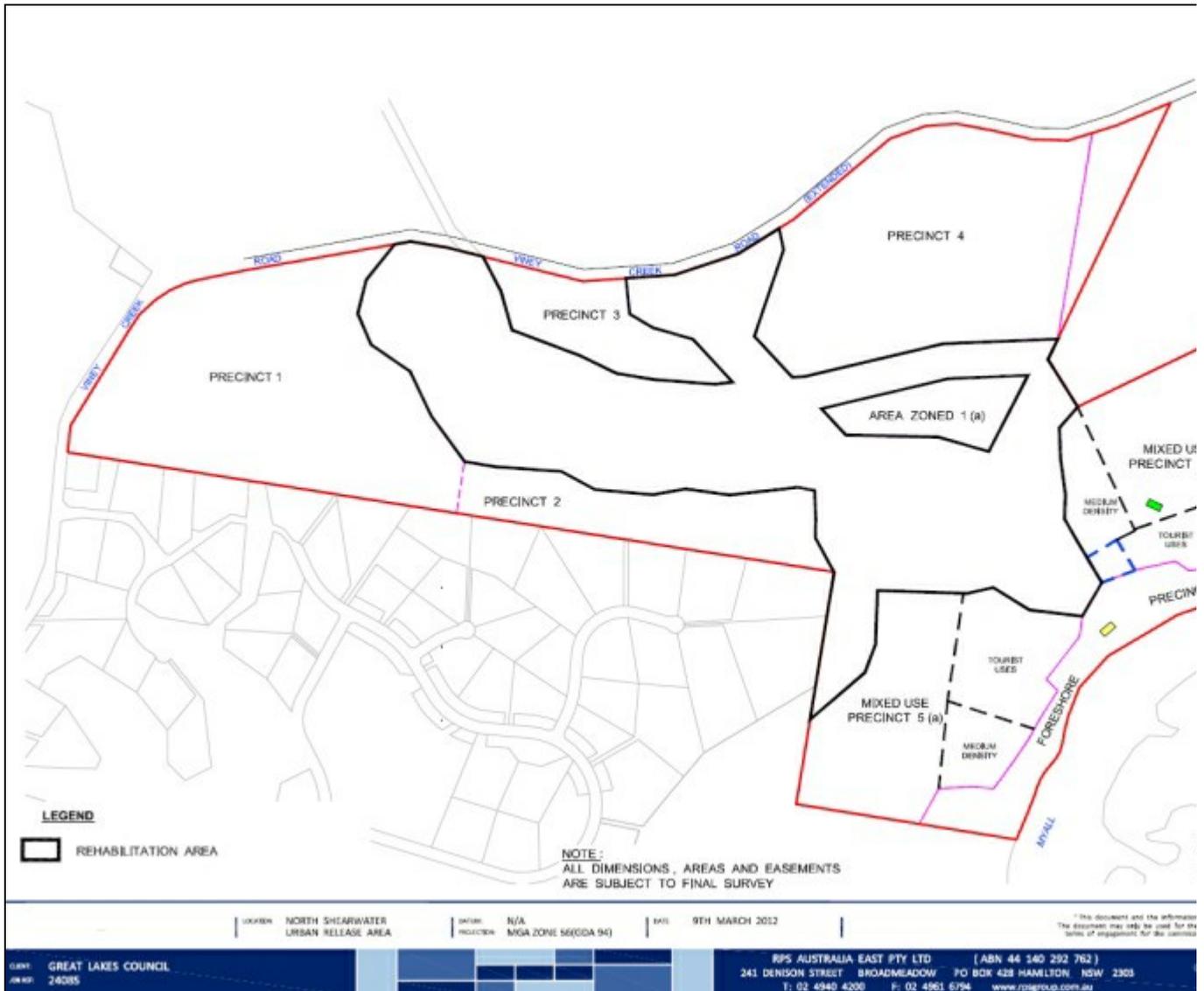
16.20.15 Restoration Management Plan

A network of conservation zones provides habitat linkages between the foreshore and land to the north, west and east of the urban release area. These areas are zoned E2 Environmental Conservation. The conservation zones are provided to maintain and enhance the visual, environmental and water management values of the site. Remnant native vegetation is retained within the zones and some cleared areas will be re-vegetated with endemic native species to form continuous wildlife corridors through the estate. Endemic riparian vegetation will be used to regenerate existing watercourses.

To deliver the balanced development/conservation outcome sought by Council during the rezoning process for the land there are certain requirements that must be met. The requirements are:

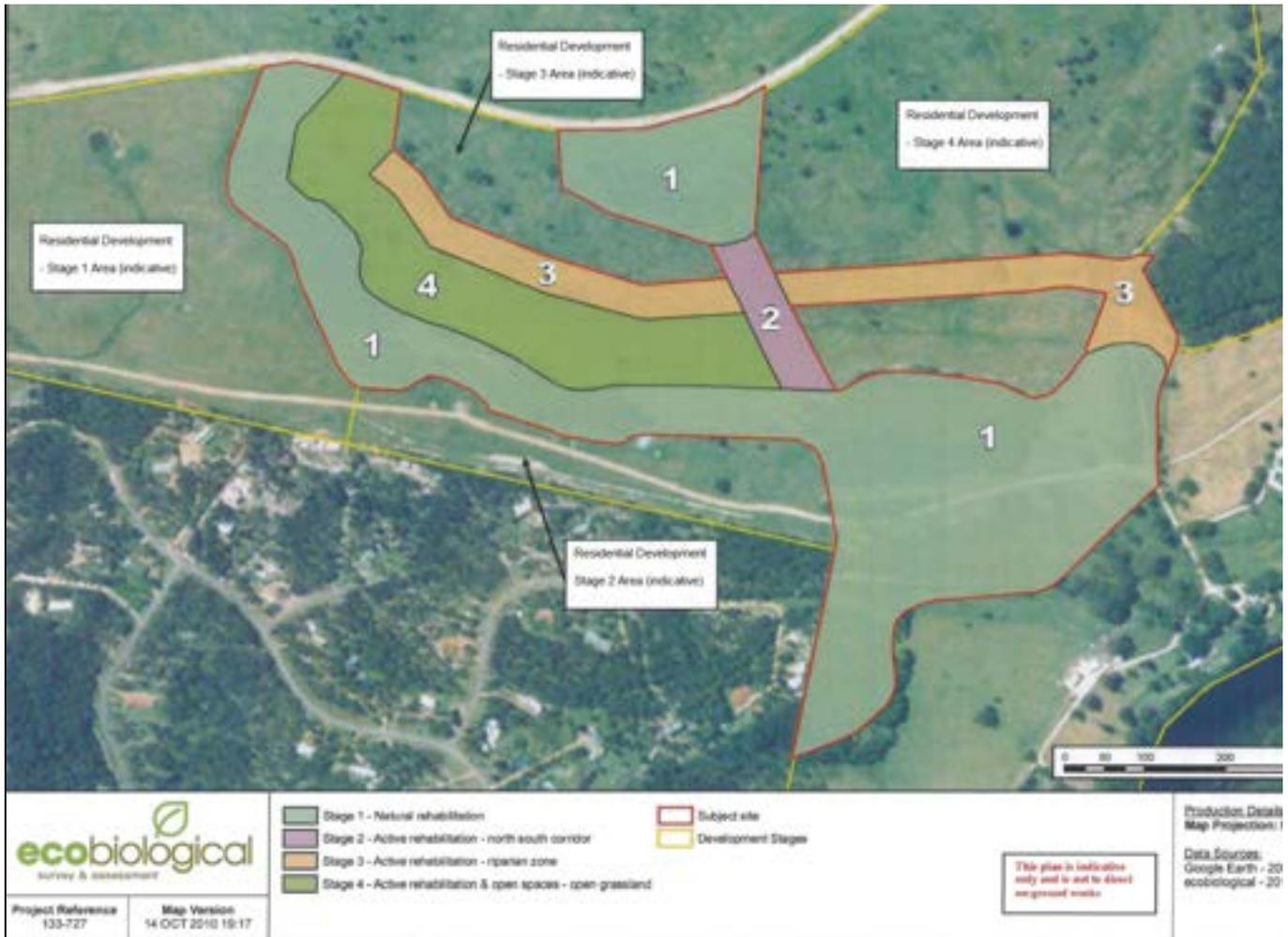
Before consent is granted to any development, arrangements acceptable to the Council will have to be made for the following:

- The rehabilitation of the land shown as “rehabilitation area” in the diagram below; and
- The protection and management of that part of the land within E2 Environmental Conservation, and
- The installation of water quality treatment facilities that will maintain or improve the quality of stormwater discharged from the development, and
- The maintenance of those facilities.



North Shearwater rehabilitation area plan ([click here to view original image](#))

Council and the developers have agreed on a Restoration and Environmental Management Plan that will direct the restoration program. The 'Areas and Staging of Regeneration and Restoration plan' shows the restoration that will occur across the site. A map of the target climax vegetation communities is also provided below.



North Shearwater areas and staging of regeneration and restoration works (click here to view [original image](#))



North Shearwater target climax vegetation communities (click here to view [original image](#))

Controls

- (1) The developers are to provide Council will the funds for the restoration works and management of environmental land. Rehabilitation of the is required at various stages of development (subdivision) of the site. The timing for the completion of the works is contained within the Restoration Management Plan prepared and adopted by Great Lakes Council.
- (2) Before consent is issued for any subdivision of Precinct 3 the E2 Environmental Conservation, land is to be dedicated to Council at no cost.
- (3) The requirements for payment of the funds to Council for the restoration works and the dedication of the E2 land are governed by the [Planning Agreement](#) that applies to the land under s93F of the Act.
- (4) Community open spaces should be incorporated into the Conservation Zones via a network of walking trails and bicycle paths to enhance casual recreational opportunities and create strong connections between precincts and with the foreshore in particular. Paths should be designed and located to optimise views and incorporate rest areas and interpretive signs to enhance the recreational experience for users

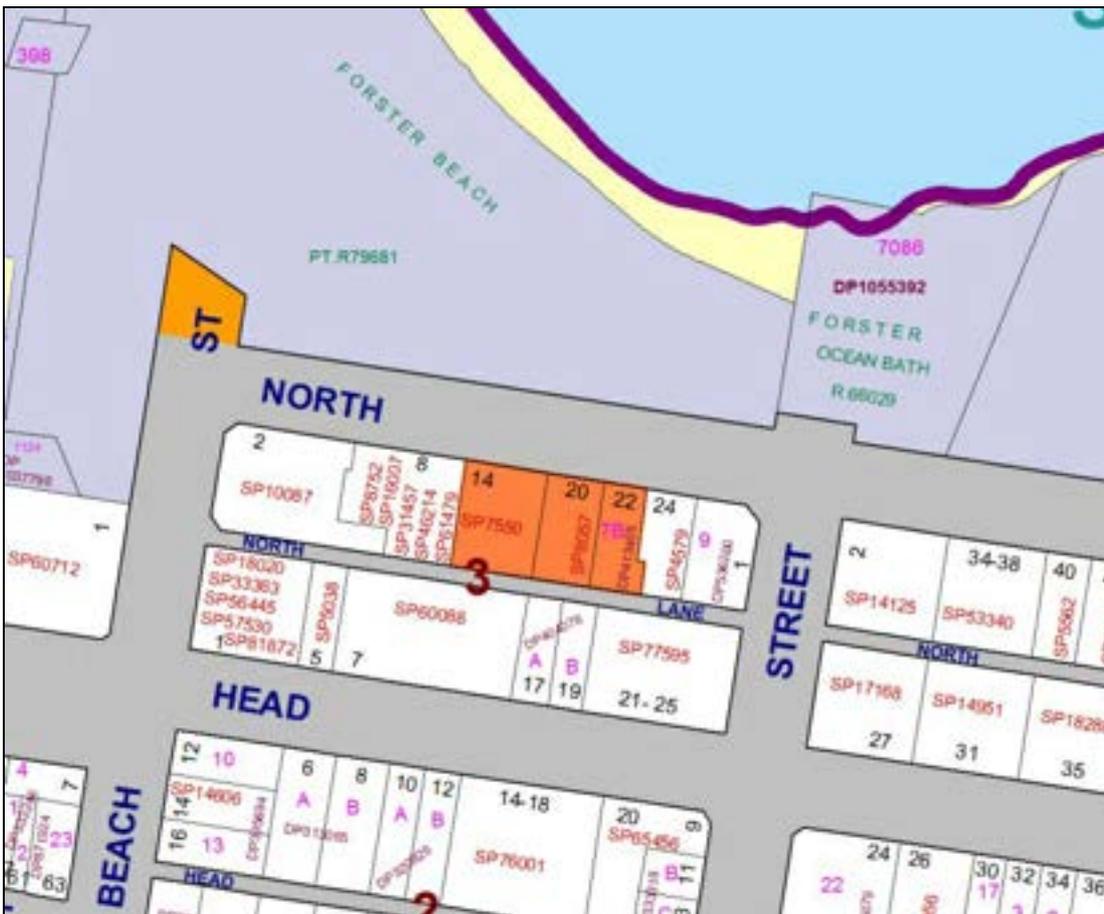
16.21 North Street, Forster

The subject land comprises three lots, SP7550, SP8057 and Lot 7B DP413405, as seen in the Site Location Plan. They are located on North Street and are prominently situated on Forster's main beach, very close to the town's business district . Each lot contains a multi-unit building comprising of 2-4 storeys. The lots vary in size between approximately 800m² and 1,200m and together cover an area of 2,758m².

The existing buildings comprise a total of 31 units as follows (from east to west): “Ocean Front” 7 units, “Debra Court” 12 units, “El Sandi” 12 units. The total residential Ground Floor Area (GFA) is 3,042m², comprising of 2,825m² interna and 217m² external area (balconies). All units comprise 2 bedrooms.

The existing buildings have 2-4 storeys, while most surrounding buildings are 6-8 storeys high. These buildings define the central section of Forster’s beachfront. The facades are of different height and character. The buildings neither relate to each other, nor do they establish a coherent street rhythm. The predominant colours are grey, brown, white and diverse brick tones.

The amalgamation and redevelopment of the master plan site has a unique potential to significantly contribute to a more harmonious and attractive beachfront, and thus a better image of the town centre, as well as revitalising the adjacent public domain.



North Street Forster site location plan (click here to view [original image](#))

16.21.1 Objectives

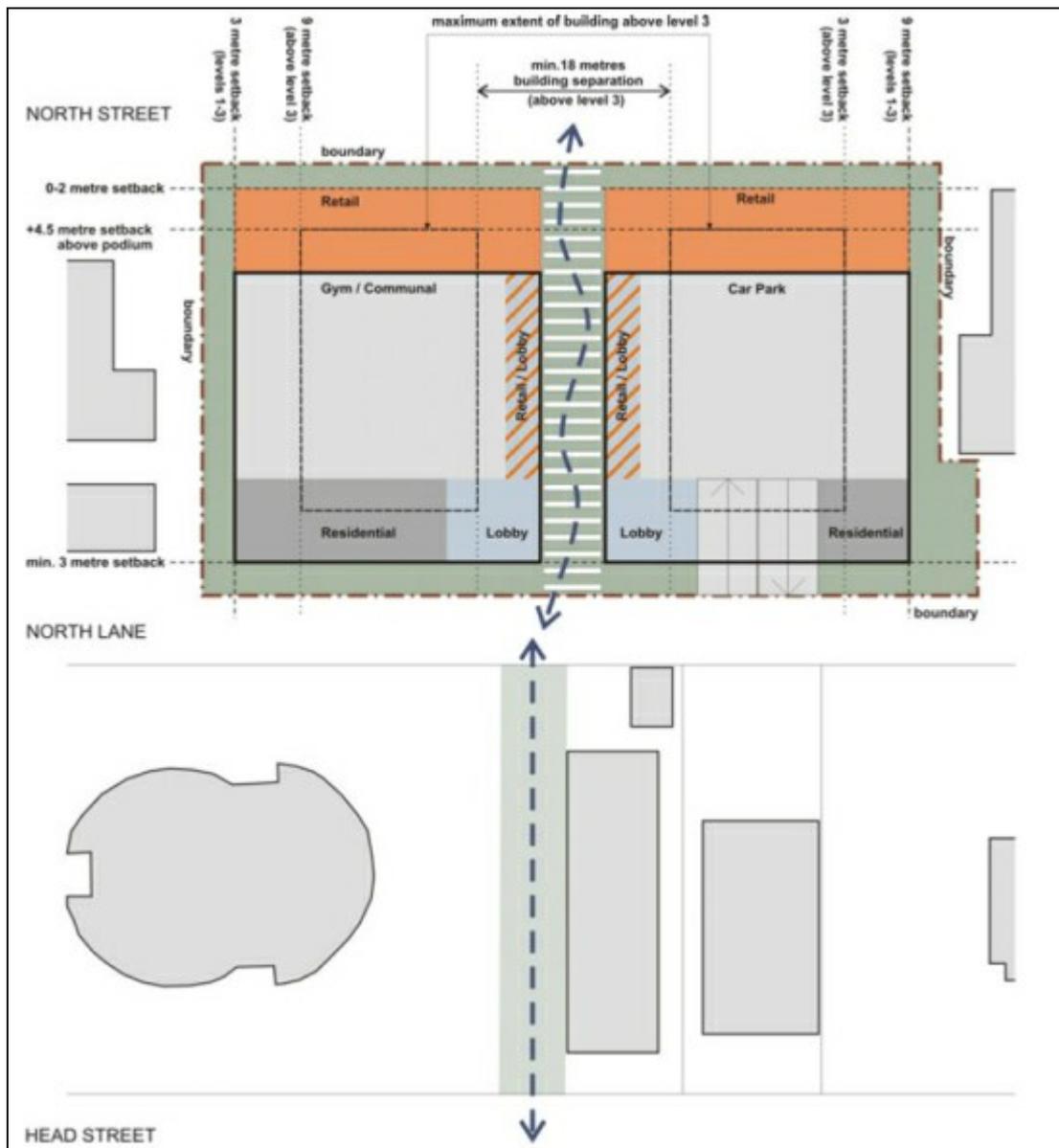
- To ensure that the site design meets the strategic objectives of its context, including:
 - achieving a more consistent Forster townscape;
 - improving the quality of the surrounding public domain;
 - responding to the desired future character of the precinct;
 - addressing demographic trends including design for an aging population;
 - achieving environmentally sustainable design.

- To provide a high level of amenity within the site and the building(s);
- To encourage a range of accommodation opportunities that address prevailing demographic trends within a high quality residential environment;
- To maximise opportunities for public domain improvements and architectural and design excellence through development bonuses;

- To achieve a strong sense of identity for the site and surrounding public domain.

16.21.2 Development Controls

- (1) Development Concept
 - (a) The site is to be developed generally in accordance with the master plan as shown. The principal features incorporated in the master plan include:
 - (i) Two separate residential tower buildings above a one storey podium structure;
 - (ii) The towers are designed to be distinct to maintain the complexity of the streetscape.
 - (iii) The introduction of a ground level pedestrian through site link from North Street to North Lane;
 - (iv) A retail frontage to North Street at the ground floor level with residential above;
 - (v) Vehicle and service access provided from North Lane;
- (2) Site Permeability
 - (a) The development is to provide a through site link from North Street to North Lane to improve the connection between the beach and foreshore area and the retail and commercial centre of Forster.
 - (b) The residential lobby associated with each residential tower will be directly accessible and visible from the through site link.
 - (c) The pedestrian site linkage is to be finished in high quality and durable materials and incorporate an attractive, pleasant and safe landscaped environment.



North Street master plan (click here to view [original image](#))

(3) Street Address

- (a) The North Street frontage shall incorporate active street frontages through the introduction of ground floor shops and cafes/restaurants.
- (b) Shopfronts should be glazed along the North Street frontage to allow views into and out of shops. This glazing or an appropriate alternative architectural treatment shall be extended along the side boundary to avoid dead edges and blank wall that are visible from the street.
- (c) Ground level outdoor dining is supported subject to appropriate noise and pollution abatement measures (i.e. ventilation/exhaust; and hours of operation).
- (d) The second storey residential accommodation shall incorporate balconies and or terraces overlooking the street and the ground level activities.

(4) Street Frontage Height

- (a) The height of the podium adjacent to the North Street frontage shall be a maximum of one storey.
- (b) The maximum height of the podium structure shall be 3 storeys.

(5) Building Setbacks

- (a) The building setback at the ground floor level to the North Street frontage shall be a maximum of 2

metres.

- (b) The building setback of the upper level podium and tower levels to the North Street frontage shall be a minimum of 4.5 metres.
- (c) The side boundary setback for the first three levels shall be a minimum of 2 metres.
- (d) The side boundary setback for any level above three storeys shall be 9 metres.
- (e) The building setback to North Lane shall be a minimum of 3 metres.
- (f) The internal separation between the two towers shall be a minimum of 18 metres. A small variation to this is acceptable if it is demonstrated that the visual privacy of habitable rooms is not negatively affected.

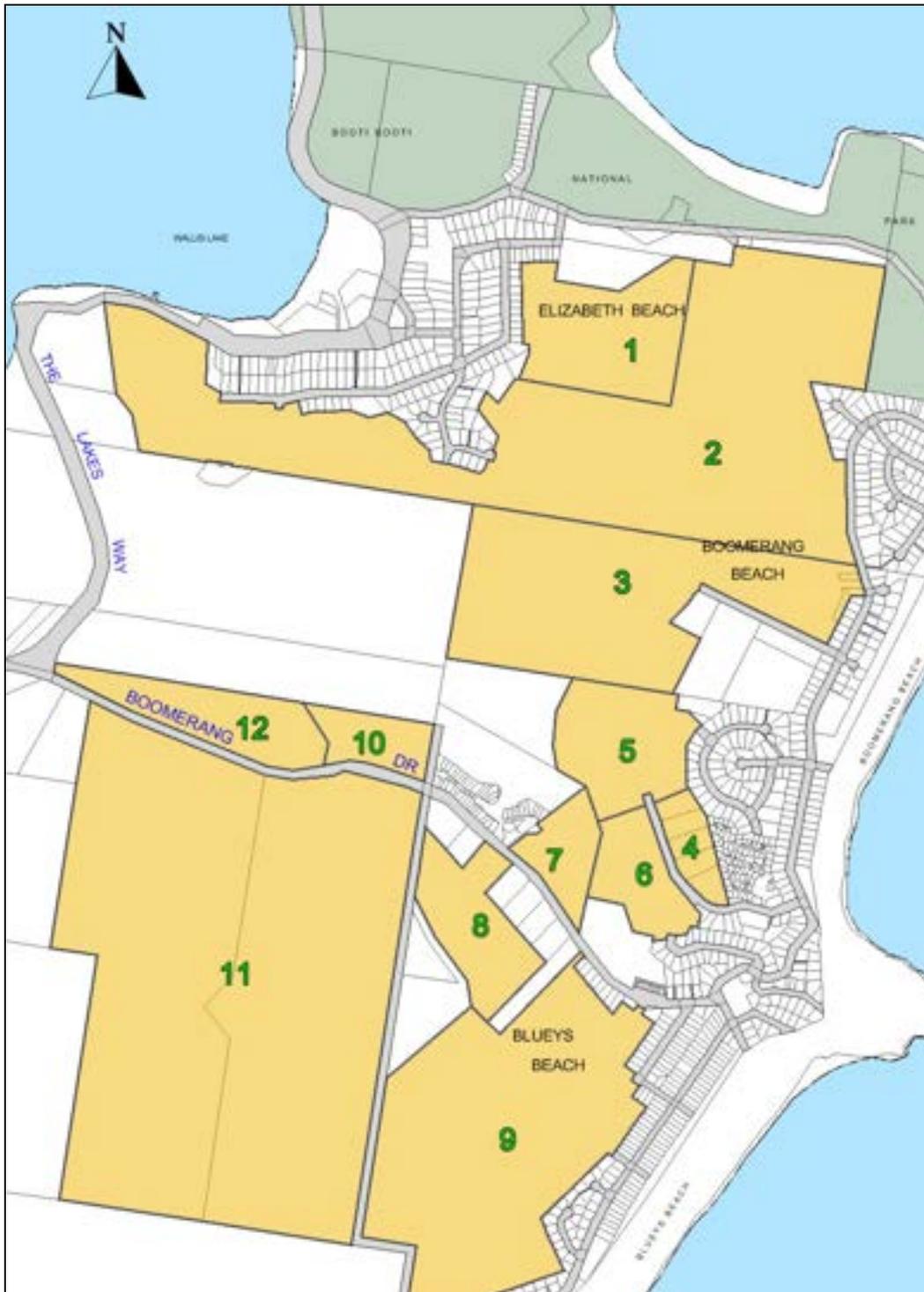
16.22 Pacific Palms

This part of the DCP contains specific controls for particular sites in Pacific Palms.

16.22.1 Environmental Controls for Specific Sites

This section of the DCP contains environmental controls for specific sites in Pacific Palms which are shown in the plan below.

Specific Requirements for Certain Sites



Pacific Palms specific requirements for certain sites (click here to view [original image](#))

16.22.1.1 General Controls for All Sites

Fencing

- (1) In any locations where proposed residential or tourist development abuts land that is, or is proposed to be transferred to National Park, bollard and cable fencing, to the specifications of the NSW Office of Environment and Heritage, is to be erected to define the boundary between the development and the National Park. An image of the style of fencing is contained below.
- (2) In locations where individual residential lots directly abut land that is, or is proposed to be transferred to National Park, paling fencing or similar may erected instead of bollard and cable fencing along the property boundary.

- (3) Full details of the fencing are to be provided with the development application.



Boundary to National Park - fencing example ([click here to view original image](#))

Keeping of Pets

- (1) In any locations where proposed residential development or residential lots abut land zoned E2 Environmental Conservation and/or National Park any development of the land shall preclude the introduction of or the keeping of any dogs or cats (other than “assistance animals” as defined by the Companion Animals Act 1998 and Commonwealth Disability Discrimination Act 1992).
- (2) Details of how this is to be achieved shall be submitted with the development application.

Water Management

- (1) A stormwater management strategy (SMS) is to be submitted with the development application.
- (2) Where the land drains to Wallis Lake the, the SMS is to demonstrate, to Council’s satisfaction, that there will be no increase in pollutants leaving the land after development occurs compared to pollutant loadings from the land before development.
- (3) Where the land drains to the ocean, the SMS is to demonstrate that, when compared to the development being undertaken without any water quality management facilities, there will be an 80% reduction in suspended solids, 60% reduction in Total Phosphorus and 45% reduction in Total Nitrogen.

Bushfire Management

- (1) Asset protection zones are to be contained entirely within the part of the land zoned residential.
- (2) Asset protection zones for future development should not be located on slopes greater than 18 degrees due to the potential environmental consequences of vegetation clearing and difficulties associated with the ongoing maintenance of the area.
- (3) To better withstand attack from bush fire, residential development on many of these sites is likely to require specific construction measures. These measures increase the cost of construction and should be taken into account in the design of each development.

Roadkill Reduction Measures

- (1) Internal roads should incorporate the following features:

- (a) Low speed design (of less than 40km/h) and traffic slowing / calming structures (chicanes, speed humps, signage etc)
- (b) Suitable roadside lighting and a narrow clear immediate road verge to assist wildlife visibility to road users.

16.22.1.2 Specific Controls for Certain Sites

Development/Conservation Offset

When Council rezoned much of the land at Pacific Palms some of the landowners entered into a development/conservation offset arrangement. This arrangement involved the land owners offering to dedicate some their land (known as the Biodiversity Provision Lot) to National Park so that the land would be protected into perpetuity. In recognition of this, Council and the Office of Environment and Heritage (OEH) agreed that some of their land could be rezoned for development. A Planning Agreement under s93F of the Environmental Planning and Assessment Act was entered into to give effect to the Development/Conservation offset.

When a development application is lodged for a subdivision that creates the Biodiversity Provision Lot Council will, in granting consent, apply a condition that requires the Biodiversity Provision Lot to be dedicated to the Minister for the Environment in accordance with the Planning Agreement. This requirement will be apply to sites 1, 5, 6, 8, and 11 shown in the map of Pacific Palms below.

Subdivision by Community Title

This part of the DCP refers to 'community title subdivision'. Community title subdivision is essentially strata subdivision of land rather than specific buildings. In community title subdivision, there must be a common property which is owned and managed by a Community Association. Individual owners pay maintenance fees to the Association for the upkeep of roads and other facilities such as open space and gardens. A neighbourhood management statement is prepared which describes specific management measures and design outcomes.

Why this form of subdivision in Pacific Palms?

The areas nominated for community title subdivision contain or adjoin ecologically important vegetation that collectively makes up the bulk of the study area and require consistent and regular management of bushfire asset protection zones and/or fire trails. The long-term integrity of these areas is dependent on a coordinated management framework being in place. The neighbourhood management statement, through its by-laws provides the most effective instrument to address future management issues such as:

- controls on companion animals,
- ecological and bushfire management,
- stormwater management,
- mechanisms by which residents may manage, use and enjoy environmentally sensitive lands without detrimentally affecting threatened fauna habitats or biodiversity on site, and
- architectural and visual landscape guidelines.

Controls for Subdivision of Sites 2, 3, 6, 7, 9 and 10

- (1) In any subdivision, the part of the land zoned E2 is to be contained in a single lot and a mechanism satisfactory to Council is to be established to ensure:
 - (a) That the E2 land will be effectively managed into the long term for ecological and conservation purposes, and
 - (b) That the requisite bushfire Asset Protection Zones will be effectively managed in accordance with the Planning for Bush Fire Protection Guidelines, 2006, or any subsequent publication.
- (2) Council believes that subdivision by community title is the best way to achieve 1 and 2 above. If the land is not to be subdivided by Community Title full details of how the above will be achieved are to be submitted with the

development application.

- (3) If the land is subdivided by community title a draft Community Management Statement, under the Community Land Development Act, is to be submitted with the development application addressing items 1 and 2 above.

Controls for Koala Food Trees on Sites 2, 3, 7, 9, 10 and 12

- (1) There is to be no loss of primary koala food trees *Eucalyptus robusta* (Swamp Mahogany) or if loss of primary koala food trees is an unavoidable consequence of the carrying out of the development, replacement plantings are to be undertaken. Full details of trees to be removed and replacement plantings are to be submitted with the development application.

Site 1: Lot 19 DP 710308 Hillside Parade

Controls

- (1) Any development application is to have regard to the following:
 - (a) Maintaining the privacy of the existing residential development to the west.
 - (b) Level of construction for dwellings to withstand bush fire attack.
 - (c) Provision of inter-allotment drainage for the adjoining existing development.

Site 2: Lot 1 DP 1130598 (Lakeside Crescent)

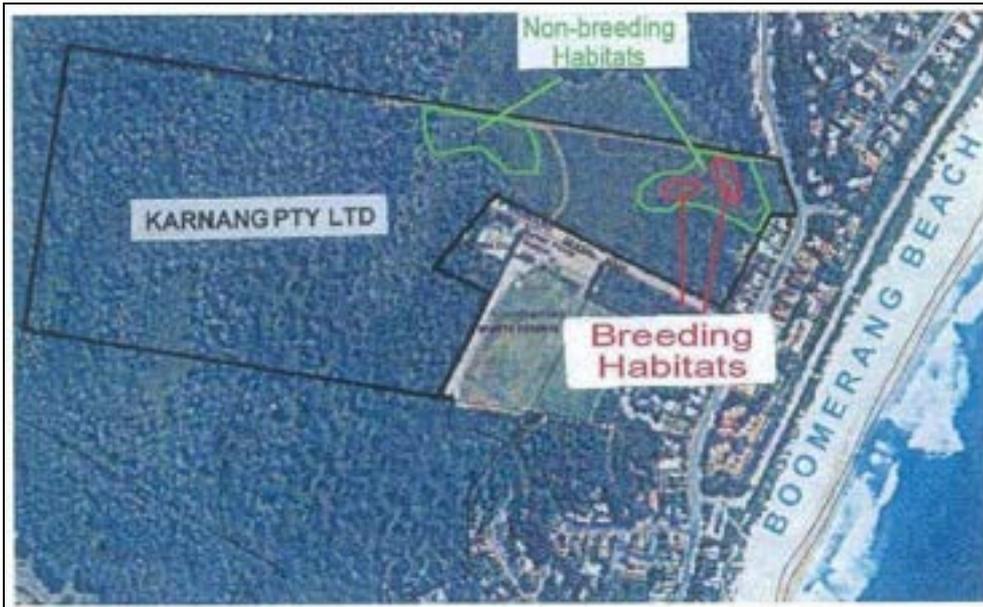
Controls

- (1) Carefully managed development may occur within the R2 Low Density Residential portion of the site.
- (2) Only clean washed sand may be used as fill material so that there is no reduction in water quality in the nearby Wallum Froglet habitat.
- (3) Any development on the site is to have regard to:
 - (a) The high ecological and bushfire constraints of the site;
 - (b) The visual and faunal link to the adjoining Booti Booti National Park created by the swamp and palm forests in the eastern part of site;
 - (c) Flooding near the southeast corner (above Peprico Place);
 - (d) The high water table.

Site 3: Lot 58 DP 731369, Karnang Drive Boomerang Beach

Controls

- (1) To ensure future development on this site has minimal impact on the surrounding threatened species habitats the following will be required:
 - (a) Use of only clean washed sand for any fill so that that there is no reduction in water quality in nearby Wallum Froglet habitat (see Image 1 below).
 - (b) Stormwater is to be directed towards Karnang Dr so that there is no discharge to the Wallum Froglet habitat to the north of the development area.
 - (c) Establishment of suitable management measures within the land zoned R2 Low Density Residential, between the development and Wallum Froglet habitat that specifically incorporates measures to prevent weeds from entering the site, reduces light and noise penetration and which clearly demarcates the adjoining E2 Environmental Conservation zone



Site 3: Lot 58 DP 731369, Karnang Drive Boomerang Beach Wallum Froglet habitat (click here to view [original image](#))

Site 4: Lots 1-5 DP 811686, Redgum Rd Boomerang Beach

This area contains a mix of swamp and dune forest vegetation. While the majority of this vegetation is of high conservation and habitat value, existing development on Lots 3, 4 & 5 DP 811686 has resulted in considerable removal of the understorey. Conventional urban densities (i.e. 8-10 dwellings/ha) are unlikely to be realised due to the presence of a number of large hollow bearing and food resource trees that form part of the Swamp Forest corridor.

The protection of significant trees is critical to the sympathetic development of this precinct.

Controls

- (1) Wherever possible the significant trees shown below are to be retained in any development. If retention would clearly compromise a reasonable development footprint then the following compensatory works are to be undertaken:
 - (a) Any hollow bearing limbs from felled hollow bearing trees are to be cut and placed in other suitable trees nearby.
 - (b) Trees of the same species as the ones removed are to be planted at the ratio of 2:1 within the boundaries of the land.



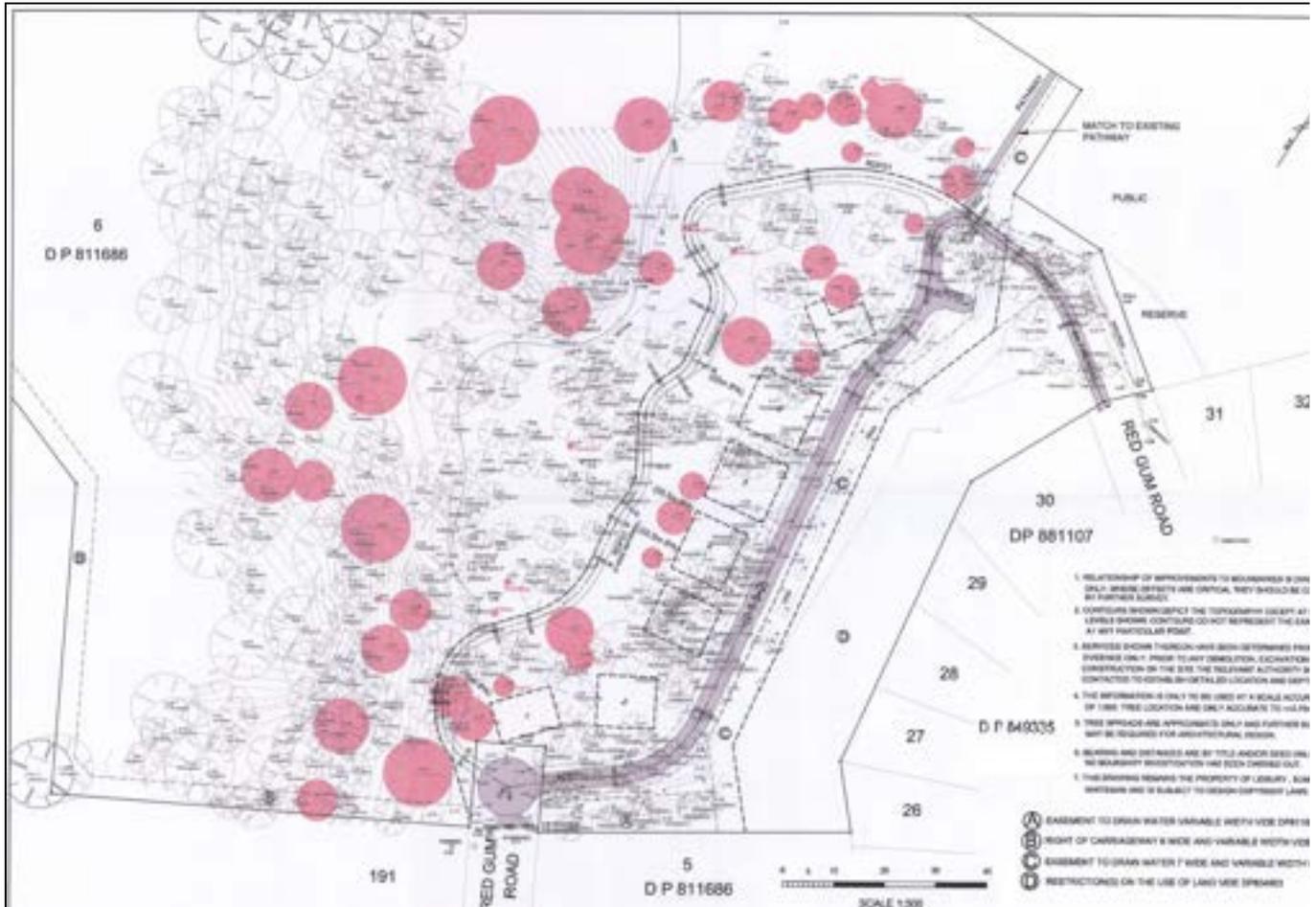
Site 4: Lots 1 - 5 DP 811686 Red Gum Road significant trees (click here to view [original image](#))

Site 5: Lot 6 DP 811686, Red Gum Rd Boomerang Beach

The main considerations in this precinct are the relationship with the adjoining National Park, bush fire risk and the retention of significant trees where possible.

Controls

- (1) Subdivision of the land is to be by community title to ensure proper bushfire management. The requisite bush fire asset protection zones are to be contained in the Association lot. A draft Community Management Statement is to be submitted with the development application to demonstrate how the APZs will be managed by the Community Association.
- (2) The development is to generally be in accordance with the concept plan contained below.



Site 5: Lot 6 DP 811686 Red Gum Road concept plan (click here to view [original image](#))

Site 6: Lot 191 DP 226108, Red Gum Rd Boomerang Beach

Controls

- (1) In any subdivision, the part of the land zoned E2 and which is not to be dedicated to the Office of Environment and Heritage is to be contained in a single lot.
- (2) A mechanism satisfactory to Council is to be established to ensure that the requisite Bush Fire Asset Protection Zones will be effectively managed in accordance with the NSW Rural Fire Service document 'Planning for Bush Fire Protection 2006', or any subsequent publication. Council believes that subdivision by community title is the best way to achieve this. However, if the land is not to be subdivided by Community Title full details of how the above will be achieved are to be submitted with the development application.
- (3) If the land is subdivided by community title a draft Community Management Statement, under the Community Land Development Act, is to be submitted with the development application addressing the bushfire management issues.

Site 7: Lot 2 DP 867899, Boomerang Drive Blueys Beach

Controls

- (1) A mechanism satisfactory to Council is to be established to ensure that the requisite Bush Fire Asset Protection Zones will be effectively managed in accordance with the NSW Rural Fire Service document 'Planning for Bush Fire Protection 2006' or any subsequent publication.
- (2) Council believes that subdivision by community title is the best way to achieve this. However, if the land is not to be subdivided by Community Title full details of how the above will be achieved are to be submitted with the development application.

- (3) If the land is subdivided by community title a draft Community Management Statement, under the Community Land Development Act, is to be submitted with the development application addressing the bushfire management issues.

Site 8: Lot 114 DP 1103145, Boomerang Drive Blueys Beach

This area comprises two distinct sections:

- the area towards Boomerang Drive which is zoned for medium density development; and
- the area towards the rear of the site which is zoned for low density residential development. This part of the site is steeper and more heavily vegetated.

Controls

- (1) Within the R3 Medium Density Residential zone, any development for multiple dwellings or residential flat buildings are to have:
 - (a) A minimum 10m setback from Boomerang Drive; and
 - (b) A maximum street frontage height of 2 storeys.
- (2) All other controls for multiple dwellings are to be in accordance with the controls contained in the [Single Dwellings, Dual Occupancies, Villas and Townhouses](#) section the Development Control Plan.
- (3) All other controls for residential flat buildings are to be in accordance with the controls contained in the [Residential Apartment Buildings, Mixed Use Development and Business Premises](#) section of the Development Control Plan
- (4) Any application for subdivision of the R2 Low Density Residential part of the land is to be accompanied by detailed information to demonstrate that Council's engineering design specifications for roads on steep land can be achieved. Based on a preliminary assessment of development proposals it may only be possible to create a small number of large lots with access via private driveways or reciprocal rights-of-carriageway.

Site 9: Lot 23 DP 537919 Boomerang Dr Blueys Beach

Whilst the R2 Low Density Residential part this precinct comprises mostly ex-grazing land, it has a history of stormwater drainage and flooding problems due to the large runoff area, steep slope and poor infiltration of Bluey's Hill. Any development of the upstream catchment area will exacerbate this problem unless appropriate measures are put in place to reduce peak flows.

Controls

- (1) Development will be approved on this site only if a stormwater management strategy is prepared which demonstrates, to Council's satisfaction, that there will be no adverse effect from increased volumes or intensity of stormwater discharge upon other downstream properties or upon Council's drainage system.

Site 10: Lot 2 DP 862876, Boomerang Drive Blueys Beach

This site is a disused quarry site located on the north side of Boomerang Drive. The site can be divided into a western half and eastern half. The more elevated western half of the site (1.76ha) has a predominantly flat topography and is separated from the low-lying eastern half by a steep embankment. Much of the site is overlain by a layer of uncontrolled fill, the full extent, nature and depth of this material and the stability of the steep embankment needs to be investigated. The site affords a critical opportunity for a north-south fauna corridor link across Boomerang Drive.

Controls

- (1) Geotechnical investigations are to be undertaken and the findings and recommendations of the investigations are to be submitted with any development application for this site.

- (2) Any future development on this site shall incorporate corridor restoration and management at the eastern end in the part of the land zoned E2. At a minimum this future corridor is to be no less than 50m wide. Full details of the restoration and ongoing management, which may include dedication to Council, of the corridor are to be submitted with the first development application for the land.
- (3) A mechanism satisfactory to Council is to be established to ensure that the requisite Bush Fire Asset Protection Zones will be effectively managed in accordance with the the NSW Rural Fire Service document 'Planning for Bush Fire Protection 2006' or any subsequent publication. Council believes that subdivision by community title is the best way to achieve this. However, if the land is not to be subdivided by Community Title full details of how the above will be achieved are to be submitted with the development application.
- (4) If the land is subdivided by community title a draft Community Management Statement, under the Community Land Development Act, is to be submitted with the development application addressing the issues above

Site 12: Lot 1 DP 862876 Boomerang Dr Blueys Beach

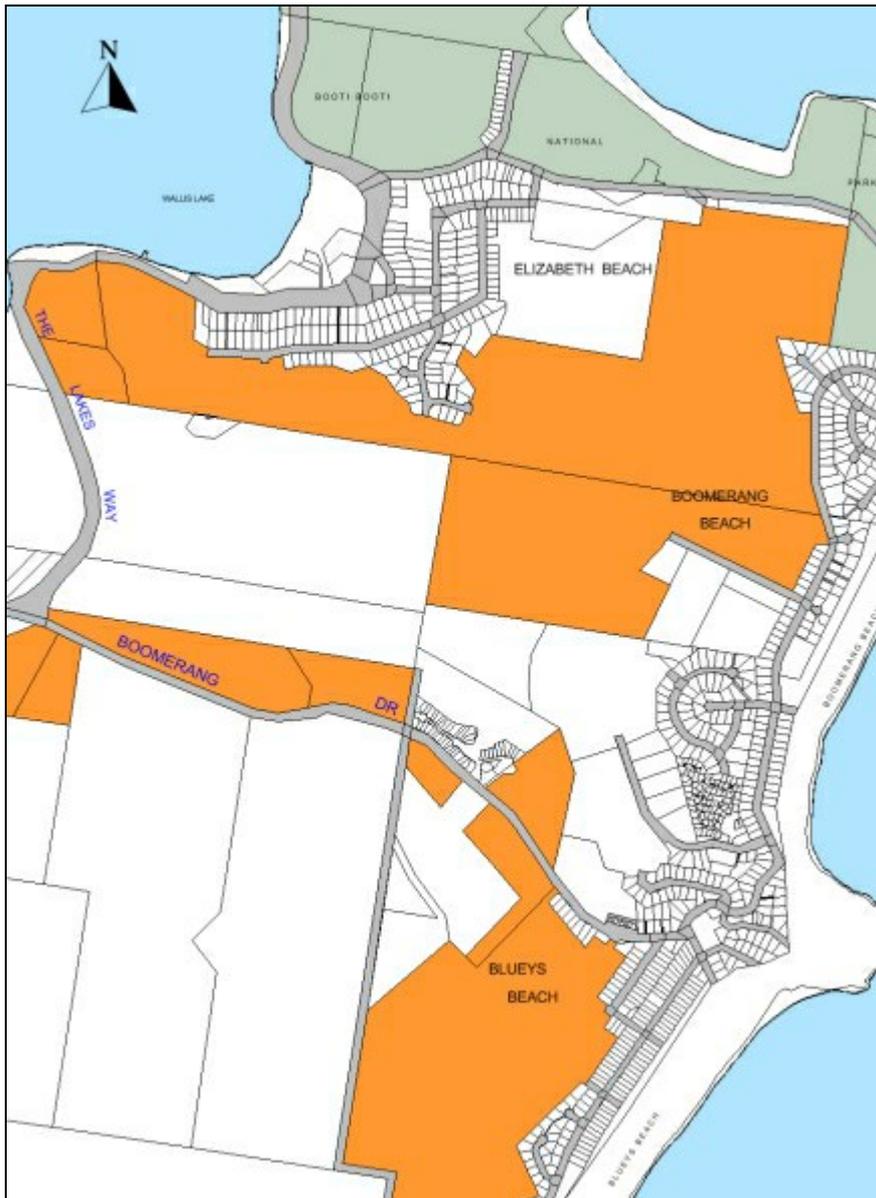
The site affords a critical opportunity for a widened north-south fauna corridor link across Boomerang Drive.

Controls

- (1) Any future development on this site shall, if not already undertaken, incorporate corridor restoration and management at the western end in the part of the land zoned E2 Environmental Conservation. Full details of the restoration and ongoing management of the corridor are to be submitted, for Council's approval, with the first development application for the land.

16.22.1.3 Specific Controls for Wildlife Corridors

This part of the DCP applies to the land shown in the plan below.



Pacific Palms - Properties affected by wildlife corridor controls (click here to view the [original image](#))

Objectives

- To ensure that critical fauna movement corridors at Pacific Palms are protected and effectively managed.

Controls

- (1) A Wildlife Corridor Management Plan (WCMP) is to be submitted for Council's approval with the development application for the land. The WCMP is to:
 - (a) Identify native vegetation communities, the habitats of native fauna (including threatened species, endangered populations and endangered ecological communities), so as to accurately define the fauna movement corridor on the land;
 - (b) Nominate on a plan all trees that are proposed to be removed. For all trees nominated for removal the habitat value and degree to which each tree contributes to a fauna movement corridor is to be assessed.
 - (c) Identify the fauna that would use the fauna corridor.
 - (d) Identify the potential impacts of the development of the land upon the habitats and fauna movement corridor.
 - (e) Having regard to items (a) – (d) above, nominate actions to mitigate the impacts of the development

upon the corridor including restoration, reinstatement or rehabilitation. Other actions may include placement of nesting boxes, refuge poles, hollows, logs, rocks or other habitat elements. A detailed plan detailing the actions shall be included with the WCMP.

- (f) Identify adequate and appropriate bushfire regimes with respect to bushfire intervals and thresholds;
 - (g) Indicate the location and style of interpretive signage to inform residents of the importance and location of the corridor/s.
 - (h) Identify the density and diversity of exotic flora species and the control and management of noxious weeds, weeds of national significance and environmental weeds;
 - (i) Identify any proposed and required tracks, trails and/ or fencing on the land and the means of establishing and maintaining such;
 - (j) Identify the means with which human access into retained native vegetation is to be managed and controlled;
- (2) Legal mechanisms, such as Community Title subdivision or s88B or s88E covenants/restrictions under the Conveyancing Act are to be put in place to prevent the following activities within the recognised wildlife corridors and core habitat areas:
- (a) the planting or introduction of non local/non native plant species,
 - (b) clearing of native vegetation
 - (c) the degradation of the natural state of flow, supply, quantity, or quality of water,
 - (d) the removal from, the introduction or disturbance of any soil or rocks or the construction of new dams,
 - (e) the accumulation of rubbish or the storage of any materials,
 - (f) the removal of any timber including fallen timber.
- (3) Asset Protection Zones (APZ) are to function as transitional zones and buffers between development and recognised wildlife corridors and core habitat areas. In this regard, such areas shall be managed to meet the APZ formation and management requirements of the NSW Rural Fire Service document 'Planning for Bush Fire Protection 2006' or its successor. The width of APZs are to be reduced as much as possible by increasing the level of construction of dwellings under AS 3959 -2009. Specifically:
- (a) The removal of native trees shall be minimised. Tree removal for APZ purposes shall be designed to achieve preferential retention of the more important habitat tree species and features (such as koala food trees, glossy black-cockatoo food trees, hollow-bearing trees, old-growth trees, special nectar trees). Pruning shall be utilised to avoid direct removal, wherever possible and particularly for any hollow-bearing trees that are of reduced safe useful life expectancy but which can be managed to assist their retention and longevity (i.e. selective canopy reduction in accordance with arboricultural standards);
 - (b) Reduction and suppression of the groundcover vegetation in the APZ shall be conducted in a manner that protects retained tree cover and sensitively protects rocks, logs and other features of significance for fauna, protecting and retaining clumps of native groundcover vegetation where possible; and
 - (c) APZ limits shall be clearly identified on the land and maintained in accordance with the approved Bush Fire Assessment Level.

16.22.2 Blueys Beach Neighbourhood Centre Development

General Design

Objectives

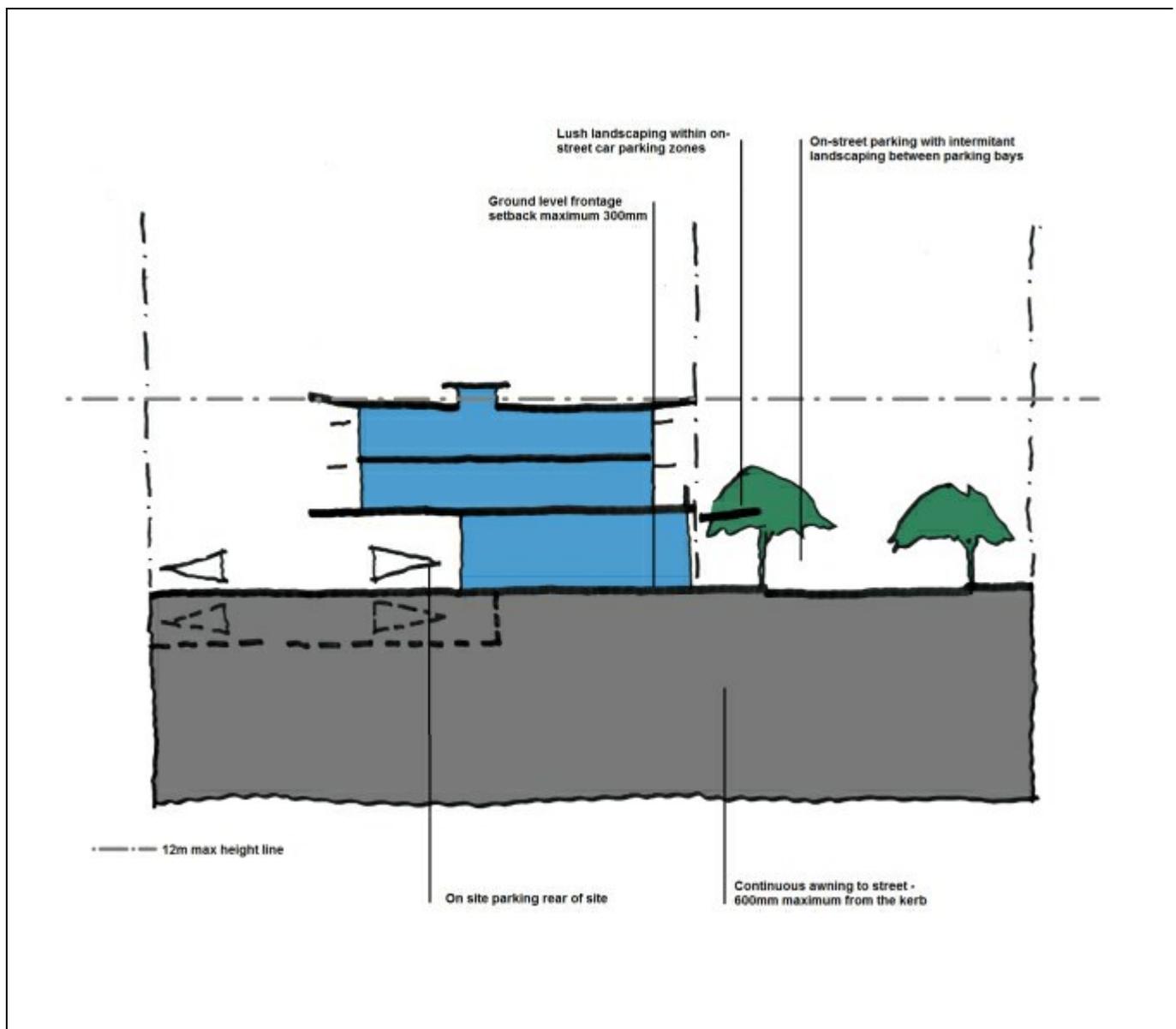
- To create a mixed use business area that will provide for a vibrant neighbourhood centre that reflects the existing village character.

Controls

- (1) New development on the southern side of Boomerang Drive is to have a maximum setback of 300mm from the

primary street frontage.

- (2) New development and redevelopment on the northern side of Boomerang Drive is to have a setback that aligns with the adjoining development.
- (3) A continuous awning is to be provided along the Boomerang Drive frontage. The awning is to be setback a maximum of 600mm from the kerb edge for land on the southern side of Boomerang Drive; and be aligned to existing awnings for land on the northern side of Boomerang Drive.
- (4) All car parking, loading and unloading areas are to be provided behind the buildings/structures for developments located on the southern side of Boomerang Drive.
- (5) The building design should allow for casual surveillance of public areas and avoid creating blind corners in pathways, arcades, stairwells, hallways and car parks.
- (6) Provide clear lines of sight between entrances and the street ; direct entry to any ground floor units from the street and separate well defined entrances to residential and non-residential premises.
- (7) Minimise the visual impact of signs and lighting.



Blueys Beach Neighbourhood Centre General Building Design (click here to view [original image](#))

Landscaping and Open Space

Objective

Seven Mile Beach Site Location Plan (click here to view the [original image](#))

16.23.1 Background / Aims

This section references the Conservation and Land Use Management Plan (CLUMP) and Environmental Validation Report which are to be used to guide the development of the site. These will also be the tools to assess development applications and to monitor ongoing performance.

The aim of this plan is to set out the type, form and location of development that can be undertaken on the land so that the development respects and integrates with the significant natural features of the land and which will provide a cohesive and pleasant living environment based on sound urban design principles.

In achieving the overall aims the plan:

- broadly describes the environmental and cultural values and features of the land and identifies the features that are to be managed and protected,
- describes the urban design principles that have been applied when determining the built form for the land,
- describes the character to be achieved for each development precinct on the land,
- sets out the architectural and built form controls for the land and the materials palette that is to be used,
- identifies the specific layout of the development, the servicing and infrastructure that will be installed and the landscape treatment,
- identifies the environmental enhancement and rehabilitation activities that are to be undertaken as part of the development, and
- prescribes the ongoing environmental performance and monitoring requirements.

16.23.2 Seven Mile Beach and Janies Headland

The site has a unique location, nestled amidst beach, lake and forest.

Located approximately 3 hours north of Sydney and 1.5 hours north of Newcastle, the site provides opportunity for resort style living within a distinct integrated and managed eco-residential and conservation environment.

Seven Mile Beach is accessed off The Lakes Way, a scenic stretch of road which diverges east from the Pacific Highway, connecting Bulahdelah, Forster and Taree via the scenic attractions of the Myall Lakes, Seal Rocks, Pacific Palms (Blueys Beach, Boomerang Beach and Smith's Lake), Wallis Lake, Green Point and Cape Hawke.

The site enjoys the amenity of water recreation at both Seven Mile Beach to the east and Wallis Lake to the west, whilst offering the natural beauty of the surrounding Booti Booti National Park which stretches from the north east, along the coast and to the south of the site.

Within the Great Lakes Council Area the site forms part of the South Forster Precinct which includes Cape Hawke, Booti Booti National Park and Wallis Lake. The site is approximately 69 hectares of which over 54% is being set aside for conservation.

Within close amenity to Forster township, 5km north, and South Forster administration and shopping centre, 1km north, the local bus service could be easily extended to provide public transport opportunities to the site, particularly as the planned adjacent urban precinct develops.

Existing infrastructure services and facilities to sustain the increase in population due to both the development of this site and the surrounding future residential sites are currently available for the site. These include a high school less than 1km north with playing fields and additional area set aside for the construction of a primary school.

The area capable of sustaining development has been defined with regard to existing site disturbance, past approvals and ecological management recommendations.

The proposed innovative development at Seven Mile Beach provides a range of opportunities for integration of the future built environment in an ecologically sensitive managed fashion with surrounding and enhanced conservation areas, adjacent a magnificent beach and in a national park.

Booti Booti National Park surrounds the site from north of the adjacent sewer works tertiary treatment plant, to the eastern and southern edges of the site.

A natural wetland conservation area (SEPP 14) exists adjacent to Wallis Lake and further area is currently under consideration on adjacent land, between two proposed areas of future residential development.

A northern conservation area is set aside as part of the natural sewer works buffer and provides an east-west fauna connection across the northern portion of the site. The site will conserve and maintain a fauna access connecting the beach to Wallis Lake and the SEPP 14 wetlands on the western side of The Lakes Way.

Extensive East - West fauna access is maintained further south of the site where the National Park boundary crosses The Lakes Way.

A southern conservation area provides a natural buffer to the National Park whilst ensuring vital habitat is retained for native fauna.



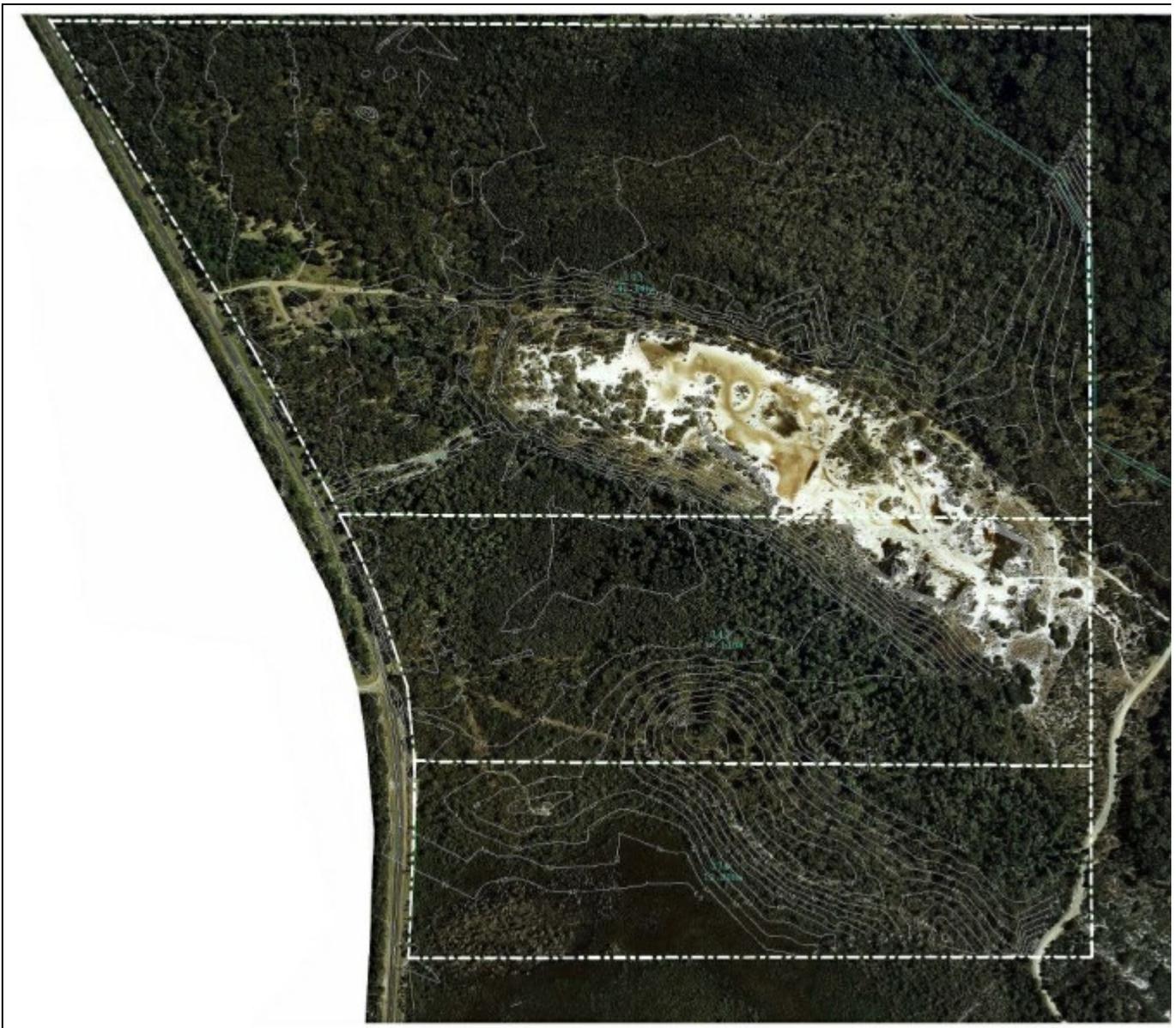
Seven Mile Beach Site Locality (click here to view [original image](#))

Relocation of the existing access from The Lakes Way provides a single vehicular entry and exit point for visitors and residents, whilst minimising impact to passing traffic with the addition of a roundabout. This will form a marker for the new southern boundary of the town.

Public access to Seven Mile Beach is retained off The Lakes Way just south of the proposed development. The road, known as Scenic Way, is within the National Park with the exception of one portion encroaching on the development site. Provision for a right of way/easement is to be provided across the encroachment, to ensure continual public beach access in accordance with the State Environmental Planning Policy No 71 (SEPP 71).

In addition, the disturbed area between the beach road and the site boundary is to be revegetated with the existing native flora, to improve the visual amenity of the beach access.

These constraints in conjunction with ecological studies across the site have formulated the development boundaries.



Seven Mile Beach Constraints Plan (click here to view the [original image](#))

Site Data:

The Seven Mile Beach site is currently on three separate titles:

LOT 103 : 40.46 ha

LOT 142: 16.11 ha
LOT 178: 12.20 ha
TOTAL AREA: 68.77 ha

The proposed development area is predominantly flat and confined to the least environmentally sensitive areas.

The development area of 31.30ha, including buffers, representing only 45.6% of the total site area.

The contour plan shows the distinct cut of the previous sand mine in the central denuded area at approximately RL 6.0m. In addition it is noted that during the history of the quarry, sands have been redistributed creating high edges to the cut. The excavated base of the old quarry is close to the water table and will require filling and regrading.

The land to the east of the sand quarry and adjacent the National Park forms quite a prominent high point on the site at up to RL 9.5m

A sand dune ridge rising to an RL of 9.5m is evident in the southern conservation precinct.

The land rises to the north east approaching Janie's Headland. The land becomes fairly steep above RL 6.5m at the point where the sewer works easement crosses the site. An existing fire trail runs north along this easement line and will be incorporated into a managed bushwalk/cycle trail network.

An aboriginal scar tree discovered by the Aboriginal Land Council, was specifically defined on site in the north east portion of the site and is to be retained with a 20m buffer. Setbacks around the scar tree and habitat trees will ensure these trees are retained with minimum disturbance during construction.

The tree survey gives no indication as to the condition or health of the trees, and in some instances a tree has been noted, during one of the numerous site visits, to be removed due to its potential hazard.

As the Cabbage Tree Palms are easily transplanted, any required to be removed will be replanted elsewhere on the site so that numbers remain the same. Therefore, they are not noted on the drawings.

16.23.3 Variations to the DCP

Variations or non-compliances with this section of the DCP are permitted provided that:

- (1) the amendments will satisfy the objectives of the zone in the LEP,
- (2) the amendments relate to building changes and locations, lot dimensions, proposed uses or engineering or construction details,
- (3) there will be no increase to the density or scale of development on land to which this DCP applies,
- (4) there will be no increased or additional adverse impacts on the environment including vegetation and habitat for fauna,
- (5) there will be no increase in the likely demand for, or loss of, water, and
- (6) there will no increase to the bushfire hazard.

16.23.4 Conservation and Land Use Management Plan (CLUMP)

A Conservation and Land Use Management Plan (CLUMP) has been prepared to give considerable background to the environmental features of the land and to outline development principles.

For example, the CLUMP provides for:

- The identification of detailed conservation strategies to manage the land in perpetuity.

- The identification of clear character statements.

The CLUMP also deals with the following matters:

- The conservation values of the site including vegetation communities, threatened species, natural wildlife corridors, riparian matters and other natural features of the site.
- The scale of any development and it's integration with existing landscape, and
- phasing of the development.
- The implementation of the development together with the various obligations for conservation, maintenance and protection of the environment.
- The verification that requirements, obligations and environmental targets and outcomes are achieved and maintained during the life of the development.

Reference is to be made to the CLUMP in the preparation and assessment of development applications for the land. A copy of the CLUMP can be obtained by contacting Council.

16.23.5 Planning Principles

Development proposals for the land will need to demonstrate compliance with the following Planning Principles and Planning Strategies:

Planning Principles and Site Planning Strategies

Planning Principle	Site Planning Strategy
To protect ecological, cultural and economical values	<ul style="list-style-type: none"> • Provide curtilage for places and objects of Aboriginal Heritage. • Provide interpretive facilities to inform the community and visitors of the areas natural and cultural features. • Provide public access to coastal areas whilst ensuring protection of cultural and ecological values. • Creation of cultural focus within a commercial and community precinct. • Provide commercial opportunities to supplement and fulfill current demand. • Provide a staged program for delivery of community facilities and infrastructure. • Identification of a sites ecological features and establishment of conservation zones and measurements to protect them. • Application of Ecologically Sustainable Development (ESD) principles. • To ameliorate degraded environments to provide additional opportunities for conservation and habitat connectivity including the preparation of an 'Eastern Habitat Corridor Restoration Plan' and a 'Bushland Management Plan'. • Hollow bearing trees are to be retained as shown on the Tree Survey Plan. Any hollow bearing trees to be removed are to be done so in accordance with the regime set out in the CLUMP. This includes relocation of the hollows to the conservation zones and replacement with 4 nesting boxes for every hollow bearing tree removed. • A 25-30m buffer zone is to be provided around the scarred tree. This buffer may be reduced to 20m if appropriate fencing and interpretive signage is installed and approved by Forster Local Aboriginal Land Council.
Respond to potential of Acid Sulphate soils	<ul style="list-style-type: none"> • An 'Acid Sulphate Soils Management Plan' is to be implemented for any excavations below the water table

<p>Respond to the environment and character of the site and surrounding area.</p>	<ul style="list-style-type: none"> • Access network and services to permeate around the natural site features including canopy trees, generally in accordance with the landscape concept.
<p>Implement water sensitive design measures to ensure water quality and stormwater discharge.</p>	<ul style="list-style-type: none"> • Minimise 'built-upon' area of the developed site by minimising road widths, maximising 'soft' landscaping and use of porous surfaces where appropriate. • Maximise rainwater reuse on the site by providing a minimum 5000L rainwater tank for each dwelling by maximising the use of rainwater for grey water usage and landscape irrigation. • Provide a series of surface stormwater collection points to act as temporary detention zones. • Utilise the high infiltration capacity of the soil to recharge groundwater from detention zones, landscaped areas and bottomless surface inlet pits. • Stormwater overflows to be directed to low-lying undeveloped areas to the north and south. • Construct elevated roadways over designated overland flow paths rather than through culvert crossings. • Minimise the effect of the development on the quality of receiving waters in Pipers Bay through the use of grassed swales, bio retention trenches, gross pollutant traps and sand filters. • Reduce the potential for flooding of the developed site and adjacent properties by restricting runoff to pre-development runoff rates, provide overland flow paths and freeboard between habitable floor levels and predicted 100 year ARI flood levels. • An improvement in the existing surface and ground water quality discharging from the land is to be achieved. • A post development surface and ground water quality monitoring program for a period sufficient enough to take into account varying rainfall conditions is to be implemented.
<p>Respond to the environment and character of the site and surrounding area.</p>	<ul style="list-style-type: none"> • Natural features and identified vegetation to be protected to ensure that the local character is predominately maintained. • Existing tree canopy to remain as a dominant feature with supplementary landscaping and arboreal connections as required. A Squirrel Glider monitoring and tracking study shall be undertaken prior to the determination of a development application. • Vistas to natural features provided from community areas. • Subdivision pattern and streetscape to be dictated by the natural site features and the desire to provide a diversity of housing lots. • Conservation of flora and fauna through the provision of habitat corridors, open space, asset protection zones, and the retention where possible of identified canopy trees within development zones.

<p>Establish a development framework to realise DCP principles.</p>	<ul style="list-style-type: none"> • A legal structure to be developed, which incorporates codes for control and siting of buildings to protect natural features and identified vegetation. • A community management scheme to be implemented to manage community property, natural hazards and fauna habitat. • Easements to be provided across private land in favour of the community association to maintain asset protection zones and fire trails. • A Community Management Plan to be prepared to coordinate and fund the maintenance of vegetation, ecology, landscaping, bushfire protection, tree protection, archeology and infrastructure. • Provide for at least 10% of housing to be adaptable housing. • Provided disabled access facilities in relation to parking, walkways and building design.
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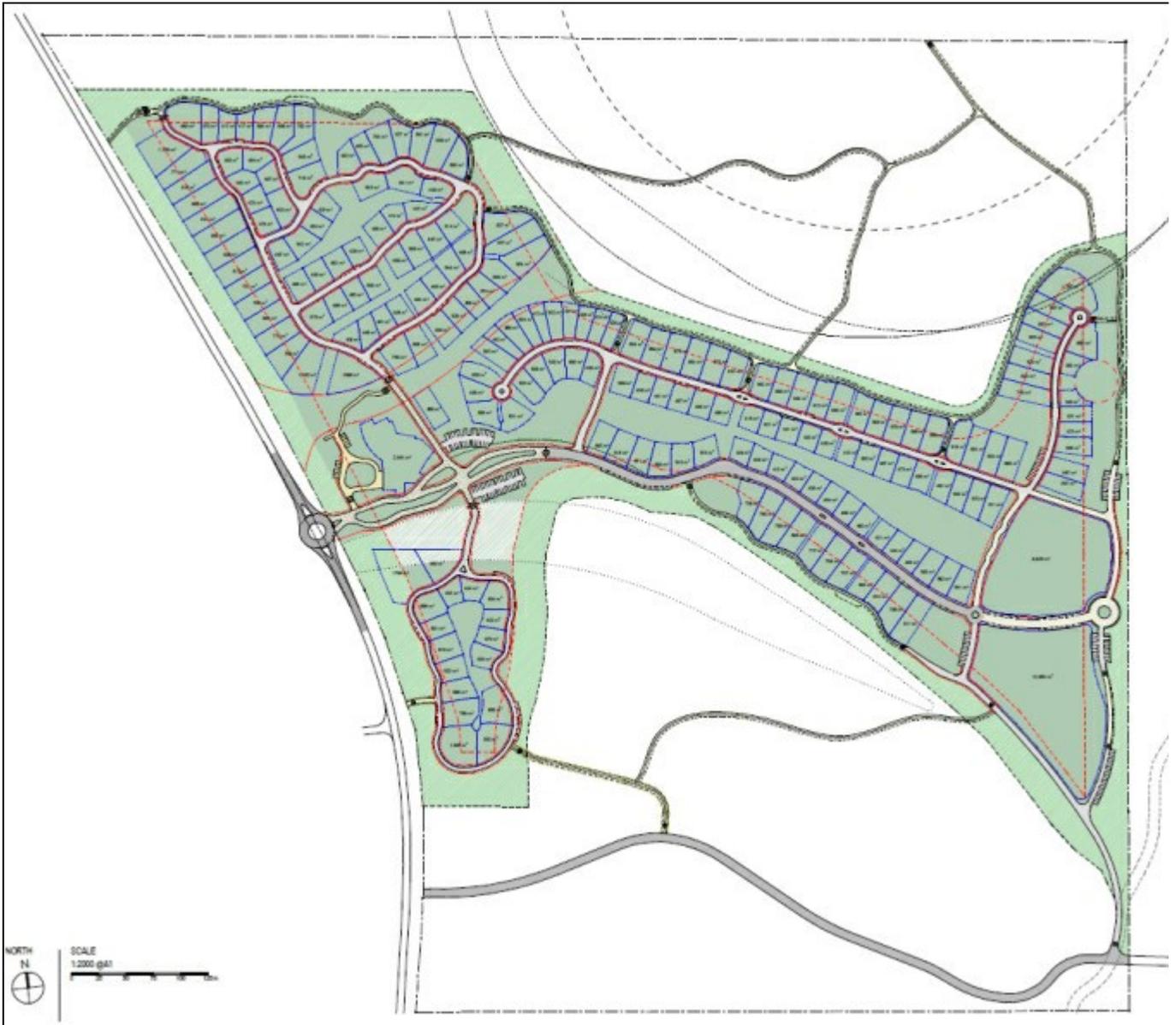
16.23.6 Site Concept

Site Master Plan



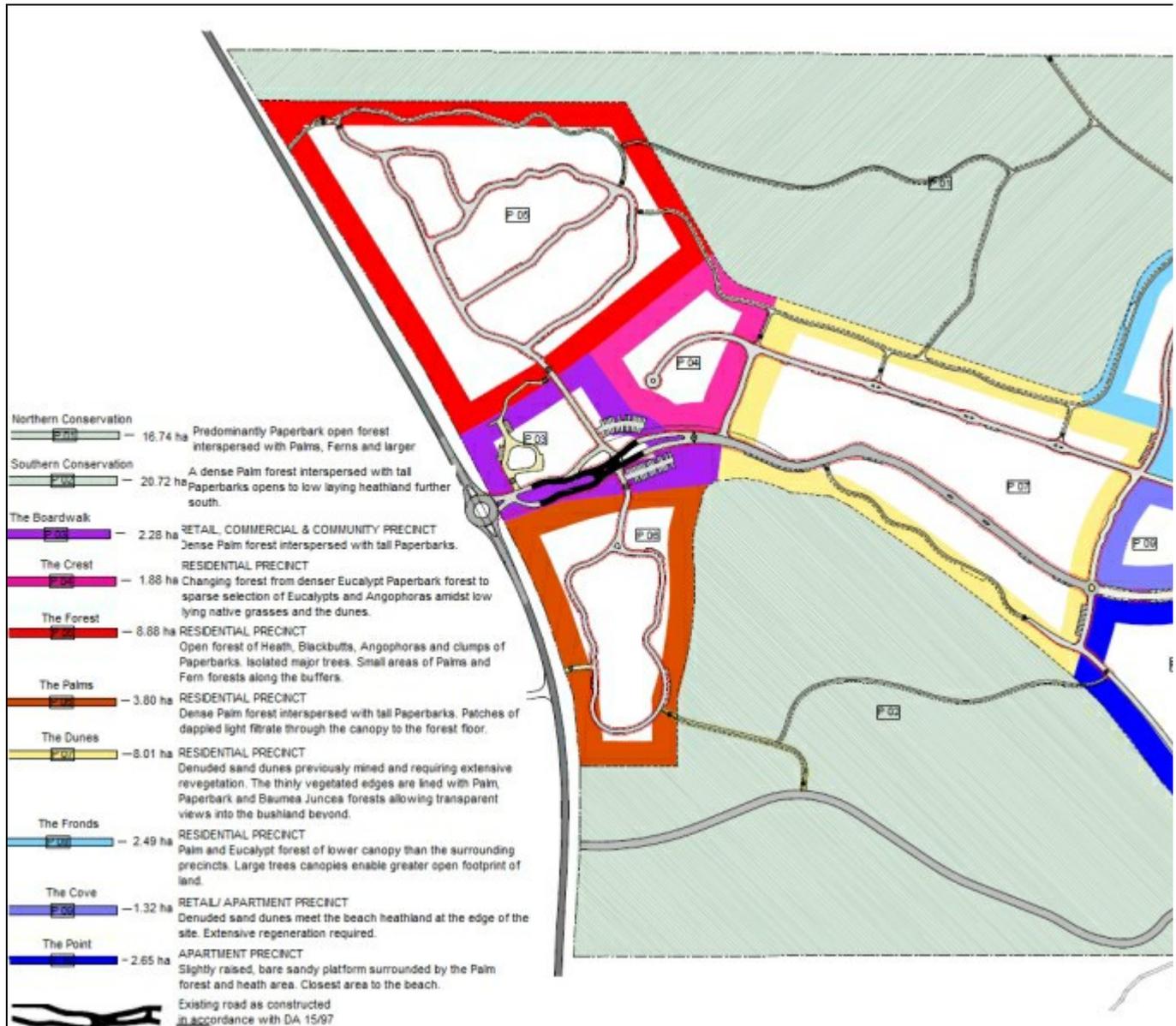
Seven Mile Beach Site Master Plan (click here to view the [original image](#))

Lot Plan



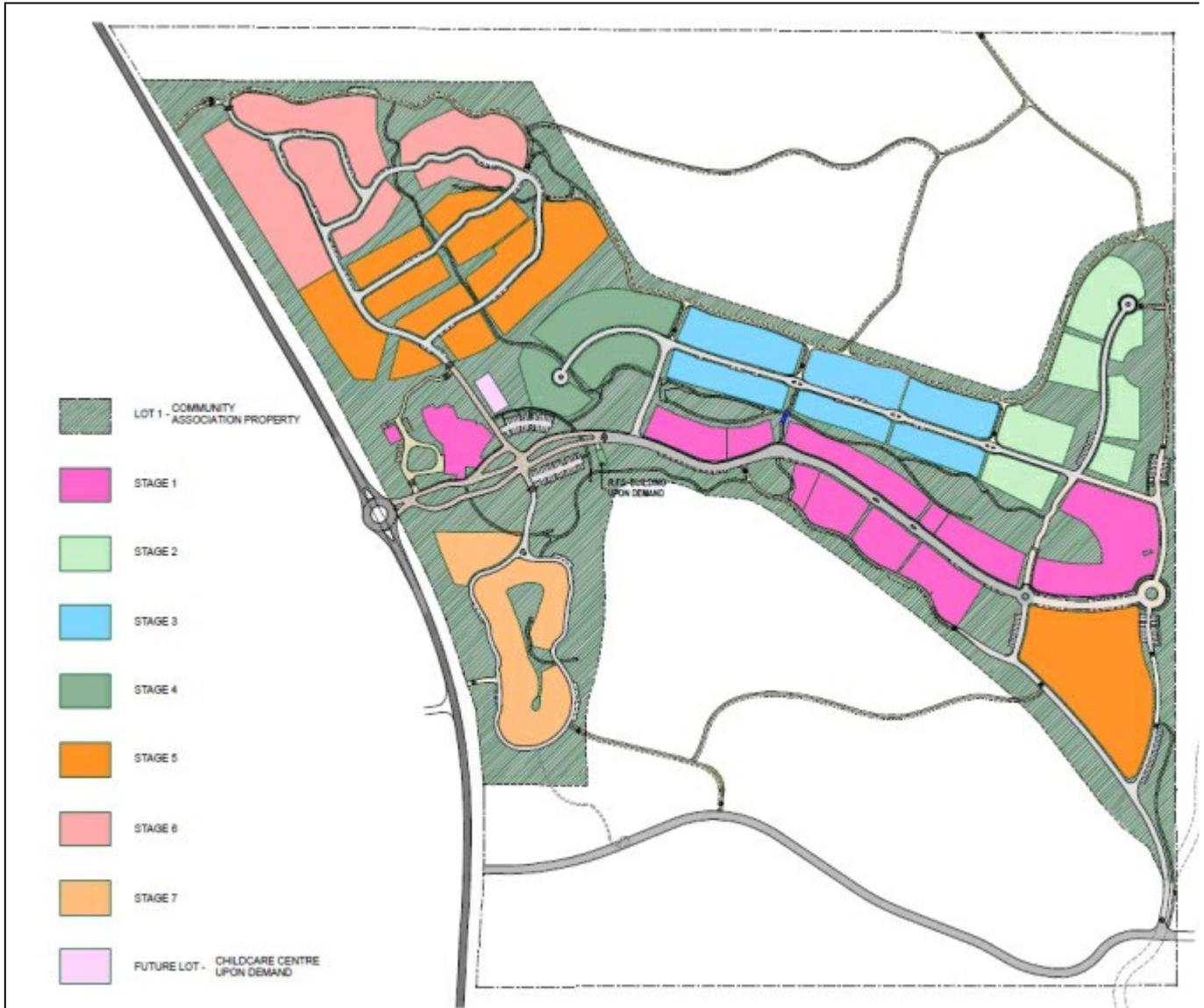
Seven Mile Beach Lot Layout Plan ([click here to view the original image](#))

Precinct Plan



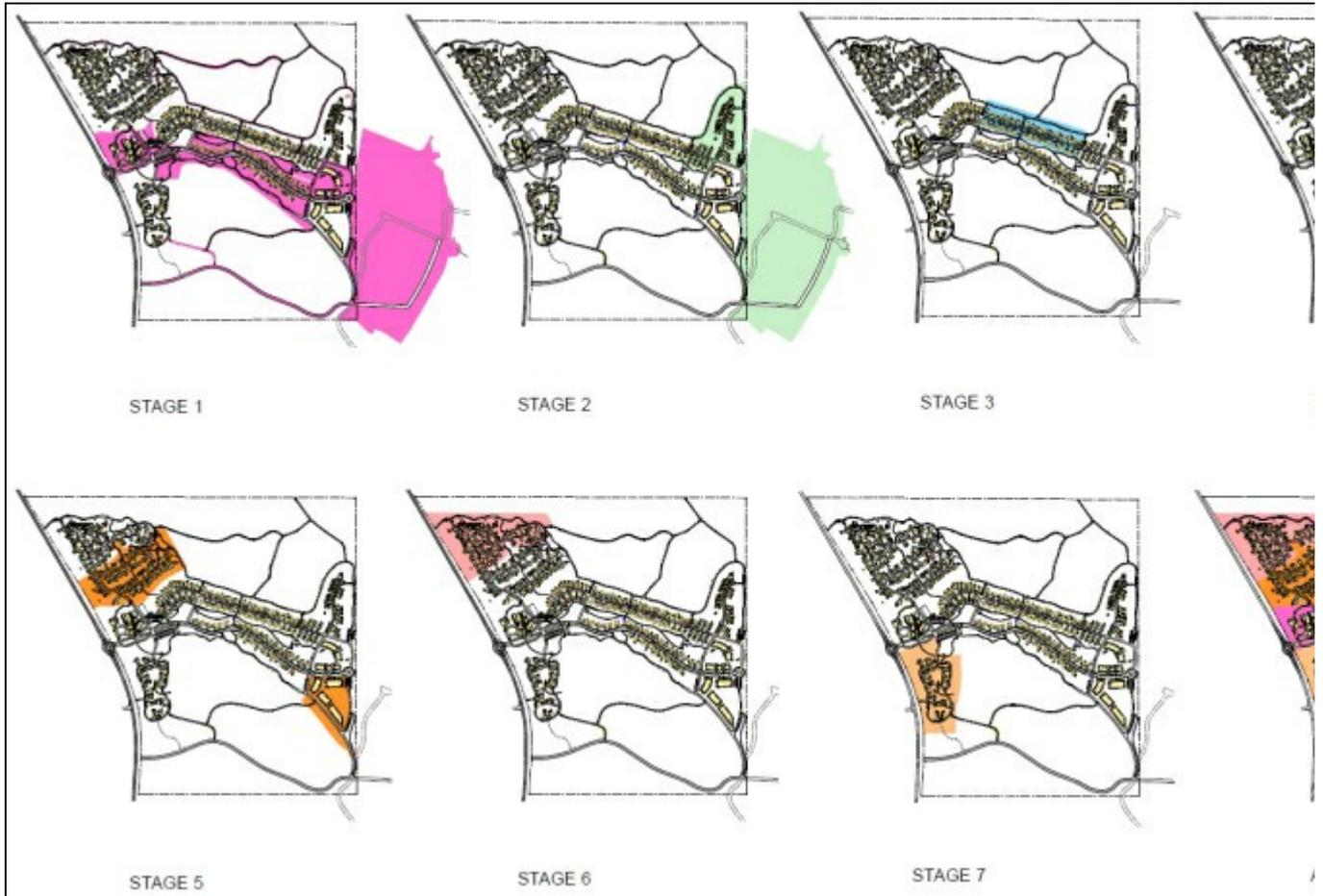
Seven Mile Beach Precinct Plan (click here to view the [original image](#))

Development Staging Plan



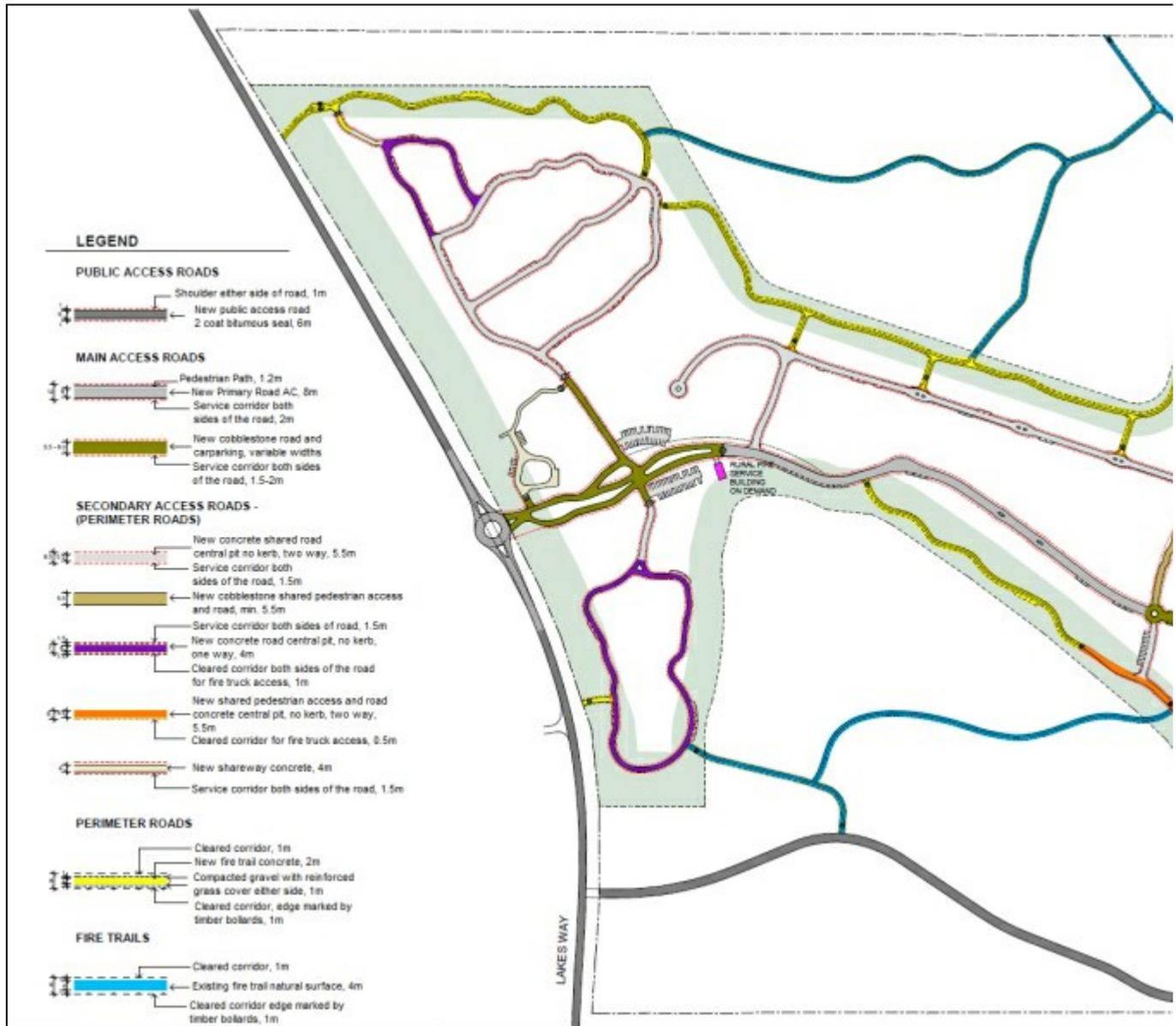
Seven Mile Beach Development Staging Plan ([click here to view the original image](#))

Construction Staging Plan

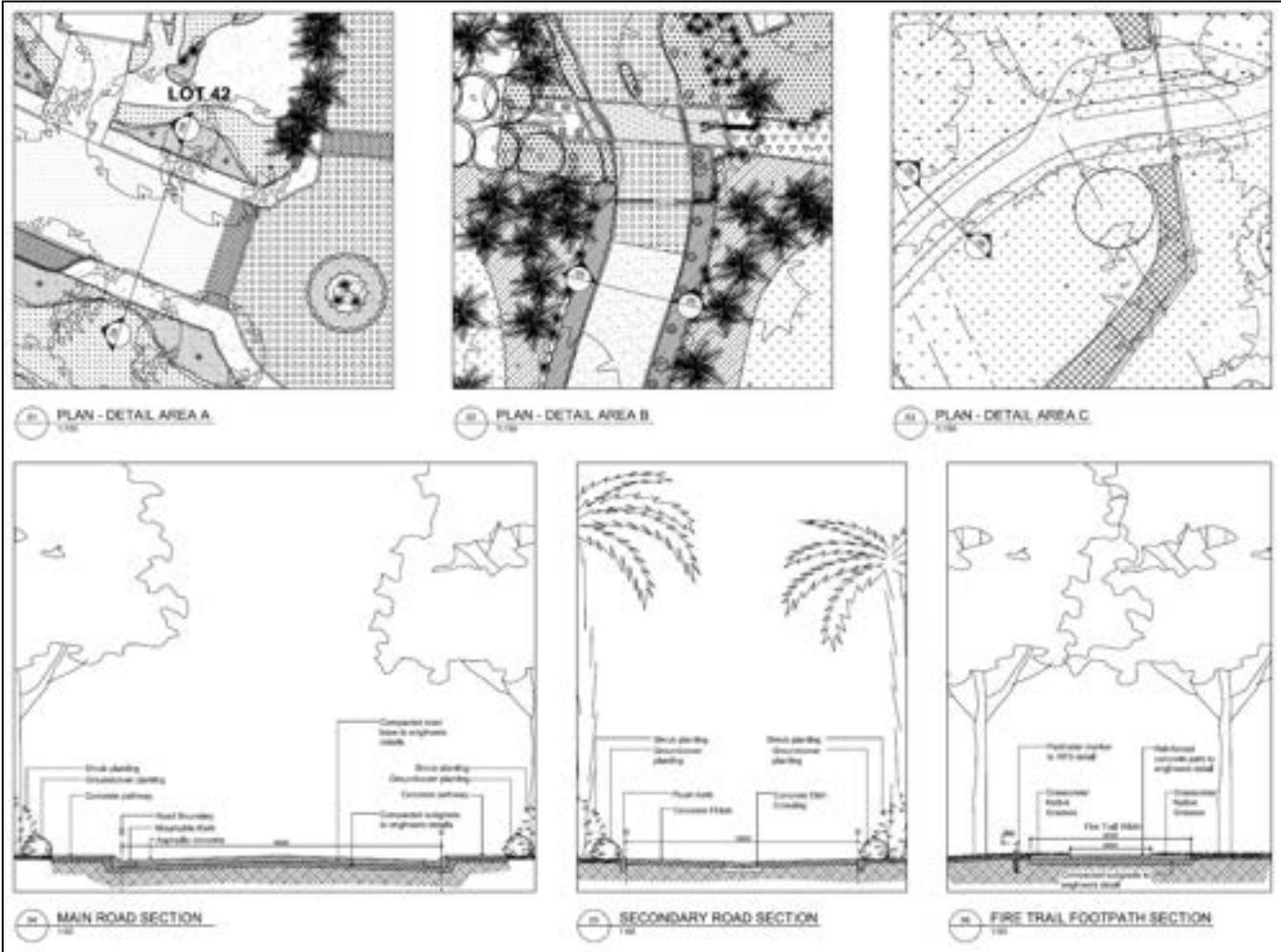


Seven Mile Beach Construction Staging Plan ([click here to view the original image](#))

Roads Plan

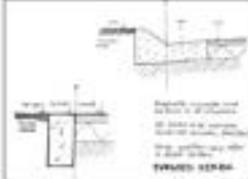
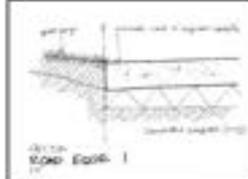
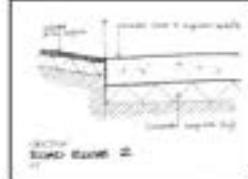
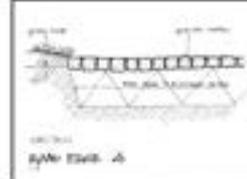


Seven Mile Beach Roads Plan (click here to view the [original image](#))



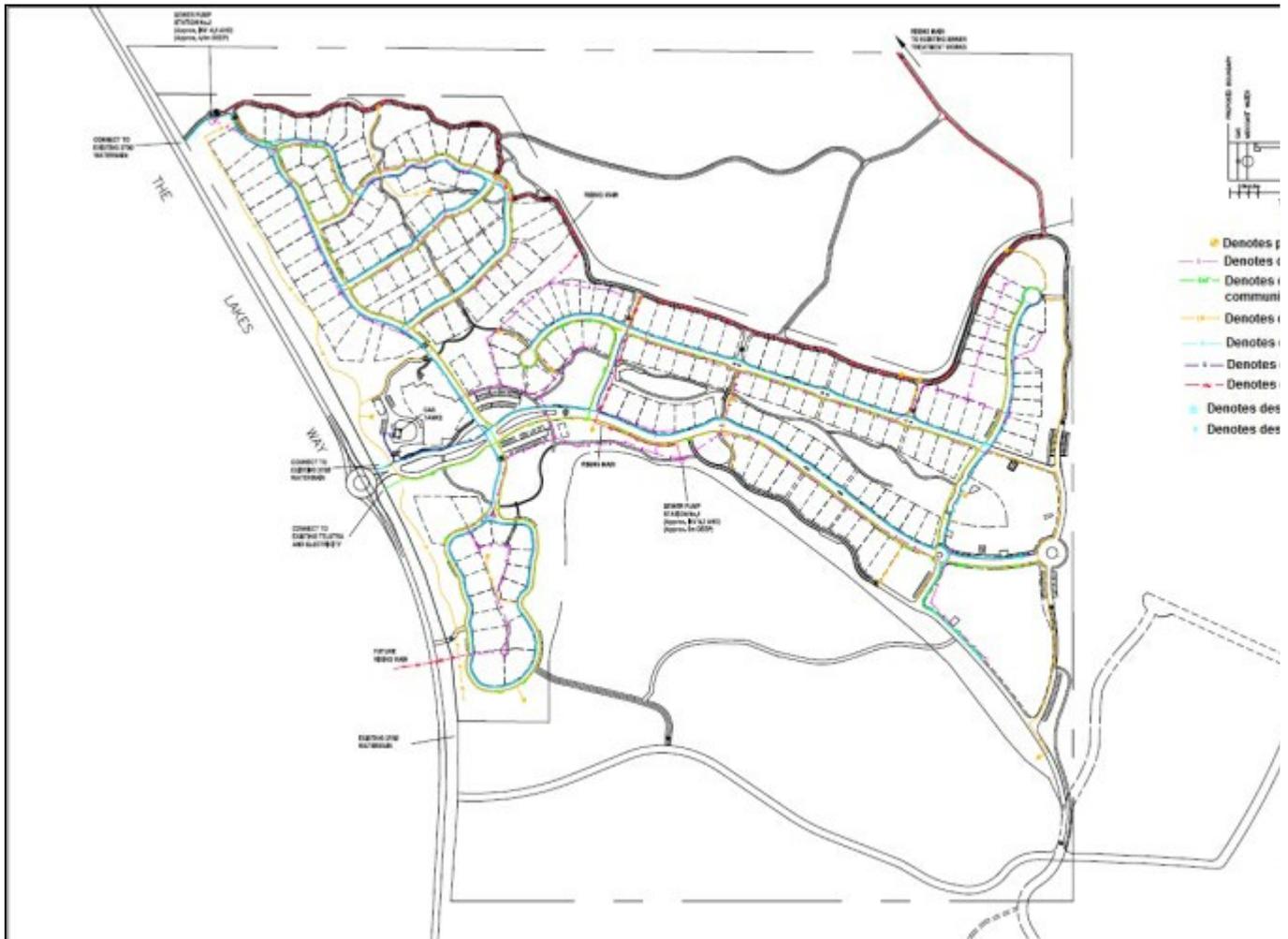
Typical road plans - road treatments (click here to view [original image](#))

ROAD TREATMENTS

 <p>A similar treatment will be applied to the main access road to soften the vista, with an asphaltic concrete pavement and low profile cut over kerb.</p>	 <p>Dense low growing plants will be installed in the islands and road verges to ensure that the road edge is softened while pedestrian safety is maintained.</p>	 <p>The hierarchy of the road system is demonstrated where the kerb will recede when turning onto the secondary road.</p>	 <p>Streetcape planting contains a combination of native canopy trees for shade and clusters of understory planting to create a less formal road edge.</p>
 <p>On the secondary roads where the concrete meets turf, low standing bollards will be installed to discourage vehicles from parking on the grass verge.</p>	 <p>Five materials and flush kerbs will have a minimal visual impact on the roadside verge of driveways.</p>	 <p>Residential precinct entries will have automatic gates to restrict entry to only residents and their guests, and traffic volumes in residential streets will be minimised.</p>	 <p>Variations in residential roadside planting will function as a visual property screen and add roadside interest or open up to a new vista with areas of turf.</p>
 <p>Simple kerb forms will be developed to assist with minimising the visual impact of the road edge. As required road drainage will be engineered with standard kerbs, gutters and pit entries.</p>	 <p>Secondary road system edge detail.</p>	 <p>Secondary road driveway junction detail.</p>	 <p>Cobble road detail on the eastern side of the site.</p>
 <p>Typical roadside parking bay with unit pavers laid in stretcher bond pattern visually separating the parking zone from the road carriageway.</p>	 <p>Paving detail plan at junction of parking bay band line and road edge.</p>	 <p>Paving detail at the end of parking bays where the concrete footpath meets the road.</p>	 <p>Paving detail as a traffic calming device using unit pavers laid in a stretcher bond pattern running across the road.</p>

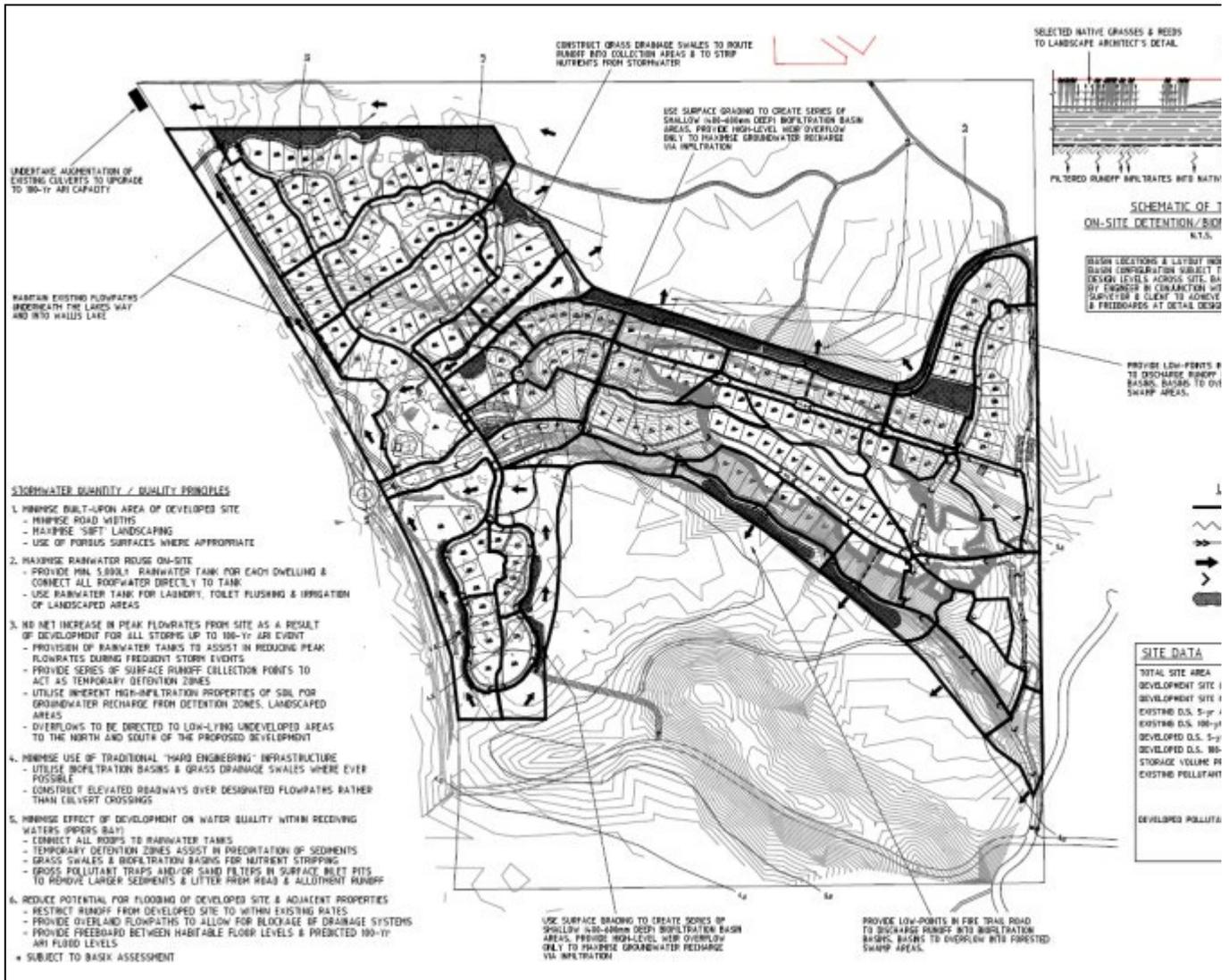
Typical road plans - road treatments (click here to view [original image](#))

Infrastructure Plan



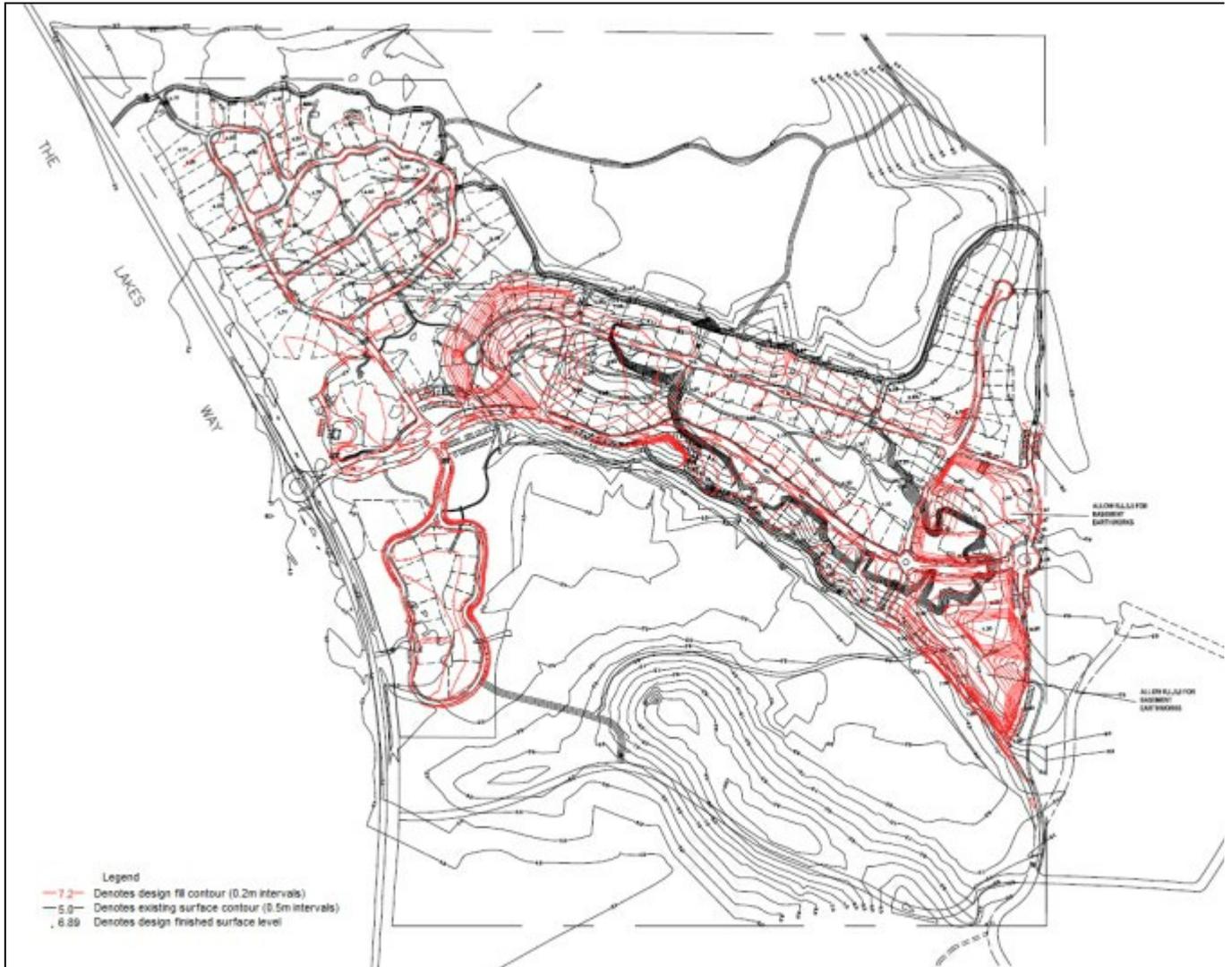
Seven Mile Beach Infrastructure Plan ([click here to view the original image](#))

Stormwater Master Plan



Seven Mile Beach Stormwater Master Plan (click here to view the [original image](#))

Regrading Plan



Seven Mile Beach Site Regrading Plan ([click here to view the original image](#))

Landscape Master Plan



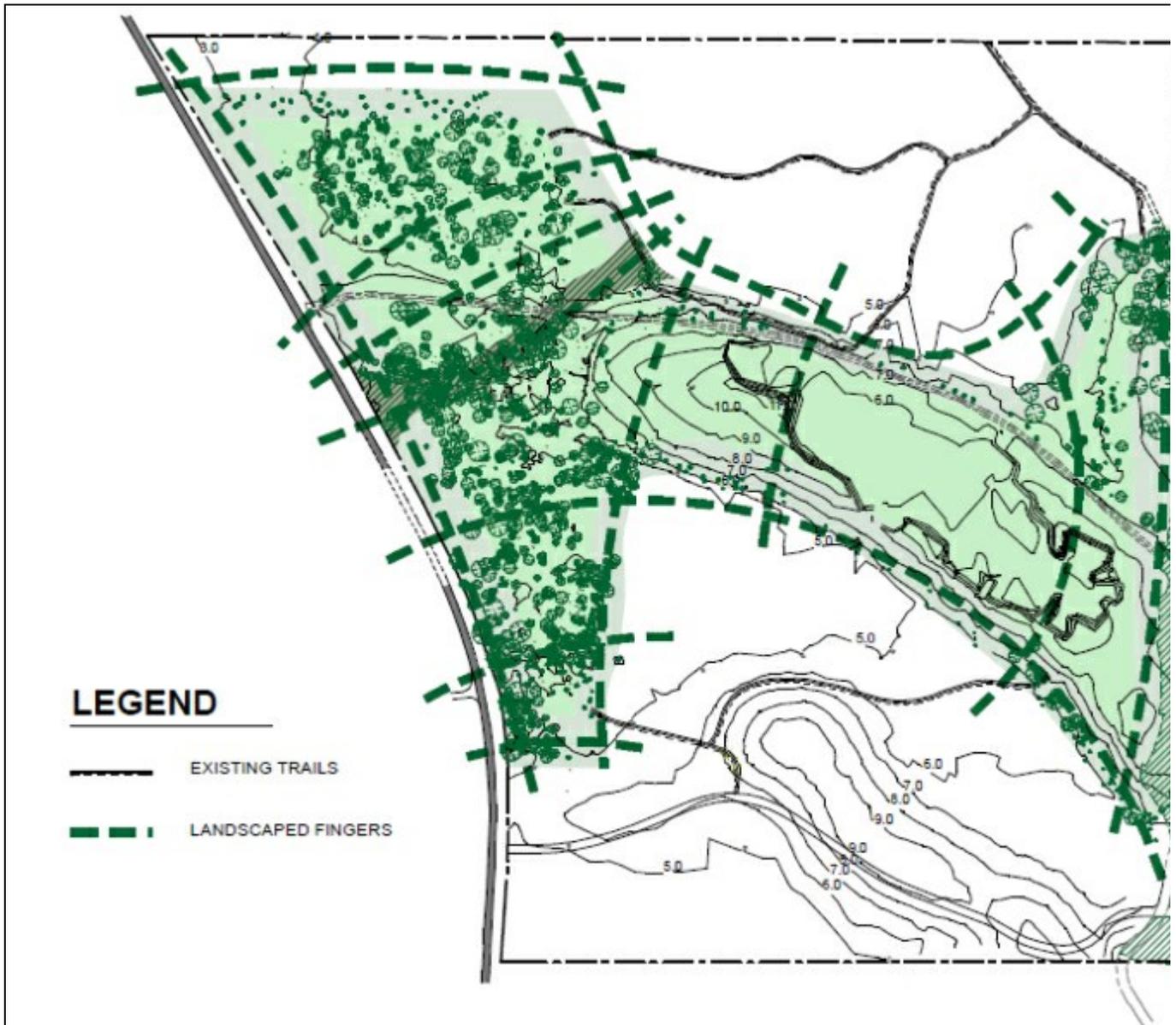
Seven Mile Beach Landscape Master Plan ([click here to view the original image](#))

Fingers of landscaping permeate the development area creating both aesthetic buffers between precincts and visual connections of outdoor spaces across the site.

Many of the landscaped fingers occur within the natural environment. They represent the edges of the northern and southern conservation precincts and the required Squirrel Glider paths across and adjacent to the site.

The remaining landscaped fingers are proposed new landscaping in the form of varying outdoor spaces such as parks, pools, creek beds and general planting. These soften the hard edges of the Asset Protection Zones (APZs) whilst creating pockets of open space for recreation, relaxation and contemplation.

The landscaped fingers provide opportunity for meandering pedestrian paths across the site, through vegetated corridors providing shade and a visual aesthetic. They are both the distinction and the connection between precincts of varying vegetation and character.



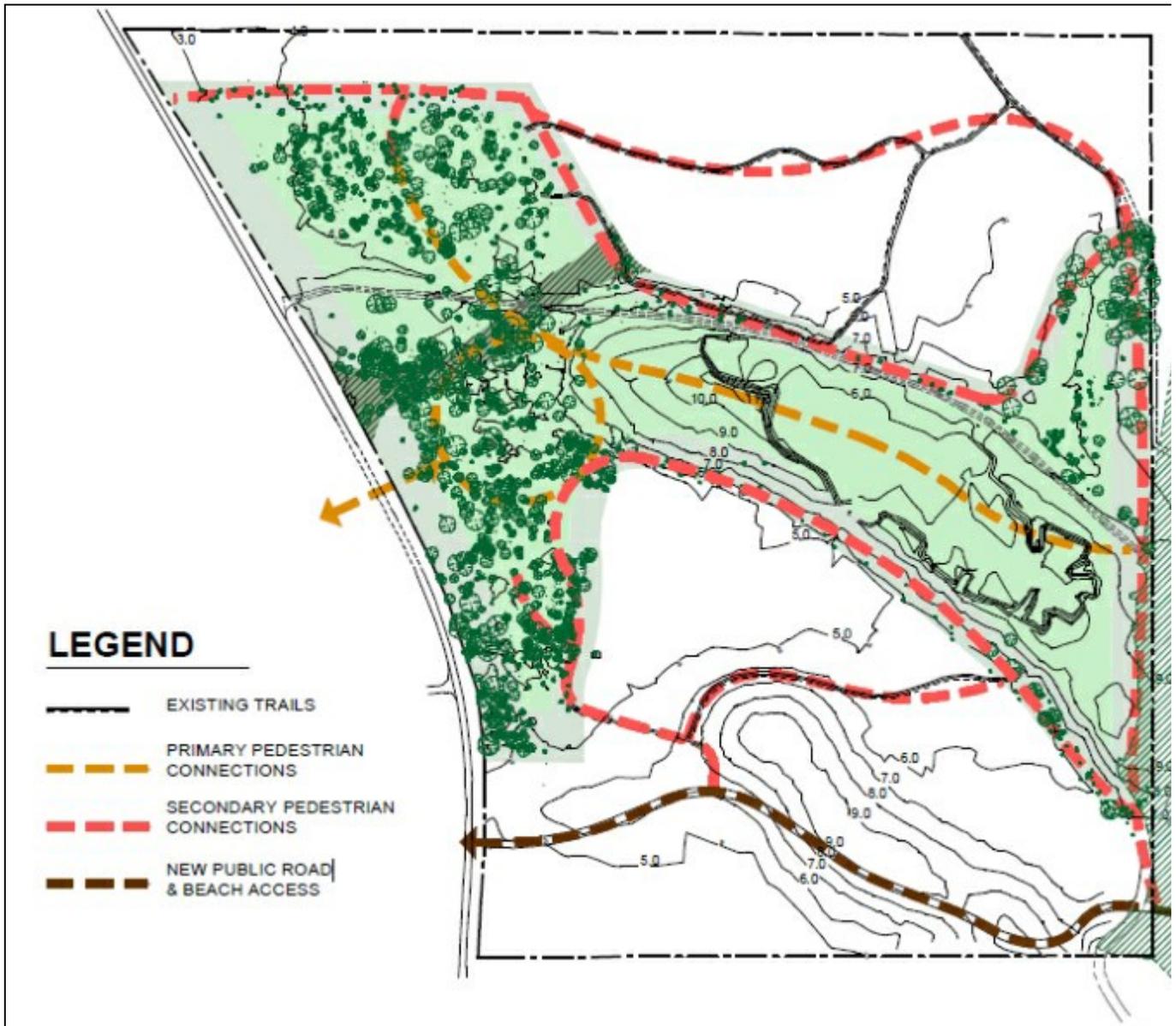
Seven Mile Beach Landscape Fingers Plan (click here to view the [original image](#))

Site Access

Many of the proposed precincts together and with the communal spaces, retail hubs and the public foreshore. As the pedestrian meets the landscaped fingers, a choice is provided; to continue on the predominant pedestrian way or meander along the green finger which connects to the cycle ways, boardwalks and bushwalks.

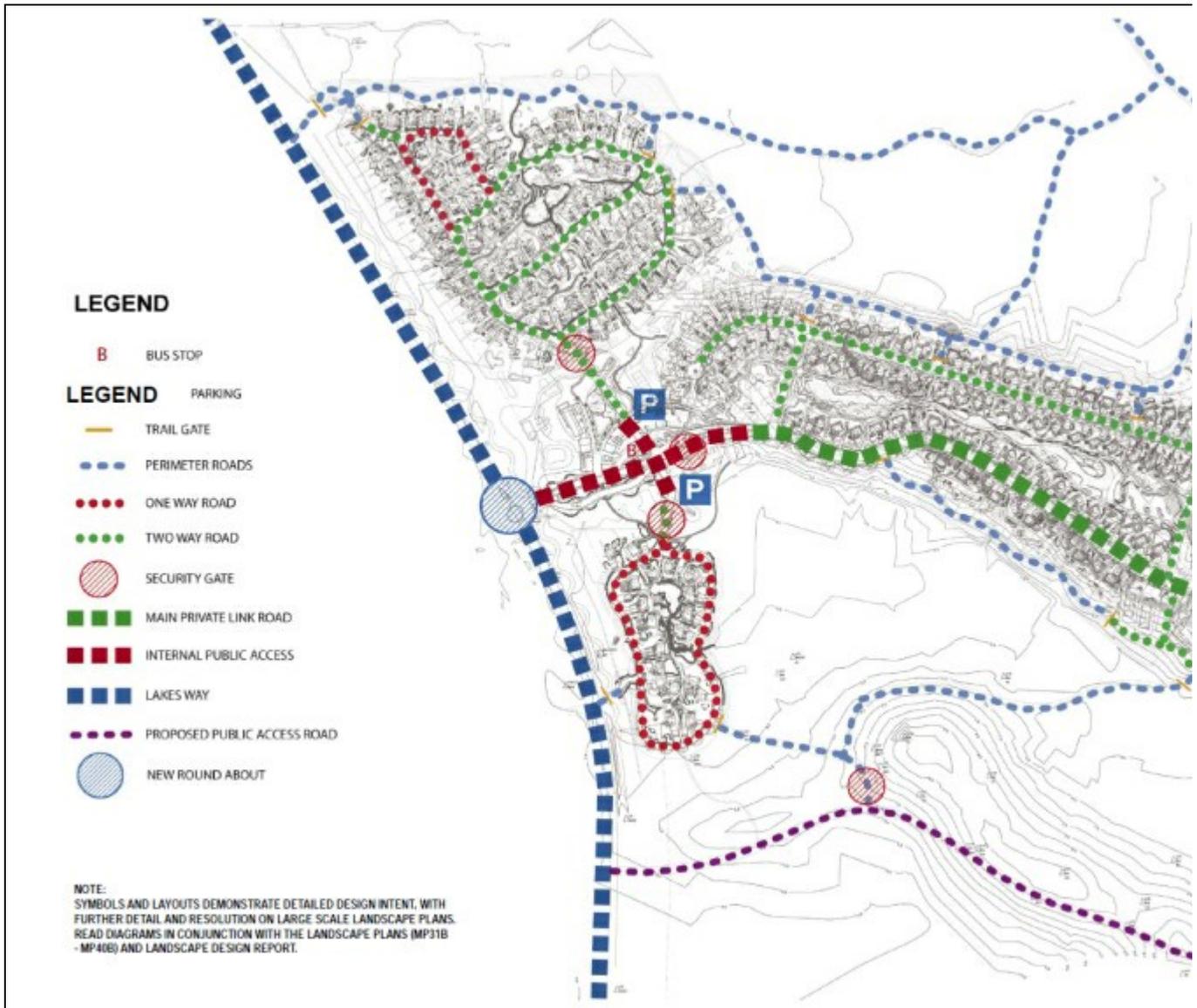
Cycle access ways merge with the landscaped fingers providing access through the existing and introduced landscape along the peripheries of the development. They connect spaces of natural interest along a direct route towards the beach.

A central boardwalk loop becomes the connection between precincts and most importantly between the retail zone and central pedestrian access way. This loop meanders through the landscaped fingers and the recreation and retail precinct providing the integral connection between pedestrian, cycle and public bus access.



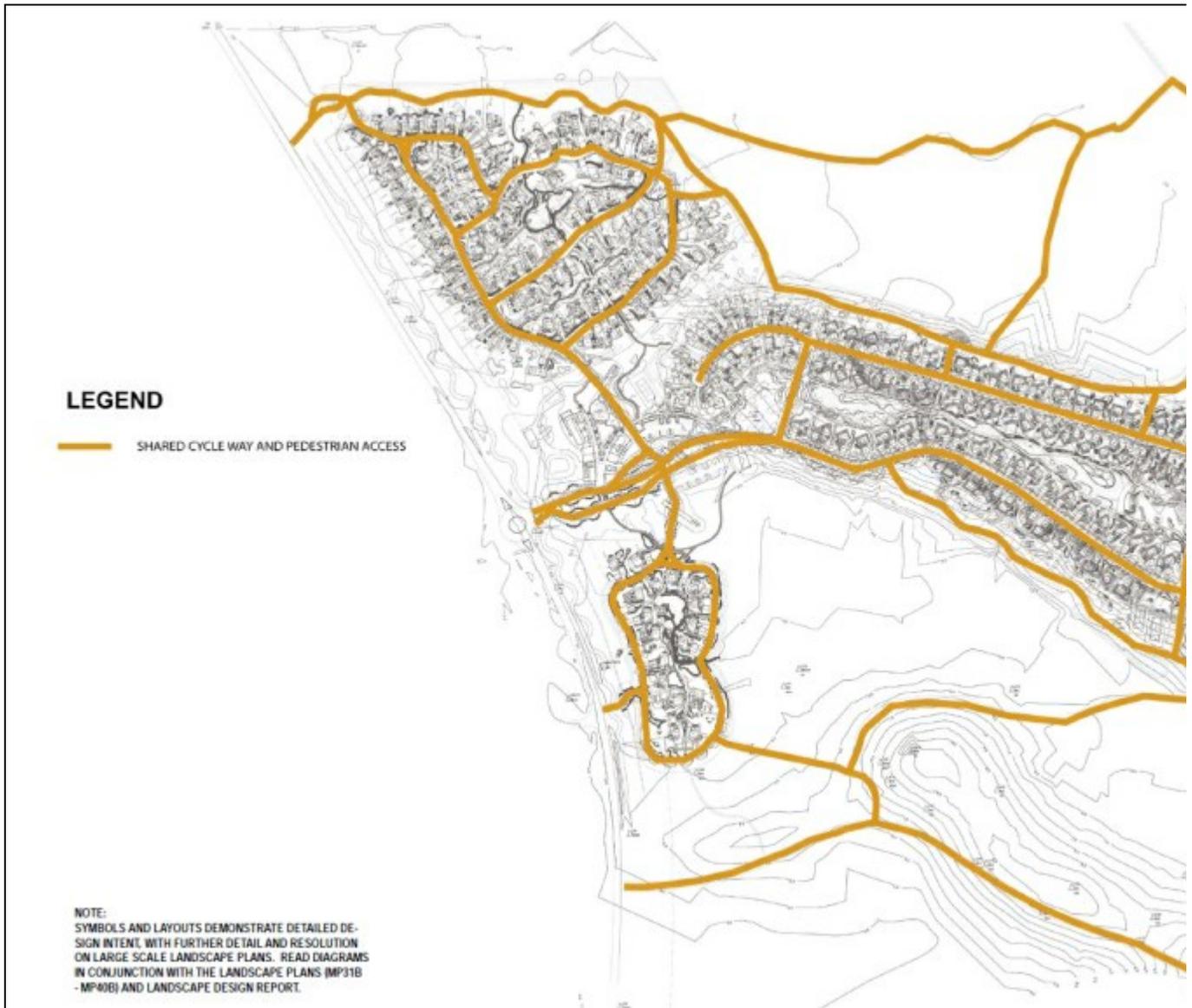
Seven Mile Beach Access Through the Landscape Plan (click here to see the [original image](#))

Vehicular Access Plan



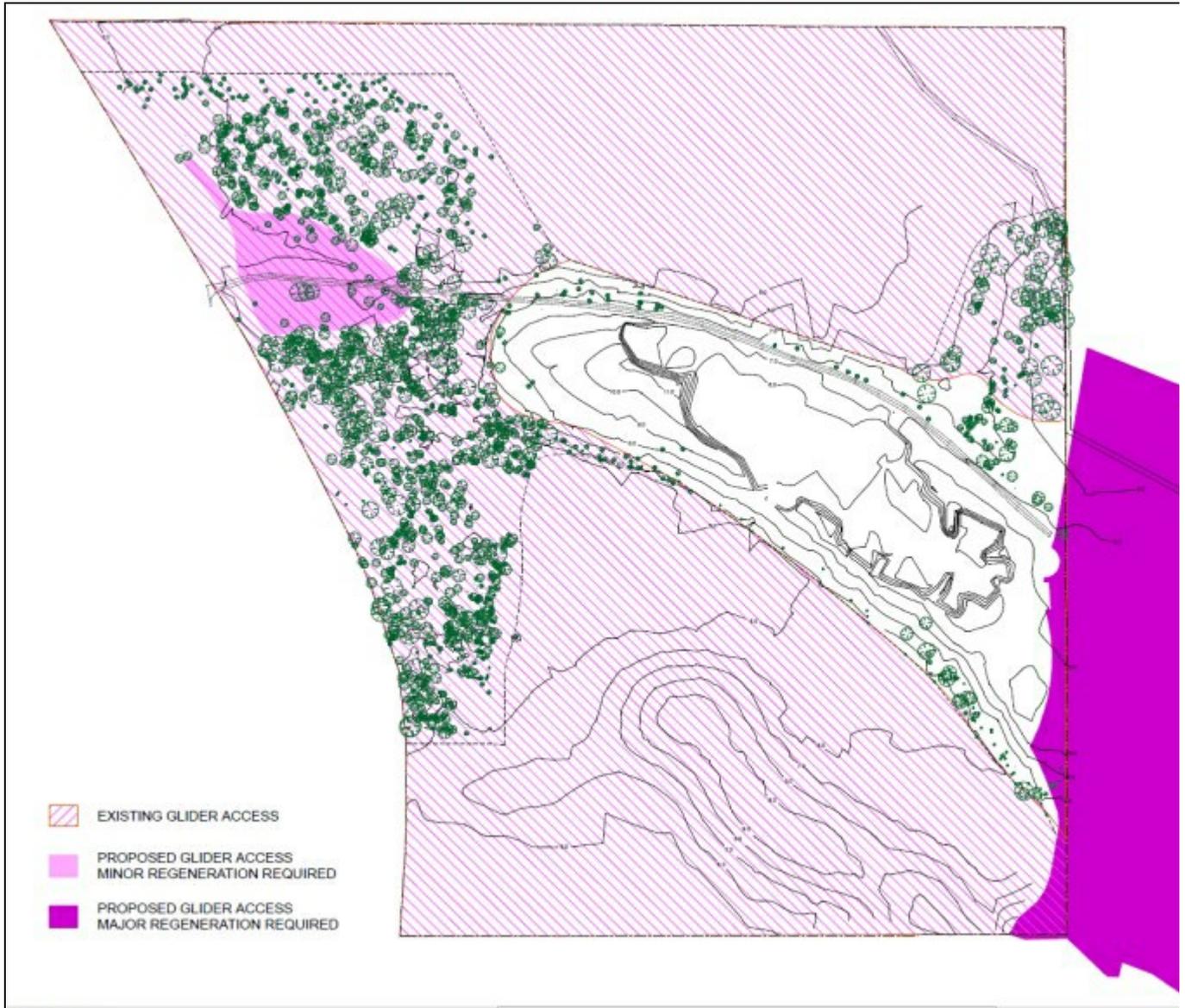
Seven Mile Beach Vehicular Access Plan ([click here to see the original image](#))

Pedestrian Access Plan



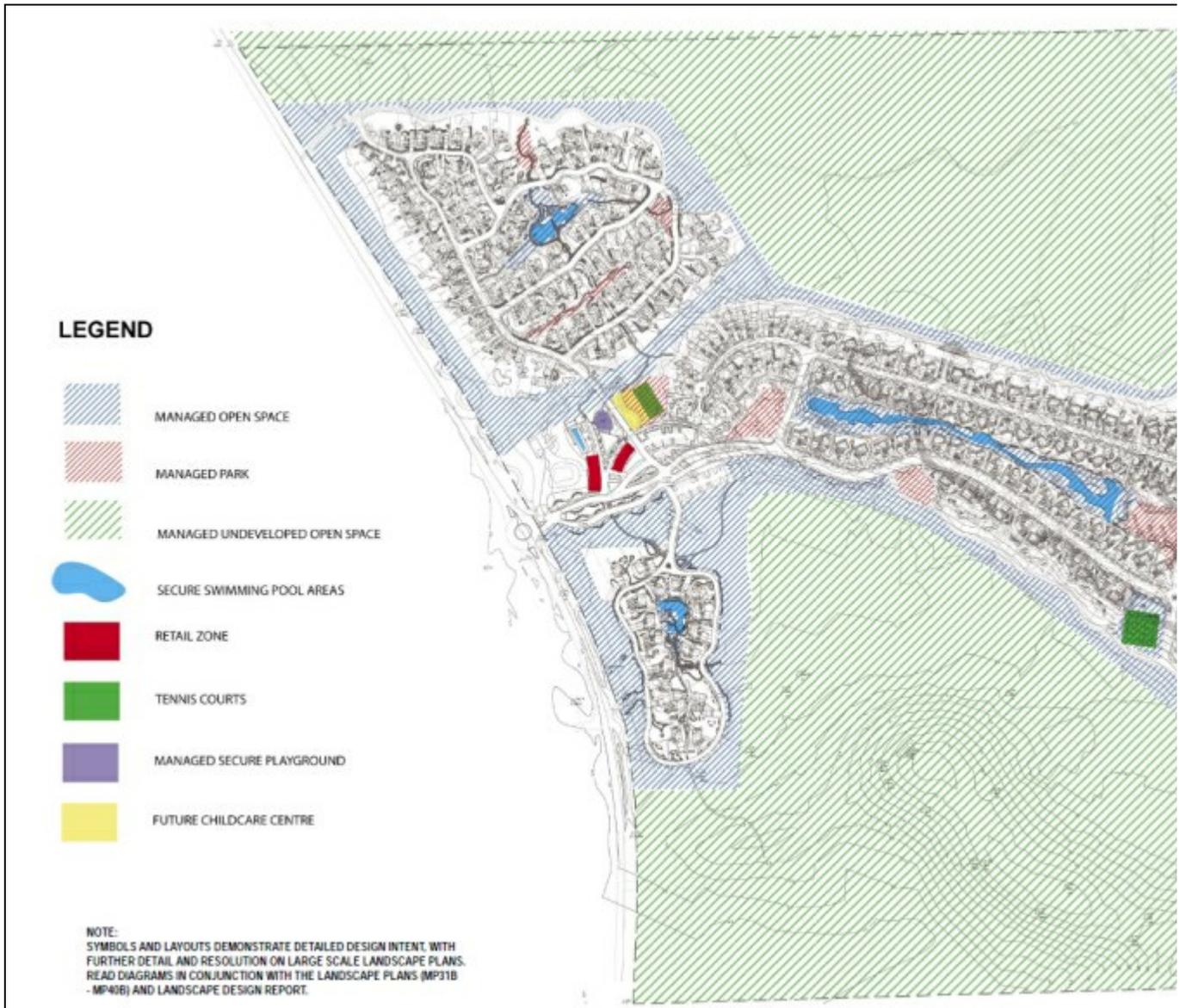
Seven Mile Beach Cycle Access Plan ([click here to view the original image](#))

Glider Access Plan



Seven Mile Beach Squirrel Glider Access Plan (click here to view the [original image](#))

Open Space Hierarchy



Seven Mile Beach Open Space Hierachy (click here to view the [original image](#))

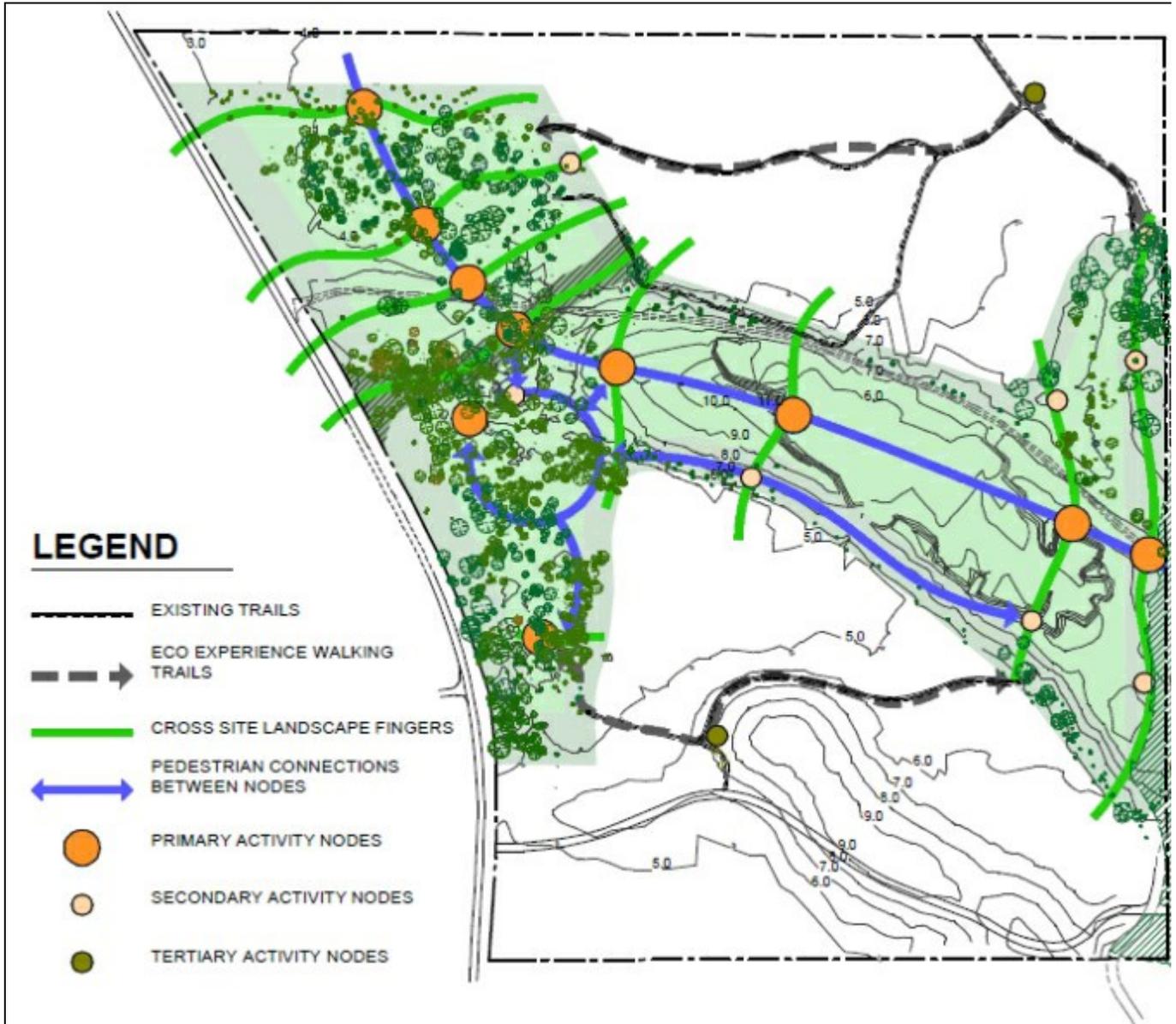
Activity Nodes

At the critical junctions of the access ways and the landscaped fingers of outdoor spaces, activity nodes are created.

These nodes become the focal points of communal activity within each precinct. They are represented as parks, playgrounds, pools, landscape features, sculpture gardens and retail and recreation hubs. Each node is designed specifically to enhance the natural precinct characteristics.

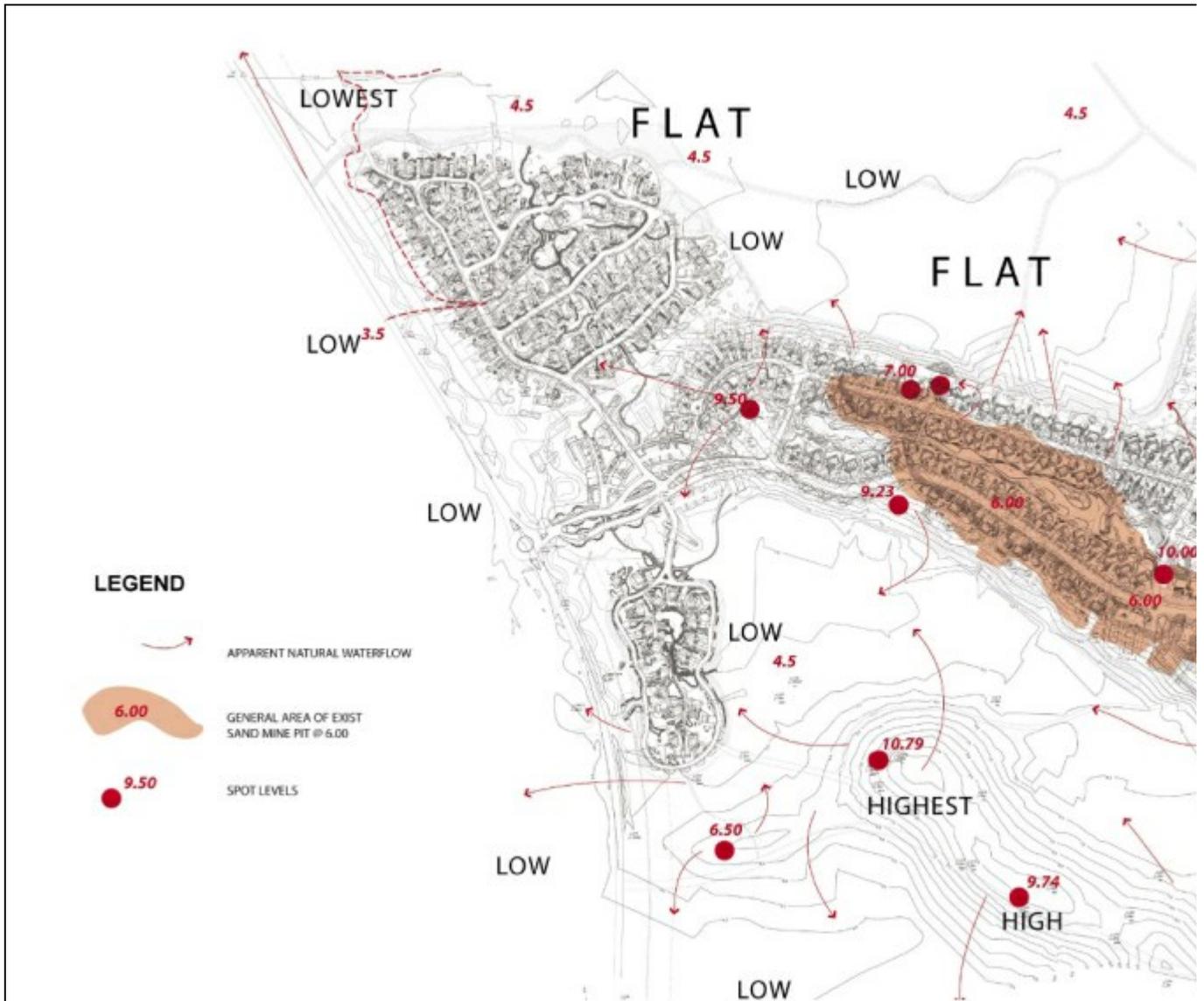
The activity nodes provide places for relaxation, recreation and meeting along a journey between varying precincts. They provide a point of interest to pause and enjoy the natural beauty of the differing characteristics of the site.

The Sculpture Walk is highlighted by focal pieces at these nodes which may be permanent or temporary.



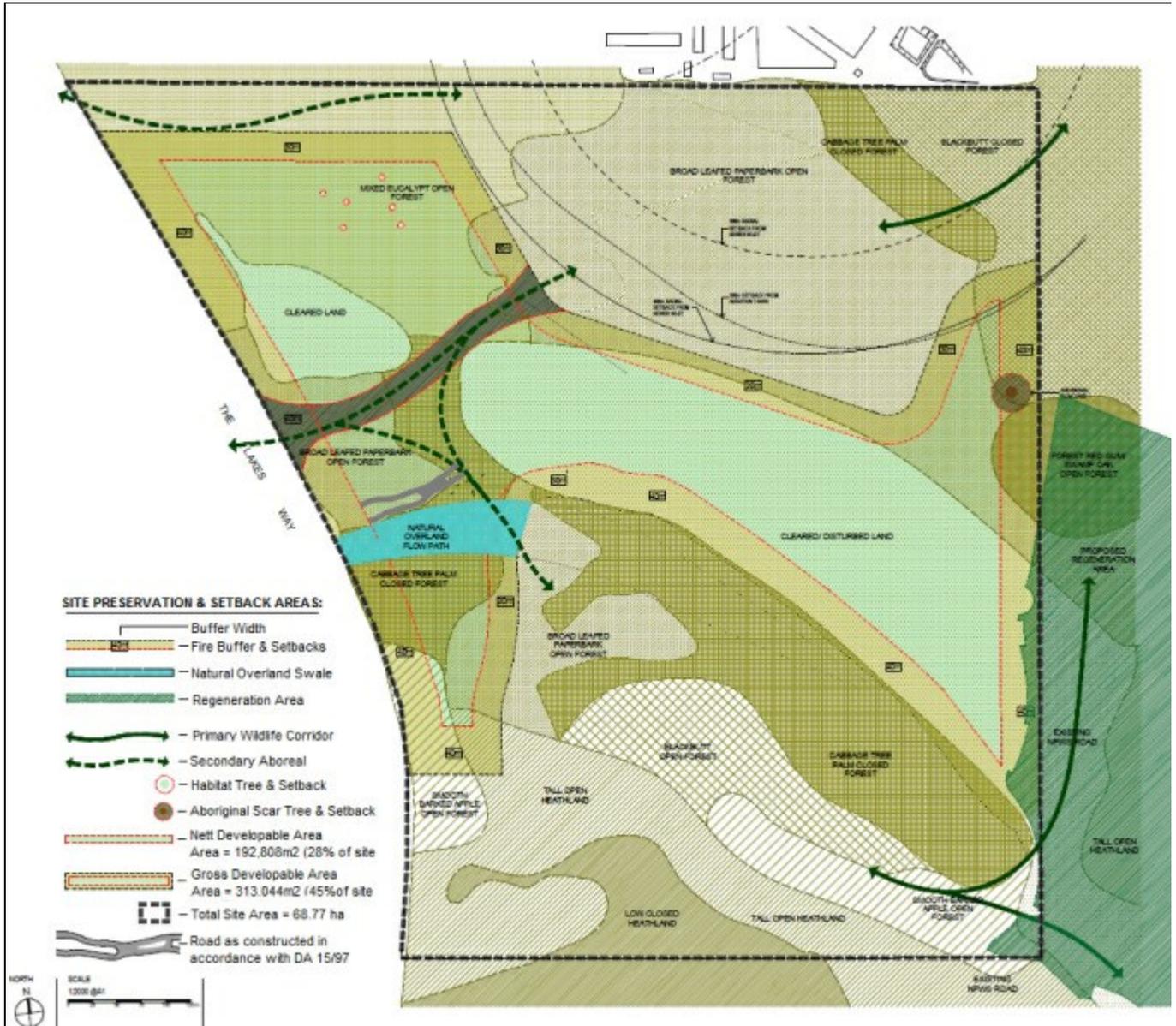
Seven Mile Beach Activity Nodes (click here to view the [original image](#))

Site Morphology



Seven Mile Beach Site Morphology Plan (click here to view the [original image](#))

Site Analysis

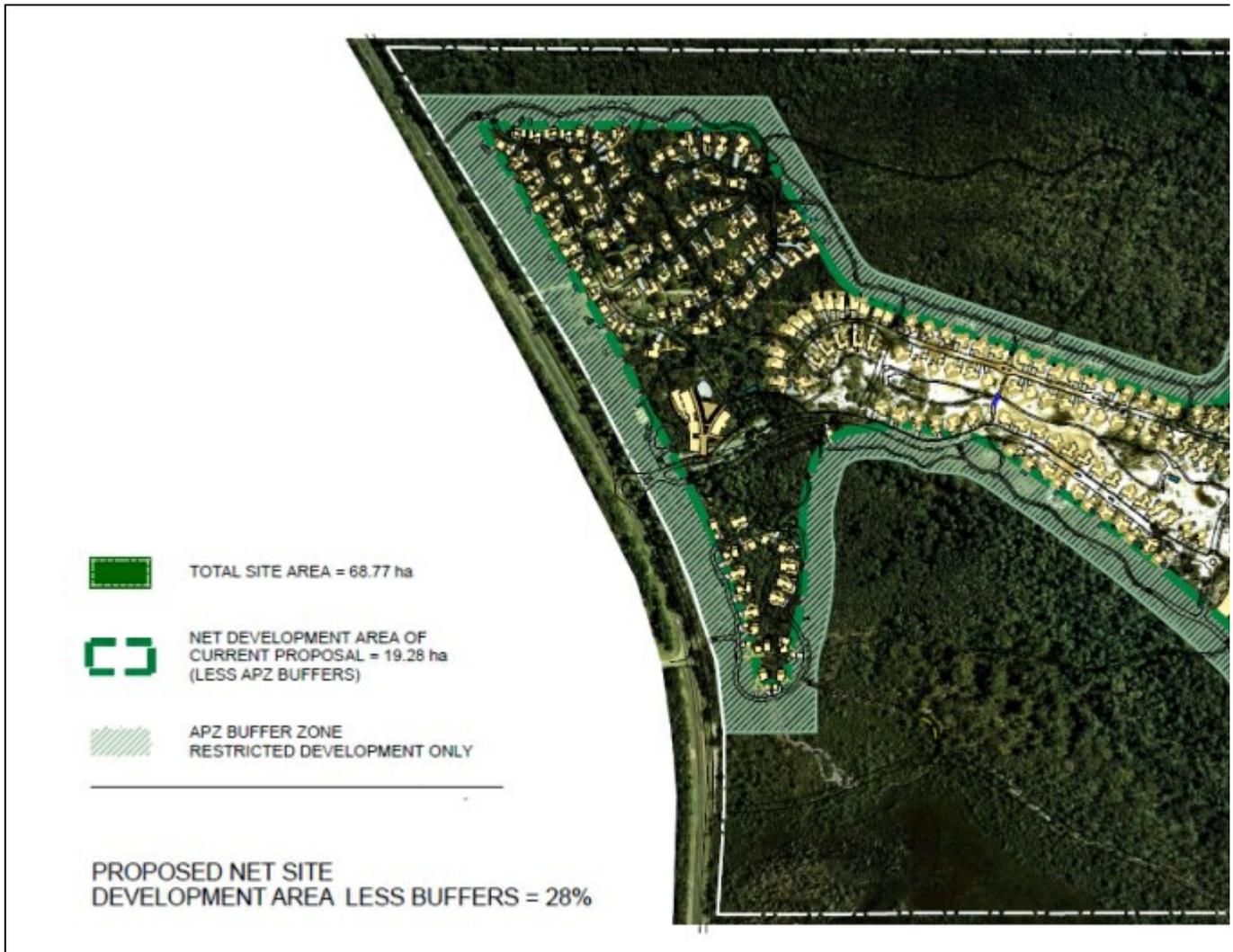


Seven Mile Beach Site Constraints and Opportunities Plan ([click here to view the original image](#))

Site Development



Seven Mile Beach Proposed Gross Development Area ([click here to view the original image](#))



Seven Mile Beach Proposed Net Development Area (click here to view the [original image](#))

16.23.7 Tree Retention and Removal Principles

Exclusion of the northwest corner of the site from the development area provides amenity for an arboreal connectivity corridor for fauna between the northern conservation area and The Lakes Way buffer.

A Squirrel Glider Link is proposed to connect the northern conservation zone with the conserved bushland along The Lakes Way. This is to be situated along the densest tree corridor ensuring tree preservation and will have a dual purpose as an inner asset protection zone. This link will be managed in an ecologically sensitive manner.

Squirrel Glider arboreal connection occurs across much of the site enabling access between northern and southern conservation zones and The Lakes Way bushland buffer. The sand quarry breaks this connection across a large portion of the site and into the surrounding National Park. Opportunity exists to reinstate this connectivity across both the site and the National Park and a portion of the site via revegetation and introduced fingers of landscape between the north and south conservation zones.

A Natural Overland Flow Path occurs between the Broad Leafed Paperbark open forest and Cabbage Tree Palm closed forest in the south west of the site. To ensure continued natural drainage of the site this flow path will be maintained at its natural ground levels. There is however opportunity to bridge across this swale to the southern developable area. Preservation of this natural swale provides another arboreal Glider Link across the site.

An old tree in the northeast sector of the site was discovered to have an Aboriginal Scar providing evidence of previous site occupation. To ensure protection of this tree a buffer of 20m is to be retained around the tree. Details of the tree's

protection are further outlined in the CLUMP and the Aboriginal Heritage Impact Assessment.

The area of cleared and disturbed land adjacent to the eastern boundary of the site, within the National Park, is currently barren and denuded. This area requires regeneration with local natural species and will provide an improved landscaped amenity between the site and beach. Regeneration will also improve fauna movement in the north south direction.

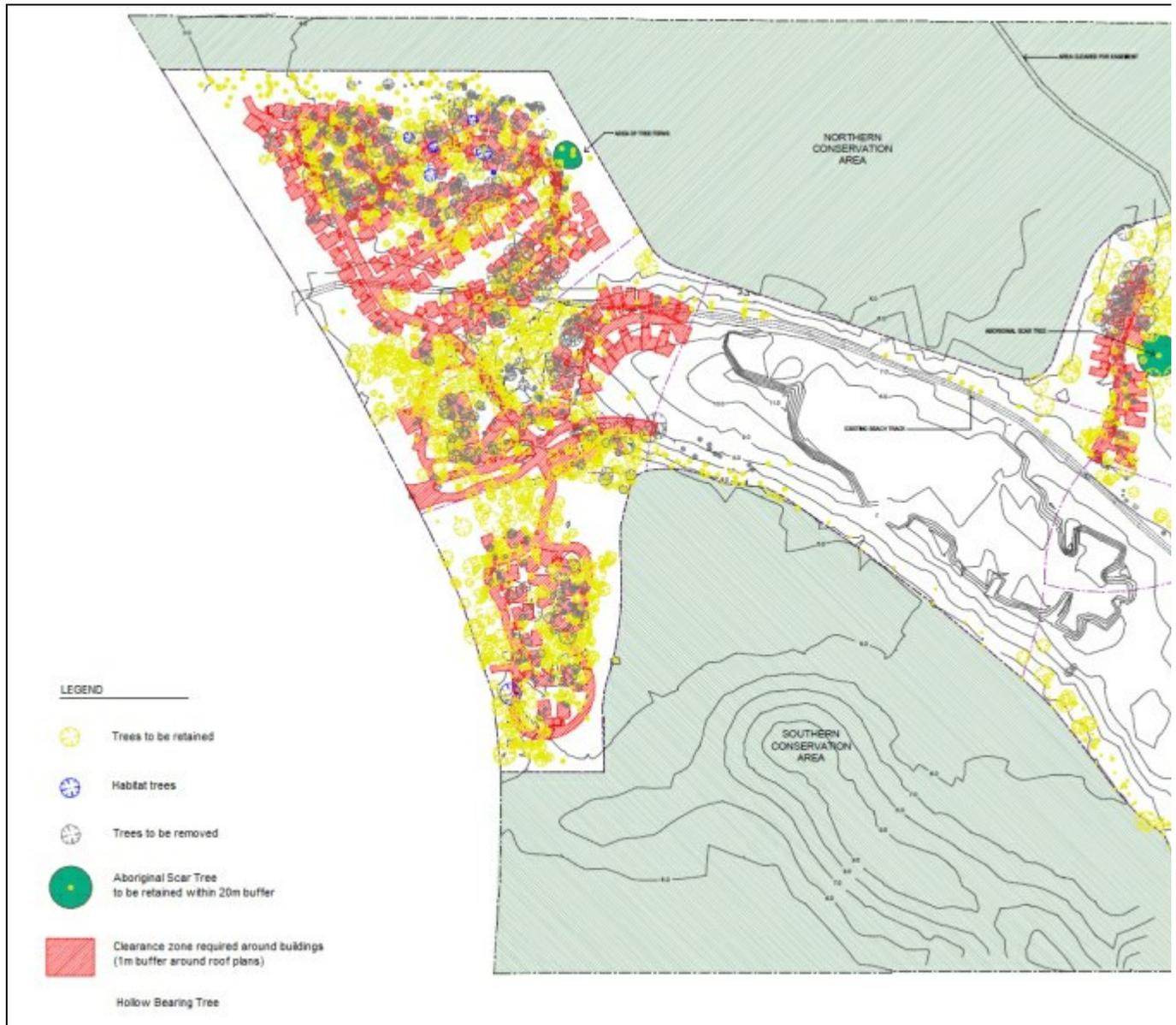
The new development proposal aims to sensitively develop the site as an eco-living and conservation precinct comprising of an administration, activity and retail centre adjacent to the entry, a child care centre, 200 houses nestled into the existing environment and 117 apartments in a variety of 5 storey complexes. The development is interspersed with outdoor pools, tennis courts, sculpture gardens, parks and playgrounds.

An area of 1m around the footprint of the roof plans within the treed areas is indicated by the hatched zones to show the extent of clearance required at ground level.

Any uncovered decks to dwellings will be constructed around the existing trees with ample room for the tree to grow to maturity.

All services are to be contained where possible within the road corridors as shown on this plan.

The only hollow bearing trees to be removed are as shown on this plan unless a tree is identified as posing a safety issue.



Seven Mile Beach overall tree retention and removal plan ([click here to see the original image](#))



Seven Mile Beach tree removal principals by precinct (click here to view [original image](#))

16.23.8 Architectural Design Statement

Represented as a predominantly pictorial document, this section of the DCP forms the basis for developing the site in the most appropriate way. It describes the constraints upon the development as a whole, and within each precinct, to create the most aesthetic and environmentally responsive outcome.

This section of the DCP sets out to create a sympathetic and environmentally aware design within a unique habitat, surrounded by protected conservation precincts.

The development site is to be managed to ensure the natural and introduced landscapes are protected and maintained for maximum aesthetic and recreation benefit.

The developed area comprises of an administration, community, recreation and retail facility, residential precincts of varying character to suit the natural environment and two distinct apartment precincts, within and surrounding a variety of recreation facilities such as pools, tennis courts, picnic area, parks and playgrounds. The development allows for ancillary facilities for maintenance, bushfire and surf life saving. Provision is made for a future childcare facility to be constructed within The Boardwalk community precinct.

All buildings are to utilise Environmentally Sensitive Design (ESD) principles whilst being responsive to their natural site constraints. All dwellings are to utilise rain water catchment via individual or shared tanks for use in toilets and yards. All dwellings are to comply with NSW BASIX requirements to reduce water usage by 40% and energy usage by 25%.

A minimum of 10% of all dwellings on the site are to be accessible living solutions providing on ground access to living, sleeping and amenities. This is to be divided between apartments and housing in the Crest, Dunes and Fronds precincts.

Community facilities are to have disabled access and facilities provided for throughout the site, including buildings, paths and vehicular parking.

A strong unifying architectural and landscape concept is employed across the site providing a connection between precincts whilst maintaining subtle defining boundaries. The architectural language is consistent throughout the site producing a unified development. Building designs, material palettes and landscaping are then adapted to each precinct providing a unique character and sense of place for residents. This enables a diversity of housing types across the site, reflecting the needs of a large cross-section of the community.

Precincts have been derived from the natural site features and the introduced architecture as follows:

Northern Conservation Precinct

A managed bushland precinct in the northern portion of the site, abutting the sewer works and Booti Booti National Park, with bushfire trails for walking and cycling. Occasional shelters for relaxation and refuge from the weather are designed to blend into the surrounding natural environment. Paths connect precincts and landscape elements within the site whilst providing emergency fire trail access and egress. This part of the site is zoned E2 Environmental Conservation.

Southern Conservation Precinct

A managed bushland precinct in the southern portion of the site, abutting Booti Booti National Park with bushfire trails for walking and cycling. Occasional shelters for relaxation and refuge from the weather are designed to blend into the surrounding natural environment. Paths connect precincts and landscape elements within the site whilst providing emergency fire trail access and egress. This part of the site is zoned E2 Environmental Conservation.

16.23.9 Development Built Form Controls

The following built form controls have been adopted to create a framework for building design within the site and to complement the specific objectives of each precinct including the Conservation Land Use Management Plan.

The built form controls set out below do not comprise of a prescriptive deemed to comply solution, and are to be read in conjunction with the DCP Objectives, the CLUMP, Council requirements, the BCA, BASIX and the Residential Flat Design Code where applicable.

16.23.9.1 Ecologically Sensitive Design (ESD)

Controls

- (1) The siting and planning of buildings acknowledges the principles of ESD. Buildings have been sited to allow for optimum passive design opportunities such as natural interior daylighting and controlled solar access through all seasons. Open planning is utilised to promote cross flow ventilation and provide light spacious interiors. Consideration has been given to maintaining solar access to neighbouring properties and protecting the lifestyle and amenity of neighbours in regards to privacy.
- (2) All habitable dwellings are to comply with the NSW BASIX requirements for water reduction, thermal comfort and energy efficiency.
- (3) Recyclable materials will be used where possible. Appropriate levels of insulation will be employed and high levels of quality and finish in materials will be specified.
- (4) Features such as service courts containing natural clothes drying facilities and individual rainwater tanks or recycled water supply will reduce power and natural resource consumption. Water reduction management techniques will be employed utilising water efficient AAA rated appliances such as toilets, showers and taps. Energy efficient appliances and equipment will be utilised throughout.

16.23.9.2 Building Design - All Precincts

Controls

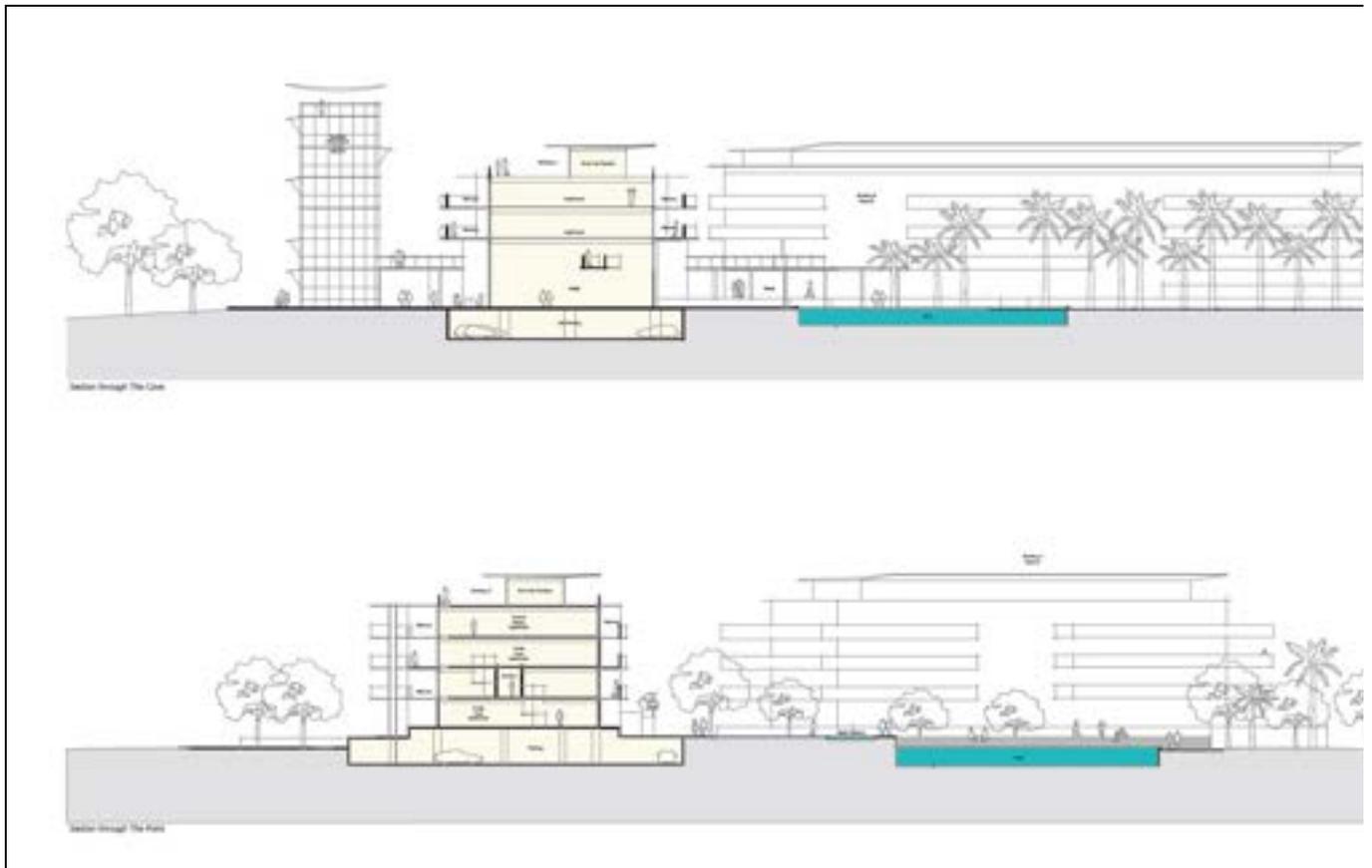
- (1) All footprints are calculated as the 'on ground' building plan which excludes basement carparks and courtyards/decks.
- (2) Off street carparking requirements for dwelling houses, retail facilities and apartments indicating minimum number of carspaces to be provided. Additional on street visitor parking to be provided throughout the site at a rate of 1 space per 3 dwellings, excluding residential units.
- (3) All dwellings are to be sited to take advantage of the views of the surrounding natural bush, including buffer and regeneration areas, and/or the landscaped open spaces provided across the site including pools, parks and playground areas.
- (4) Visual privacy between dwellings, community facilities and recreation areas is to be protected, with particular regard to private open spaces and windows to habitable rooms. Living area windows are to be separated at a minimum distance of 9m at ground level and 12m at all other levels. Outdoor living zones are to be visually screened by landscaping, a fence with a maximum height of 1.8m or fixed screen with a maximum 25% aperture, when they occur within 12m of another window or public outdoor space.
- (5) Acoustic privacy between dwellings and from community facilities, vehicular accessways and parking areas is to be optimised through siting, window locations and adequate construction to limit noise transmission to habitable rooms and in particular bedroom areas. Openings of adjacent dwellings should be staggered and bedroom windows should be protected from service equipment areas and active recreational areas via separation and landscaping. All shared walls and floors are to be constructed to minimise noise transmission.



Community / Retail Concept Plan (click here to view [original image](#))



Typical apartment plans - site plan (click here to view [original image](#))



Typical apartment plans - site section (click here to view [original image](#))



Typical apartment plans - indicative floor plans (click here to view [original image](#))

The Boardwalk

- (6) The Boardwalk precinct is to comprise retail, recreation, community and administration facilities and a maintenance facility, with provisions for future addition of bushfire shed and childcare facility.
- (7) Site coverage of the building footprints shall not exceed 25% of the precinct area as shown on the Site Master Plan.
- (8) Side Setback - N/A.
- (9) A minimum setback of 30m is to be provided from the wall of the building to the boundary fronting the Lakes Way with the exception of the Maintenance Building which is to be a minimum of 20m from the boundary fronting the Lakes Way.
- (10) No building element shall extend into visual, bushfire and wildlife buffers except decks, pools and non-habitable structures such as maintenance and bushfire facilities.
- (11) Carparking is not required for community functions as the centre is for resident use only for which carparking is already provided.
- (12) Parking to retail, commercial and cafe areas to be provided at a rate of 1 space per 20m² at ground level and 1 space per 30m² at first floor level.

The Crest

- (6) The Crest precinct is to comprise attached and detached dwelling houses.
- (7) A maximum of 19 dwellings is permissible
- (8) A minimum lot area of 400m² per dwelling is to be provided.
- (9) The maximum dwelling footprint is 40% of the lot area.
- (10) Zero lot lines and minimum side setbacks are to be provided in accordance with the Building Code of Australia
- (11) A minimum setback of 1m from the wall of dwelling, garage or carport to front boundary is permitted. A

preferred setback of 4m is relaxed where natural site features and bushfire buffer areas are accommodated.

- (12) No building element shall extend into bushfire and wildlife buffers except decks pools and detached non-habitable structures.
- (13) A minimum of 2 covered car spaces per dwelling is to be provided on site. Where the house is adaptable, a minimum of 1 garaged disabled car space is to be provided.



Typical house plan - The Crest ([click here to view original image](#))



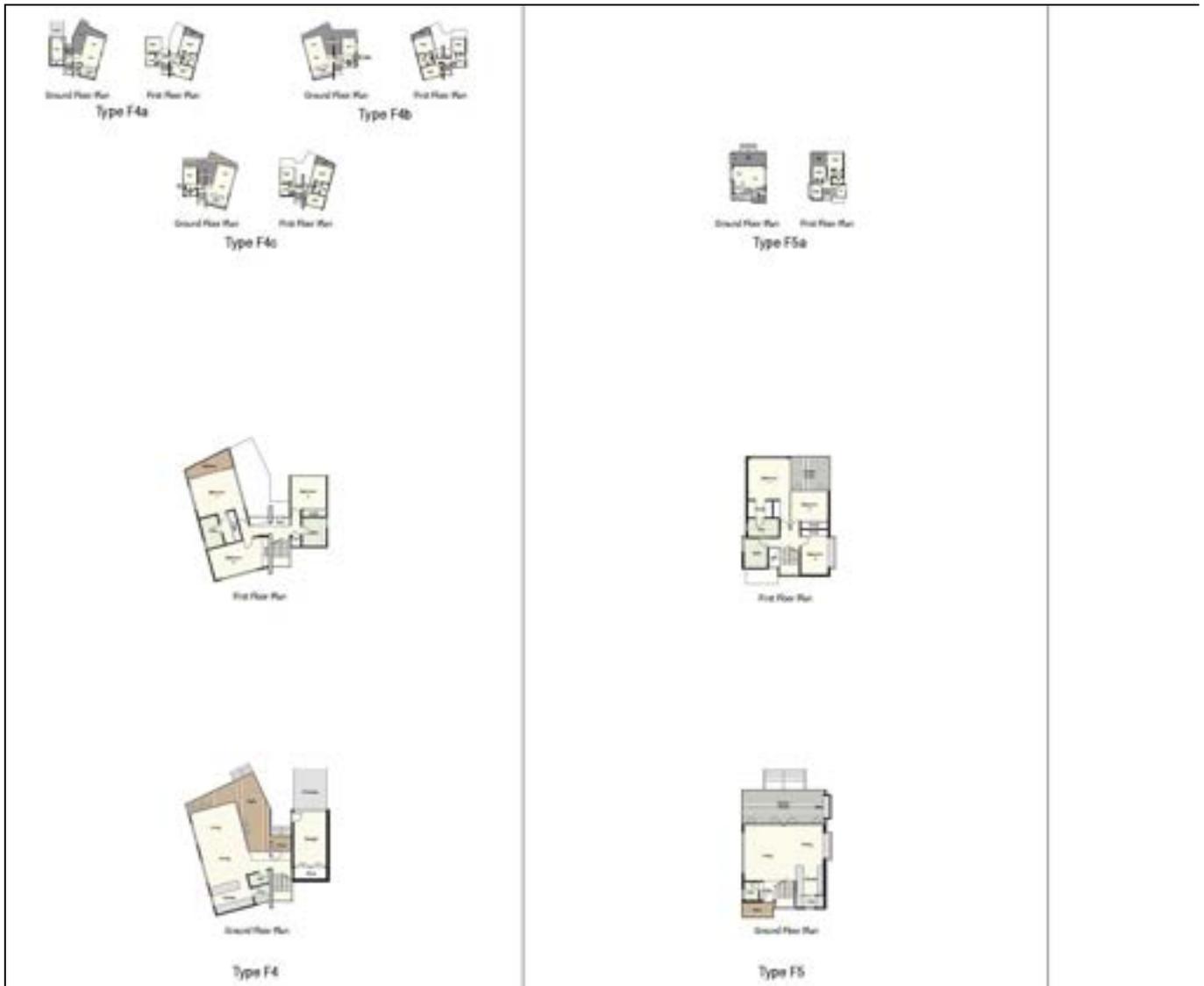
Typical house plans - The Crest (click here to view [original image](#))

The Forest

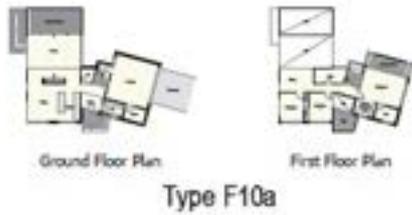
- (6) The Forest Precinct is to comprise of detached dwelling houses, some with separate carport/garage structures.
- (7) A maximum of 78 dwellings is permissible.
- (8) A minimum lot area of 400m² per dwelling is to be provided.
- (9) The maximum dwelling footprint is 40% of the lot area.
- (10) Zero lot lines are not permissible. Minimum side boundary setbacks are to be in accordance with the Building Code of Australia
- (11) A minimum setback of 4m from the wall of dwelling to the front boundary is permitted. This setback may be relaxed where natural site features are accommodated and the impact on existing tree locations are minimised.
- (12) A minimum setback of 1m from the wall of garage/carport structure to front boundary is permitted.
- (13) No building element shall extend into bushfire and wildlife buffers except decks pools and detached non-habitable structures.
- (14) A minimum of 2 car spaces per dwelling is to be provided on site consisting of at least 1 covered space.



Typical house plans - The Forest ([click here to view original image](#))



Typical house plans - The Forest (click here to view [original image](#))



Typical house plans - The Forest (click here to view [original image](#))

The Palms

- (6) The Palms Precinct is to comprise of detached dwelling houses, some with separate carport structures.
- (7) A maximum of 17 dwellings is permissible
- (8) A minimum lot area of 400sqm per dwelling is to be provided.

- (9) The maximum dwelling footprint is 40% of the lot area.
- (10) Zero lot lines are not permissible. Minimum side boundary setbacks are to be in accordance with the Building Code of Australia.
- (11) A minimum setback of 4m from the wall of dwelling to the front boundary is permitted. This setback may be relaxed where natural site features are accommodated and the impact on existing tree locations are minimised.
- (12) No building element shall extend into bushfire and wildlife buffers except decks pools and detached non-habitable structures.
- (13) A minimum of 1 covered car space and 1 hardstand car space per dwelling is to be provided onsite. Where possible, 2 covered car spaces are to be provided onsite.



Typical house plans - The Palms (click here to view [original image](#))

The Dunes

- (6) The Dunes Precinct is to comprise of detached dwelling houses some with separate carport/garage structures.
- (7) A maximum of 71 dwellings is permissible.
- (8) A minimum lot area of 400m² per dwelling is to be provided.
- (9) The maximum dwelling footprint is 40% of the lot area.
- (10) Zero lot lines are not permissible. Minimum side boundary setbacks are to be in accordance with the Building Code of Australia.

- (11) A minimum setback of 1m from wall of dwelling, garage or carport to front boundary is permitted. A preferred setback of 4m is relaxed where natural site features and bushfire buffer areas are accommodated.
- (12) A minimum setback of 1.5m is to be provided from the pool area to the rear boundary.
- (13) No building element shall extend into bushfire and wildlife buffers except decks pools and detached non-habitable structures.
- (14) A minimum of 2 covered car spaces per dwelling is to be provided on each site. Where the house is adaptable, a minimum of 1 garaged disabled car space is to be provided.
- (15) Additional on street visitor parking is to be provided at a rate of 3 spaces per tennis court.



Typical house plans - The Dunes ([click here to view original image](#))



Typical house plans - The Dunes ([click here to view original image](#))



Typical house plans - The Dunes (click here to view [original image](#))

The Fronds

- (6) The Fronds Precinct is to comprise of attached and detached dwelling houses.
- (7) A maximum of 15 dwellings is permissible.
- (8) A minimum lot area of 340m² per dwelling is to be provided.
- (9) The maximum dwelling footprint is 45% of lot area.
- (10) Zero lot lines are permissible and minimum side setbacks are to be provided in accordance with the Building Code of Australia.
- (11) A minimum front setback of 2m from the wall of the dwelling to the front boundary is preferred. This setback may be relaxed where natural site features are accommodated and the impact on existing tree locations are minimised.
- (12) A zero setback from the wall of garage/carport structure to front boundary is permitted.
- (13) A minimum setback of 1.5m is to be provided from the pool area to the rear boundary.
- (14) No building element shall extend into bushfire and wildlife buffers except decks pools and detached non-habitable structures. No building element shall extend into the fenced 20m diameter scar tree buffer zone.
- (15) A minimum of 2 car spaces per dwelling is to be provided onsite.



Typical house plans - The Fronds (click here to view [original image](#))



Typical house plans - The Fronds ([click here to view original image](#))

The Cove

- (6) The Cove Precinct comprises of a complex of two individual apartment blocks of five storeys, including roof decks, plus basement carparking, podium retail, restaurant, cafe, gym and pool and a separate bushfire tower.
- (7) A maximum of 50 apartments is permissible.
- (8) Site Coverage of the building footprint shall not exceed 35% of the precinct area as shown on the Site Master Plan.
- (9) No habitable building element shall extend into buffers reserved for bushfire. This excludes decks, pools, and other non habitable structures, including the basement carparking.
- (10) In accordance with the Residential Flat Design Code (Planning NSW)
- (11) Carparking is to be provided at the minimum rates shown in the following table

No. Bedrooms/Use	Car Parking Rate
1 bed	1 space / dwelling
2 bed	1.2 spaces / dwelling
3+ bed	1.5 spaces / dwelling
visitor parking	0.2 of a space / dwelling

trailer parking	0.125 of a space / dwelling
commercial and restaurant areas	1 space per 20m ² separate to resident parking

The Point

- (6) The Point Precinct is a complex of four individual apartment blocks of five storeys, including roof decks, as well as basement carparking. Allowance is made for a future Surf Life Saving storage facility in the precinct but separated from the apartments.
- (7) A maximum of 80 apartments is permissible.
- (8) Site Coverage of the building footprint shall not exceed 35% of the precinct area as shown on the Site Master Plan.
- (9) No habitable building element shall extend into buffers reserved for bushfire. This excludes decks, pools, and other non habitable structures, including the basement carparking.
- (10) In accordance with the Residential Flat Design Code (Planning NSW)
- (11) Carparking is to be provided at the minimum rates shown in the following table

No. Bedrooms/Use	Car Parking Rate
1 bed	1 space / dwelling
2 bed	1.2 spaces / dwelling
3+ bed	1.5 spaces / dwelling
visitor parking	0.2 of a space / dwelling
trailer parking	0.125 of a space / dwelling

16.23.10 Precinct Character

The Boardwalk



The Boardwalk Precinct Plan (click here to view the [original image](#))

Concept

The siting of the buildings respond to the natural clearing and existing sight line along the entry road whilst ensuring ample space for maintenance and servicing requirements buffered between The Lakes Way and the public spaces and buildings.

Their placement and forms are derived by the lines of existing vegetation. The vegetation then filters into and between the buildings. The buildings sweep views to the open, interactive community space embraced by the retail, community and administration facilities. Their gentle curves provide clues of more around the corner, whilst the architectural aesthetics define a sense of place, an arrival destination.

The building form sweeps open taking advantage of the existing vegetation clearing . Decks step down to the ground forming a natural relaxed outdoor theatre space bounded by the two building wings and the active and exciting promenade.

A light translucent building disappears into the forest whilst a heavier building of natural stone and timbers provides a wall to the edge of the development and a natural screen to the maintenance and back of house requirements.

Existing Character

Dappled light falls on the ground amidst a thick forest of Paperbarks and Palms which open to a small sun lit clearing

in the north west. The tall, slender trees become occasionally interspersed with large Eucalypts as they gradually open to and wrap around the small opening in the forest, like a natural amphitheatre.

Glimpses emerge from the existing road through the vegetation to this natural sun-lit opening and the more open forest beyond. The forest transforms into a drier and more open Eucalypt Forest with lower canopies and larger open areas offering refuge from the sun.

Proposed Character

A thick cathedral of Palms opens to the edge of a curving administration building drawing the eye around the corner into a vibrant communal space between the retail and recreation facilities. Buildings open to create an interactive, busy boardwalk around a central multi-purpose deck and playground areas.

Linked across the road to the parking and tennis courts by a circular pedestrian way used to connect the adjacent residential precincts, the buildings are able to sit wholly within the natural environment and enable the trees and decks to intermingle.

Architecture

The siting of the building responds to the natural clearing and existing sight line along the entry road.

A translucent retail building floats on a timber deck and enables the architecture to interact with the forest beyond. The recreation and administration buildings' forms culminate at an interactive wall, which has been created for community events staged along the boardwalk.

Materials Palette

A colour and material palette sympathetic to the natural vegetation's colours and textures are used in conjunction with man made elements of neutral tones such as steel and glass to create contrasting elements of "solidity" and "transparency" that reflect and frame images of the surrounding natural bushland. Low maintenance, fire retarding materials are to be utilised.

A natural timber decking/boardwalk provides the plinth upon which the buildings and landscape emerges. Steel roofing floats over the dwellings with occasional trees penetrating.

Retail/Cafe Building

Glass shop fronts
Frameless doors, windows
Steel, timber shade screens
Prefinished steel metalwork
Sculpture element

Administration/Recreation Building

Polished and textured concrete
Metal sheet and timber cladding
Hardwood curved timber screen
Prefinished stainless steel metalwork
Timber, aluminium doors, windows

Maintenance

Steel and concrete clad
Aluminium doors and w
Steel and timber shade
Prefinished steel metal

Landscape Character

The design objective of the entry is to create a unique sense of place and identity specific to the site and environs. Upon arrival the flanking dense stands of Cabbage Tree Palms and Paperbarks are indicative of the distinctive landscape qualities of the site. A tunnel like experience will set the mood of the landscape throughout the site.

The Community Centre building will be designed to integrate a substantial number of mature trees to ensure the building is closely integrated with the landscape setting.

Roadside understorey planting will ensure that the road edge treatment is visually softened. Select uplighting of the Palm trunks will enhance evening entry.

The large central median defines two similar road carriages and creates an intimate scale to the entry experience.

The filtered views into the adjacent vegetation areas will provide glimpses into residential precincts to the east and south.



Landscape Character The Boardwalk Precinct (click here to view the [original image](#))

The Crest



The Crest Precinct Plan ([click here to view the original image](#))

Concept

A spine of attached housing on the western edge of the road, curves on the natural rise, breaking apart and changing setback to accommodate the existing vegetation. To the south side of the road the dwellings separate into detached dwellings creating vistas to the park and enabling landscaping to filter to the roads edge.

Pockets of rear yard space nestle into the surrounding treed landscaping, both natural and introduced, providing private northern courts and yards between the dwellings. A higher density of housing can be supported by its proximity to the retail and recreation areas. Further convenient amenity is available through the integration of individual plunge or spa pools.

Existing Character

The Crest embodies the natural landscape characters represented across the site. This precinct forms a junction between the bare dunes, the Eucalypt forest and the lush Palm precincts of the retail hub and the Palms.

At the edge of the open sand mine cut, the precinct rises slightly higher than its surrounding areas. It gently increases in level as it curves along the edge of the sand dune towards the north, becoming more open and disturbed, vegetated by low lying shrubs and sparsely located Angophoras.

Closer to the proposed retail precinct and main road, the vegetation thickens into a natural privacy screen interlaced

with Palms.

Proposed Character

A delicate enclave of housing gently curves along the natural lip of the dune, broken apart by the natural features of the site. The buildings are sited to provide a series of informal private and communal spaces.

The Crest offers the opportunity for both bushland living amidst the existing forest and the more formal introduced landscape.

The attached houses are in close proximity to the main development facilities which include childcare, tennis courts and retail and provide a convenient alternative to the more secluded bushland dwellings.

Architecture

Despite common walls between dwellings, an abundance of natural sunlight is welcomed into the on ground houses via a private, solar north paved courtyard.

The common walls are splayed enabling the dwellings to gently curve along the crest of the dune. The dwellings step in/out to enable the existing vegetation to be retained as part of the overall landscape.

Northern courtyards wrap around private water features, spas or plunge pools, forming an extension of the main living, family and study areas. The natural and introduced landscape is welcomed into the houses blurring the distinction between the indoor and outdoor spaces.

Movable vertical timber screens to the eastern and western living facades create a series of flexible outdoor living spaces adjacent to the study and living rooms. These create an extension to the indoor living areas and become private relaxation spaces.

Materials Palette

Like the natural qualities of the precinct, the materials and colours are a collection of imagery derived from the surrounding areas yet sympathetic to the immediate environment.

- Concrete slab on ground, for thermal mass
- Blockwork or masonry common walls, stone features
- Timber, plywood and corrugated steel cladding
- Painted FC or Blueboard cladding and flat metal features
- Exposed timber or steel roof members, steel roofing
- Timber and steel solar and privacy screens
- Timber decks and irregular stone paved courts

Landscape Character

The design objective of the entry is to create a unique sense of place and identity specific to the site and environs. Upon arrival the flanking dense stands of Cabbage Tree Palms and Paperbarks are indicative of the distinctive landscape qualities of the site. A tunnel like experience will set the mood of the landscape throughout the site.

The site entry signage and the main entry to the Community Centre will feature water feature elements as part of the project thematic design. Courtyard spaces around the Central Community buildings will provide informal seating and meeting spaces.

The tennis courts are located close to the management from the Central Community building, the Community gym and lap pool and to utilise the allied parking. The residential precinct entries will be marked by gateway landscape treatments, creating a sense of privacy and distinction at these locations.

East of the entry having moved past the vehicle control point, the landscape character becomes more open, integrating with the adjacent open woodland.



Landscape Character The Crest (click here to view the [original image](#))

The Forest



The Forest Precinct Plan ([click here to view the original image](#))

Concept

The road network winds between existing trees avoiding heavily forested areas and attractive groves of tree ferns. A series of loop roads define the house sites which back onto communal landscaped spaces used for passive and active recreation.

Landscaped 'green' fingers are introduced to connect the surrounding forest with these communal spaces. Pathways traverse the precinct connecting houses to the surrounding bushland, cycleways, retail centre, recreational areas and beach.

Houses are inserted into the bushland setting giving respect to road patterning, aspect, view and existing tree locations. The pavilion forms are designed to respond to individual site constraints, maximising north aspect to living zones and minimising impacts on existing trees.

The pavilions are afforded views of the surrounding forest and communal landscaped spaces alike. They bring the forest into living zones and extend living zones into the landscape.

Existing Character

Open sun drenched clearings set amongst Eucalypts retreating into denser, younger Angophora and Eucalypt Forests fringed by Tree Ferns and Palms.

Interspersed with large trees, the forest has medium height canopies of small circumference enabling good solar access across the precinct. Clumped trees dotted through the precinct provide ample shade, good summer amenity and natural screening.

Proposed Character

Houses are designed to nestle into the existing bushland setting with minimal impact on the surrounding environment. The houses are sited to create the enclosure to the communal landscaped space, a focal point for active and passive recreation. These spaces become an extension of the internal living environment.

A natural bushland theme unifies the diverse characters of the precinct; rocky creeks, serene plunge pools, Fern forest boardwalks, playgrounds and picnic areas.

The glassy linked pavilion style houses are designed to adapt to blocks with both north-south and east-west aspects. The Pavilions are elevated slightly off the ground plane minimising ground and vegetation disturbance.

The loose fit floor plans give flexibility in orientation, entry location, and car access points responding to block aspect, solar orientation, cross ventilation, existing tree locations and street address. House footprints are designed to crank, slide, rotate and mirror reverse to minimise impacts on existing trees.

The architecture incorporates ESD principles through optimised north orientation and canopy roof overhangs that allow winter sun penetration into living areas, whilst minimising excessive heat gain during summer. Cross ventilation and stack ventilation have also been integrated and water tanks have been used for water storage and recycling.

Architecture

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Materials Palette

Materials are used to evoke the colours and textures of the surrounding forest. Textured materials are used to enhance the play of light and shade. Low maintenance materials are utilised with sparing use of paint finishes.

- Stone feature walls, garden walls, paving
- Cladding of timber board; timber, CFC and metal sheet
- Timber decking, boardwalks
- Steel and timber shade and privacy screens
- Prefinished steel & stainless steel metalwork
- Louvred glass windows
- Prefinished metal water tanks
- Prefinished steel roof sheet

Landscape Character



Landscape Character The Forest Precinct ([click here to view the original image](#))

The scattered mature canopy trees and the proximity to Wallis Lake foreshore form the basis for the landscape character. The massed Tree Ferns in the adjacent forest are to be repeated in focal planting, complimented by massed Burrawang understorey palms, ferns and grasses.

Screening plants are to include Banksias and Lilly Pilly to reinforce the informal forest character.

Existing canopy trees are being largely retained and supplemented with new native canopy tree species to integrate with the existing species where apparent. Melaleuca (Paperbark) species are prominent on the site and will be reinforced with stands of new Paperbarks to create feature tree groves.

Pedestrian path hierarchy will include main access and collector paths, with decreasing path scale and level of finish to integrate progressively into the woodland setting. Feature boardwalk paths provide a visual link towards the pool area from the open space links. These echo the vocabulary of 'jetties' into Lake Wallis.

Existing native grass areas below existing canopy trees will be largely retained, with formalised new lawn areas to provide recreation and visual amenity. The extensive use of Birds Nest Ferns in conjunction with other accent ferns will extend the visual character of the dense stands of Tree Ferns in woodland east of this area.

Native grasses will be planted to reinforce natural woodland grasses that exist on the site. These will provide informal

visual divisions between gardens and open space. The pool design will be developed in close liaison with a professional arborist so that mature trees can be maintained in reasonable proximity to the pool and surrounds.

Extensive timber decking will further reinforce the 'lake jetty' visual imagery. The decking will extend around nearby trees ensuring tree root protection as required. The boardwalk extending around the pool will continue the boardwalk pathways elsewhere in this precinct, ensuring protection against erosion and root compaction.

The Palms



The Palms Precinct Plan (click here to view the [original image](#))

Concept

The Palms is a small private enclave of dwellings situated in a unique environment of Cabbage Tree Palms which provide a lush tropical flavour to the precinct.

Accessed via a bridge over the natural swale, the road becomes a one way shared access loop which encompasses the majority of dwellings. This immediately sets the theme for the creation of an internally focused village which enjoys the surrounding lush environment on all sides.

Wrapping around a communal parkland and central pool, the private yards gradually infiltrate into this shared space which becomes an extension of their backyard. The central space filters across the road to a boardwalk alongside the *Baumea Juncea* Forest, dotted with relaxation pavilions.

Existing Character

Rays of light penetrate the tall Paperbark and Palm Forest playing on the light and dark tree trunks creating a patchwork of shadows on the ground. Further south the landscape evolves from the dense Palm Forest to an open Angophora Forest strewn with Banksia, edged by rising heathland.

A wet Baumea Juncea Forest of Paperbarks and grasses makes its impact on the precinct edging into the site along the eastern periphery. Detached from the site by a natural overland swale, the precinct has a remote, calm and sensual character nestled into lush forest.

Proposed Character

An almost private community of distinctive housing amidst a lush forest of Palms and Ferns wrapping around a central communal pool area linked by stone paths and timber decks. Opening into the views, both surrounding and within the community, dwellings are sited within and around a pedestrianised ring road which skirts a variety of vegetation communities.

Relocated Cabbage Tree Palms and introduced landscaping reinforce the lush forest characteristics around the ring road whilst enhancing the visual and acoustic privacy along The Lakes Way.

Small openings in the wall of landscaping offer filtered views into the surrounding forest and up to the southern heath dunes. Boardwalks disappear into the Palm fringes leading to the beach via the southern dunes, offering views across the National Park and the development. These walks are interspersed with sculptures and shelters for rest and relaxation as part of the integral Sculpture Walk.

Architecture

Pole platform dwellings sit lightly just above the ground with minimal footprints extruding vertically like a tree house, in sympathy to the tall thin canopies surrounding the dwellings. The buildings reach for the sun light with tall voids carrying the light to the ground floor levels.

Small footprints of taller buildings enable greater light penetration and less impact upon the site whilst gesturing toward the tall surrounding forest.

Dwellings consist of one or more pavilions which are connected by a glassy circulation link and open to the north with view lines to the shared internal community spaces. Integrated screen rooms extend the living areas into the surrounding landscape.

Materials Palette

Steel and glass structures, screen rooms, floating timber decks at varying levels.

Landscape Character

The intrinsic landscape qualities of this area will be retained and enhanced to create a premium quality environs for pavilion style housing, 'nestled between the trees'. Dense groves of Palms and Paperbarks will be complimented by strong horizontal planes of single species and linking lawn areas. Informal buffer native planting between houses will have a semi-tropical character creating private garden spaces.

The Palm groves will provide companion planting of Doryanthes to reinforce the understorey foliage and create effective visual screening. Native grasses are a continuing theme through all site areas and in this precinct will form the informal edges to the lawn and roadside treatments. The southern edge of the precinct will feature the massed Burrawangs that occur naturally just to the east of this area.

The pathway treatments in this precinct have a distinct treatment with the hierarchy of finishes having a continuing theme of stone with increasing formality. The joined flagging at the entry transitions to irregular open flagstone with pea-gravel joints transitions to simple pea-gravel paths and into the private garden spaces as simple stepping stones.

The resort-like qualities of this area translate readily into the pool design. A series of small deck areas provide a range of intimate family areas. The series of spaces around the pool are linked by low-key stepping stone paths through massed foliage gardens concealing the pool safety fencing.



Landscape Character The Palms (click here to view the [original image](#))

The Dunes



The Dunes Precinct Plan ([click here to view the original image](#))

Concept

The introduction of landscaped fingers across the site brings the existing lush peripheral character of the forest walls into the precinct, softening the edges. A water body and pedestrian link meanders through the various landscape fingers providing an aesthetic visual outlook to the central residents.

Dwellings are accessed from vehicular spines running parallel to the site constraints. They open to either the existing forest views or the introduced central landscape feature. Residents can choose from the peaceful forest edges or a more active pool side dwelling.

Pedestrian links through the green fingers provide access to the central pool for visitors and forest side residents. The open nature of the site is utilised to incorporate ecologically sustainable principals into the design framework.

Existing Character

A barren, denuded site between two defined walls of thick, lush, green forest lays open to the elements and breaks the connection between northern and southern conservation precincts.

Rolling dunes characteristic of an exposed beach environment break the monotony of the central void. Lightly vegetated fingers of dunes stretch into the centre to create tenuous links across the site.

Occasional large trees sit in isolation along the southern edge of the precinct. One particular large tree sits high on the edge of the previous sand mine cut offering abundant shade and visual prominence.

Proposed Character

A man made environment emerges between the landscaped fingers and softened bushland edges of the dunes.

Dwellings stretch out toward the beach enjoying secluded bushland views or waterside living along a unique pool and parkland setting. The central pool feature provides an oasis amidst the more open Dune Precinct which will cool the hot summer breezes as they pass over the water to the adjacent houses.

Dwellings emerge from the dunal landscape, strongly connected to the earth. External living spaces filter into the dunes and native landscaping whilst offering views to the beach-like pool or surrounding bushland interlaced with Palms.

Architecture

Individual dwellings wrap around a private solar north courtyard, an indoor/outdoor living space affording privacy central to the dwelling. This courtyard enhances the opportunity to provide natural sunlight and ventilation to all rooms whilst ensuring maximum solar and thermal potentials of the site are utilised. Introduced landscape boundaries provide summer shade and privacy to neighbours.

Careful consideration of massing ensures maximum solar penetration to habitable spaces whilst minimising any overshadowing to neighbours or surrounding communal recreation areas. Large open plan living pavilions connect to second storey bedroom and services pavilions around the central courtyard. Bushland or pool side views are maximised by placement of the single storey portion of living pavillion between the views and north court. This minimises overshadowing and privacy issues.

Materials Palette

Colours and textures sympathetic to the introduced landscape mimic the sand dune environment. Natural tones and finishes are used with minimal paint detailing. Solid elements and on ground concrete slabs provide thermal massing.

- Polished exposed aggregate concrete and stone tile courts
- Masonry, plywood and timber cladding
- Aluminium sliding doors and louvre windows
- Prefinished steel corrugated profile roofing
- Stone feature walls, planters, irregular paving
- Polished and textured concrete features
- Timber decking on steel supports
- Steel and timber shade screens
- Prefinished metal water tanks
- Solar hot water roof panels, tank in roof cavity

Landscape Character

The defining landscape identity element in this locality is the Janie's Corner Headland to the east of the site. The 'wind-pruned' foliage of the headland 'diving' into the water is to be repeated at the smaller scale of the pool environs. The linear pool is distinctively flanked by dense mass planting on 'dune mounds', creating framed views around and across the space. Focal seating decks and accent 'crescent beaches' are a feature of the pool design. A 'Village Green' to the east of the pool will provide a complimentary amenity in terms of informal children's play, picnics, and the like. Canopy trees and massing Palms will reduce views between the houses.

The streetscape identity has a combination of native canopy trees for shade and adjacent clumps of palm planting to echo the distinctive sense of place. The native canopy trees will be located in informal clusters so as to break down the linear qualities of the road and any regularity created by lighting and driveways.

Individual residential addresses will be substantially concealed by the allotment landscaping. Sweeping walkways along edges and across the space will provide visual linkage and connectivity. Access control points will occur at all pool area entry locations.

Feature pavilions occur at each end of the linear series of pools providing visual termination and housing amenities such as barbeques, toilets and pool storage. A series of crescent shaped decks echo closely the allied 'sandy beaches' to create a series of family seating nodes. Sections of 'pool narrows' will create feature swimming environs, with these linking principal swimming areas. Design for safety will be a key part of the pool detailing. A secure pool bridge will provide free pedestrian movement between open space areas, whilst ensuring secure pool-safe areas.

The private garden areas will discretely merge with the common open space surrounds to the pool area. This integration will lend a spacious and generous quality to the areas. Private access ways will be marked with stepping stones, wrapping into private courtyard areas.

Communal access links will be selectively provided between allotments to ensure that informal access does not occur across private property. Canopy trees along the space will restrict views across the space between residences as well as creating a series of spatial divisions along this open space spine.

The Village Green is to be created as a distinct passive recreation amenity area with enclosing canopy trees and accent palms. Native grasses will provide a distinctive edge to the broad lawn areas, creating visual unity with the other major landscape areas around the site. Smaller scale pedestrian bridges will occur within the secure area of the pool where clear visibility and other safety issues are successfully addressed.

Limited areas of sand are proposed for the pool with this subject to refinement of pool detailing and management regimes. Detail edge treatments will be built to successfully manage the presence of sand along formal pool edges. 'Dune' forms will be created with steeply mounded berms, with edging of vertical timbers where walkways 'slice' through the dune forms.



Landscape Character The Dunes (click here to view the [original image](#))

The Fronds



The Fronds Precinct Plan (click here to view the [original image](#))

Concept

Dwellings connect to a meandering central spine like the leaves of a Fern frond. Occasional "leaves" are removed to enable both new and introduced landscaping to thrive between the dwellings.

The structured repetition of the dwellings slowly evolves into more individualistic designs as the natural environment dictates, slowly breaking apart as the land gently rises towards the tip.

Existing Character

The dune landscape to the south becomes immediately forested with smaller Paperbarks, to the west, growing in shallow depressions in the ground plane. A forest of Red Gums and large Eucalypts with minimal ground cover dominate the north and northeast portions of the precinct.

Adjacent the eastern boundary, an ancient Aboriginal scar tree is found situated in a denser Eucalypt Forest fringed by Palms and Ferns. This tree is historically significant to the local Aboriginal people and requires a buffer area of natural vegetation to protect the tree.

At the tip of the site, the landscape becomes even more fragile and heavily treed. Many large Eucalypts and Angophoras of relatively large canopy filter the sunlight onto the soft ground. Cabbage Tree Palms permeate the site as it rises slowly towards Janie's Headland.

A variety of unhealthy older trees are slowly falling over and dying making way for the Palm saplings and Ferns growing beneath the canopy.

Proposed Character

A delicate enclave of housing is broken apart by natural features which are highlighted as places of interest, utilised as quiet communal parklands for relaxation and as pedestrian links between the road and the peripheral cycle and pedestrian paths.

Skirting around the Aboriginal Scar Tree and fragile wet areas, the sinuous curves of the landscape create private spaces for both the community and individual dwellings such that it becomes infinitely intertwined with the architecture.

Architecture

The dwellings slowly rise off the ground becoming pole platform structures with boardwalk connections at the tip of the development, responding to the changing environment. The townhouse developments slowly breaking into smaller groups and eventually a single dwelling.

Dwellings encompass a northern courtyard, an extension of the living spaces. These courts occur between single storey living pavillions to ensure northern solar penetration all year round. Common walls between garage and amenities or bedrooms ensure maximum acoustic privacy between neighbours. These walls extend from the buildings slowly shrinking into the landscape.

An entry deck leads to a central glass void providing a glimpse of the bushland and water features beyond. The void provides a natural separation between spaces for maximum privacy and compartmentation within the house.

Simple skillion roofs with delicate lines float over a glass wall providing shade and shelter to outdoor living areas. Timber and steel screens are transformed into external walls offering shade from the harsh east and west sun. Private spas or plunge pools are incorporated as visual features between the dwelling and bushland. These water features sit against the decks and building edges such that they appear to float over the ground.

Materials Palette

Lightweight materials and fine edges to decks and roofs create the appearance of a floating dwelling over the landscape and associated water features, anchored only by the solid party walls. The material tones and colours are predominantly soft and muted blending into the surrounding environment, with the occasional splash of colour for detail. Smooth textures and high level detailing provide fine lines floating over a textured landscape.

- Plywood and sheet metal cladding
- Stone clad or concrete party walls
- Slide away walls and doors
- Louvred glass windows
- Prefinished steel roofing
- Prefinished steel & stainless steel metalwork
- Steel and timber screens
- Prefinished steel water tanks
- Natural timber decks and bridges
- Paved courts filtering into the landscape

The Cove



The Cove Precinct Plan ([click here to view the original image](#))

Concept

The Cove apartment buildings are sited on disturbed land to minimise environmental impact.

The arced forms of the apartment buildings respond to the sweep of the inner rows of the Dunes housing. They gently tighten in radius to enclose the communal courtyard. The buildings terminate the principal east / west site landscape axis. The curved forms fan out to capture views and aspect, and focus in over active pool and courtyard areas.

The north apartment building relates to the surrounding natural environment, enjoying views of bushland and Janie's Headland beyond. The south apartment building reinforces the urban edge of 'street' between the two apartment precincts. A central pool becomes the focal point of the courtyard. The courtyard is enlivened by the supporting café, restaurant and recreational facilities.

The building forms allow permeability of views, space and light to increase amenity for residents and reduce the impact of bulk and scale. Openings are used to provide connection between the courtyard and street, to promote enquiry, to allow service entry zones and encourage movement through the precinct, engaging with the built environment.

Existing Character

The Cove apartment precinct lies within the disturbed area of the development site left by past sand mining

operations. It is a harsh and exposed environment. The ground is relatively bare with exposed sandy soils containing sparse clumps of heath regrowth.

The area is exposed to the weather from the south, east and west, with Janie's Headland providing some shelter from strong north easterlies. The area has a high marine exposure due to its proximity to Seven Mile Beach.

The Cove precinct is open to the north and south and is surrounded by The Fronds, The Point and The Dunes precincts. The precinct is located at the eastern termination of the existing 'open cut' which runs approximately five hundred metres east-west along the site.

The eastern boundary of the site is bordered by Booti Booti National Park, which is comprised of open heathland. The Scenic Drive dissects this land giving access to the beach. The tract of land immediately adjacent the site has been degraded by multiple track crossings and is to be regenerated.

The site is bounded by the main access road to the south, secondary access roads to the north and west, and a perimeter road to the east. The site is roughly rectangular, its longest axis running east - west.

Proposed Character

The Cove apartment complex forms the activated eastern end of the site. It is a hub for contemporary living set in a coastal environment. Facilities provided include; cafe, restaurant, and ancillary retail. Recreational facilities include; lap pool, lagoon pool and spas, sauna and gymnasium.

Residents are connected to site based facilities such as walking tracks, cycleways, feature pool, cafes and shops. Convenient walking tracks are provided to access Booti Booti National Park and Seven Mile Beach which are in close proximity to the site.

Architecture

The Cove is a complex of two low-rise apartment blocks, with combined retail facilities sited around a communal landscaped courtyard containing a feature pool and landscape. The courtyard opens to the east - west landscape axis of the site. The apartment buildings sit over a basement level of carpark that defines the perimeter of the deep soil zone under the lagoon pool.

Each building has four principle stories accommodating apartments. A partial fifth storey setback from the facade below contains roof top pavilions which provide access to the private roof terraces from the apartment below. These pavilions accommodate living spaces to compliment the recreational function of the roof terrace and provide supplementary habitable space for the penthouse apartment below.

Large cuts through the building separate the 'retail' function from the ground and first level apartments. The cut created by the lap pool through the north building reveals views of the bushland beyond. Cooling summer breezes circulate through the breaks separating the north and south buildings.

The buildings are designed with a strong horizontal expression, hugging the ground. The line of the façade is reinforced with glass louvres and infills of timber screening for privacy and weather protection. Punched windows have a horizontal proportion.

The horizontal banding of balconies are punctuated by the blade walls separating apartments. Entries are vertically expressed as glazed elements that spill natural light into lobby spaces. Apartments have a dual aspect providing north and south internal and external living areas.

The roof terraces contain hard and soft landscaped elements and offer a vantage point to share the view. Lightweight roof structures, which provide shade and weather protection over the roof top pavilions and the private terraces, serve to cap the form of the buildings.

Materials Palette

Natural materials are selected to evoke the colours and textures of the coastal environment. Colours are generally

light to mid tones. Textured materials are used to enhance modelling of the façade through the play of light and shade. High durability, long life, low maintenance materials suitable for high marine exposure are to be utilised, with minimal use of paint finishes.

- Stone clad building base, feature walls and courtyard walls.
- Cladding of painted concrete, tiling & metal panels.
- Shade and privacy screens of timber, prefinished aluminium louvres & stainless steel mesh.
- Balustrades clear glass & painted concrete.
- Timber & stainless steel handrails.
- Prefinished steel & stainless steel architectural metalwork.
- Prefinished aluminium doors and windows.
- Colorbond stainless steel roofing.
- Roof terrace pergolas of prefinished aluminium louvres.
- Shade awnings of perforated weather resistant tensile fabric.

The Point



The Point Precinct Plan (click here to view the [original image](#))

Concept

Apartments are oriented to balance exposure to north light and a desire to maximise east and southeast ocean views. A 'V' building format has been adopted to fit within the site constraints of regenerating bushland and APZ setbacks.

Apartment blocks are oriented along the north and south legs of the 'V' addressing 'street' and perimeter roads respectively. The block sited at the pointed end of the 'V' completes the enclosure of the internal courtyard and acts a buffer to cold westerly winds.

The 'V' opens toward the east maximising the angle of view from the apartments at its periphery. The arrangement provides the majority of apartments with views over the courtyard to the open heathland beyond. Distant ocean views are made possible from the upper level apartments and from the private roof terraces.

Apartment 'slab' typology is broken down into small self sufficient blocks in keeping with the scale of the surrounding environment and built form. Buildings adopt a low-rise stance concealing them behind the tall heathland that separates the site from the beach. Breaks between apartment blocks provide spatial relief between apartments. These openings become avenues for contact and interaction, linking residents to pool, beach, cycle and walking tracks.

Existing Character

The Point apartment precinct is located at the most easterly section of the site on a slightly raised dunal landform, a leftover from past mining operations. It has been significantly disturbed as a consequence and is a harsh and exposed environment. The ground is relatively bare with exposed sandy soils containing sparse clumps of heath regrowth.

The area is exposed to the weather from the south, east and west, with Janie's Headland providing some shelter from strong north easterlies. The area has a high marine exposure due to its proximity to Seven Mile Beach.

The north and west boundaries of the precinct are defined by the existing 'open cut' that runs east-west along the site.

The southern edge of the precinct is strongly defined by deeply shaded closed forest, comprising of tall Eucalypts interspersed with lower Palms.

The eastern boundary of the site is bordered by Booti Booti National Park, which is comprised of open heathland. The Scenic Drive dissects this land giving access to the beach. The tract of land immediately adjacent the site has been degraded by multiple track crossings and is to be regenerated.

The Point apartment site is defined by the main access road to the north, the south and east perimeter roads, and a minor access road to the west. The site is roughly triangular in shape and is located at the termination of the south eastern end of the Dunes Precinct. The apartment site is located on disturbed land to minimise environmental impact.

Proposed Character

A complex of low rise apartments that reflect the coastal ambience of the vicinity, arranged around an internal landscaped courtyard which opens to bushland views and sun. Individual apartments have a strong focus on indoor-outdoor living with the majority being double sided. Generous balconies and courtyards are provided as private open space. Private roof terraces enable recreation, contemplation and a vantage point to enjoy the view.

Residents of The Point can access the recreational facilities of The Cove apartments, in addition to their own pools, spas and outdoor recreation spaces. Residents are connected to site based facilities such as walking tracks, cycleways, feature pool, cafes and shops. Convenient walking tracks are provided to access Booti Booti National Park and Seven Mile Beach which are in close proximity to the site.

Architecture

The Point is a complex of four low rise apartment blocks sited around a 'V' shaped private communal courtyard. The courtyard opens out to bushland views, a northeast aspect and welcomes cooling summer breezes.

Each building has four principle stories accommodating apartments. A partial fifth storey set back from the facade below, containing roof top pavilions which provide access to the private roof terraces from the apartments below. These pavilions accommodate living spaces to compliment the recreational function of the roof terrace and supplementary habitable space for the penthouse apartments below.

Entry to the carpark is from the lowest section of the site along the southwest boundary. The carpark establishes the

platform on which the apartments sit and define the perimeter of a deep soil zone under the courtyard. This facilitates sustainable planting and the excavation of pool shells.

The buildings are designed with a strong horizontal expression, hugging the ground. The line of the façade is reinforced with glass louvres and infills of timber screening for privacy and weather protection. Punched windows have a horizontal proportion. The horizontal banding of balconies are punctuated by the blade walls that separate apartments. Entries are vertically expressed as glazed elements that spill natural light into lobby spaces.

Apartments are a combination of single storey dual aspect, two storey single aspect and two storey cross over types. Private roof terraces contain hard and soft landscaped elements and offer a vantage point to share the view.

Materials Palette

Natural materials are selected to evoke the colours and textures of the coastal environment. Colours are generally light to mid tones. Textured materials are used to enhance modelling of the façade through the play of light and shade.

High durability, long life, low maintenance materials suitable for high marine exposure are to be utilised, with minimal use of paint finishes.

- Stone clad building base, feature walls and courtyard walls.
- Cladding of painted concrete, tiling & metal panels.
- Shade and privacy screens of timber, prefinished aluminium louvers & stainless steel mesh.
- Balustrades clear glass & painted concrete.
- Timber & stainless steel handrails.
- Prefinished steel & stainless steel architectural metalwork.
- Prefinished aluminium doors and windows.
- Colorbond stainless steel roofing.
- Roof terrace pergolas of prefinished aluminium louvers.
- Shade awnings of perforated weather resistant tensile fabric.

Landscape Character - The Fronds, The Cove and The Point

These sites have yet another distinct and premium quality landscape character that provides natural design inspiration for the character of the area. In this aspect, the light through the trees and the clear understorey create mottled lighting effects. These will be accentuated through the forming long sweeping edges between massed native grass areas and lawns. The native grasses are proposed to dominate the streetscape character.

Environmental sculpture opportunities are identified in the alcove spaces as indicated on the plans. These will have feature night lighting. Massed native grassed will dominate the street frontages of all residences to create a sense of continuity through the series of closely spaced driveways.

Lomandra species provide a very hardy compliment to native grass species, being suitable for hard-wearing locations adjacent driveways and walkways. A dedicated playground facility is nominated on the drawings. The detail design will develop the thematic elements of the precinct into the play equipment.

The perimeter of treatments beyond the massed native grass areas will be of the heath shrub and small tree species that repeat from the spaces between the residences.

The Banksia and Melaleuca species are distinctive species whose fruit and leaf forms provide inspiration for the sculptural elements. The contrast in texture and colour between the massed grasses and native perimeter buffer planting will accentuate the distinctive curvilinear forms as shown on the drawings. Lawn and massed shrubs interface in the private courtyard areas creating comfortable private passive recreation areas for residents.

Lush forest understorey type species endemic to the region will be used to create feature foliage planting effects to produce a buffer and visual accent. The use of native forest and dune grasses will provide soil stabilisation of embankments and mounded earthforms designed to echo the coastal dune forms. Striking modern detailing will provide

a high level of simplicity and will echo the architectural detailing. The garden layout creates a strong transition between the dues and built forms.

The open space areas will feature linear fingers of timber decking, stone gabions, and planting. A dramatic simplicity is sought, with transitional planting to interface with the adjacent secondary dune vegetation. The finishes to the pool surrounds will include timber decking, concrete pavements and stone in order to achieve the high level of finish consistent with the architecture.

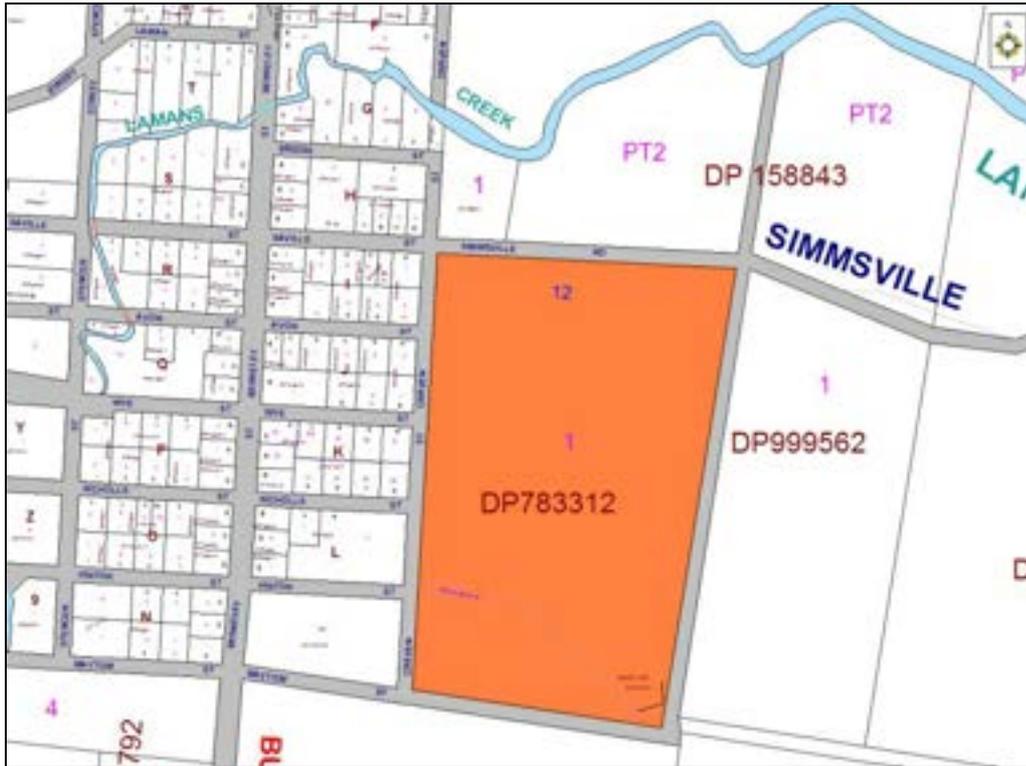
The shallow wading pools in the open space areas will provide visual termination to the decks, with feature night lighting. The depth will be strictly limited for safety. Massed Cabbage Tree and Bangalow Palms will mimic the natural stands of Palms in the forest and hillside gully areas of the locality.



Landscape Character, The Fronds, The cove and the Point Precincts
(click here to view the [original image](#))

16.24 Simmsville Road, Stroud

This Part applies to Lot 1 DP 783312 Simmsville Road Stroud, as shown below.



Simmsville Road Stroud site location plan (click here to view [original image](#))

Development subject to this Part must ensure that ecological and socioeconomic values are effectively managed.

16.24.1 Subdivision

Controls

- (1) Development subject to this Part must be sympathetic to the heritage values of Stroud. Any application to subdivide land subject to this Part must adopt adjoining street grids and use similar lot sizes.
- (2) The minimum frontage of a newly created allotment should be 20m.

16.24.2 Water Quality

Controls

- (1) Post-development stormwater runoff must not increase pollutant loads entering downstream drainage systems unless a lower water quality objective can be tolerated and would be acceptable to Council and stakeholder public authorities.

16.24.3 Riparian Zone Management

The NSW Office of Water may require that the following issues be resolved in any subdivision of land subject to this clause either to obtain an approval under NSW legislation administered by the Department or to comply with the Department's current policies for the sustainable management of riparian areas:

- The identification, and if present, the protection of core riparian zones and vegetated buffers.
- If core riparian zones or vegetated buffers are present, demonstration that any structural works, including those for stormwater capture and treatment, and bushfire asset protection zones, are located outside them.
- The current legal status and intended use of any existing farm dams be determined under the Water Management Act 2000 and the Water Act 1912.

16.24.4 Habitat Management

Controls

- (1) The remnant woodland stands on Lot 1 must be protected and linked to remnants on steep slopes or in riparian zones by targeted replanting of native vegetation.

16.24.5 Aboriginal Heritage

Controls

- (1) The isolated artefact that was found during the survey (Insite Heritage 2007) must be protected by ensuring that future subdivision and development do not require services, fencing, roads or other elements that are likely to disturb it.

16.24.6 Visual Amenity

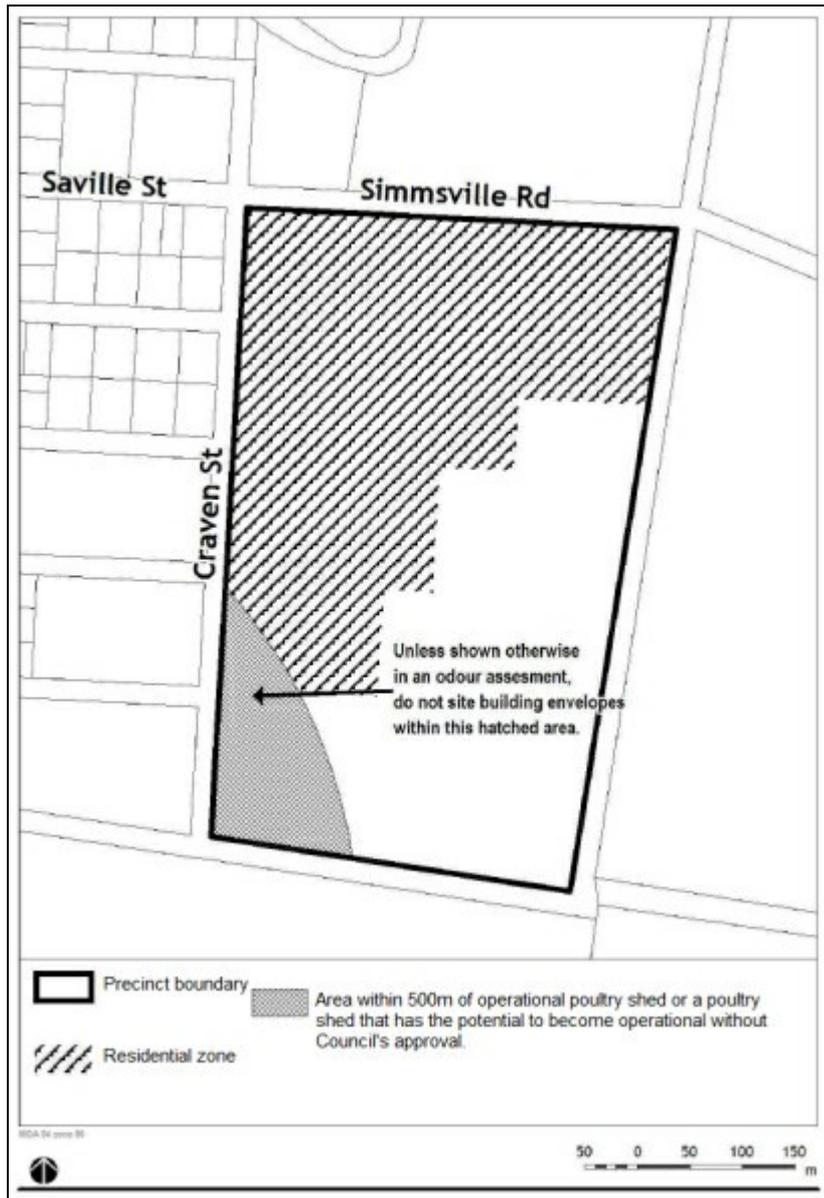
Controls

- (1) A visual impact assessment must be prepared to accompany any development application for subdivision in the Simmsville Precinct.
- (2) The visual impact assessment must consider:
 - (a) The likely location, scale, density and height of all future residential development that could be visible in the historic centre of Stroud.
 - (b) The degree to which such development would be visible from the heritage conservation area of Stroud and a qualitative assessment of the change to visual amenity and heritage values.
 - (c) Controls that would be effective in reducing or avoiding adverse changes to visual amenity or heritage values in Stroud. The controls could address height limits, landscaping screens, suitable colour schemes, facade variation, the size of garages, materials used to construct driveways, or other attributes that would be effective in reducing or avoiding adverse changes to visual amenity or heritage values in Stroud.

16.24.7 Buffer to Poultry Sheds

Controls

- (1) All building envelopes within Lot 1 must be located at least 500m from their closest point to the closest part of the nearest operational poultry shed, or a poultry shed that has the potential to become operational without Council's approval.



Simmsville Road Stroud buffer to poultry sheds (click here to view [original image](#))

The hatched area represents: "Area within 500m of an operational poultry shed or poultry shed that has the potential to become operational without Council's approval."

16.24.8 Traffic and Access

Controls

- (1) Any development application for subdivision or development must be accompanied by a traffic study, prepared in accordance with the RTA's Guide to Traffic-Generating Developments and the following requirements:
 - (a) Consideration of the overall development of Lot 1 and any proposed staging of development
 - (b) Identification of the required road infrastructure upgrade as a result of the development.
 - (c) Identify all relevant vehicular traffic routes and intersection for access to/from Lot 1 and the surrounding area.
 - (d) Current traffic counts for all of the above traffic routes and intersections. The anticipated additional vehicular traffic generated from the proposed development.
 - (e) Consideration of the traffic impacts on the existing intersection and the capacity of The Bucketts Way to safely and efficiently cater for the additional vehicular traffic generated.

- (f) Traffic analysis to the Roads and Maritime Services requirements

16.25 Stroud

16.25.1 Residential Development

16.25.1.1 General Principles

Objectives

- To provide a high quality design of buildings reflecting the rural character of Stroud's Village and Visual Catchment.
- (1) A development application is required to carry out the work on land or buildings in the “heritage conservation area” and/or affecting a “heritage item” in accordance with the Local Environmental Plan. Council’s opinion on whether a development application is required for minor work will be based on compliance with the controls in this DCP.
 - (2) All applications within the Heritage Conservation Area and/or affecting a Heritage Item (by reference to two lots either side) must ensure that the significance and integrity of the Area and/or Item is retained.
 - (3) Applications may be referred to Council's Heritage Advisor, to ensure compliance with the intent of the DCP controls.
 - (4) Applicants proposing development in the heritage conservation area and/ or affecting a heritage item should consult with Council in the first instance.

NOTE: A development application may not be required for minor work if in Council’s opinion the proposed development would not adversely affect the heritage significance of the Heritage Conservation Area and/or heritage item. For example: Property owners may submit a written request to Council proposing external paint colours for their property. If the colours are appropriate to the era and style of the building, Council will provide written advice that a development application is not required.



Typical verandah at ground



Typical front verandah and boundary fence



Typical double garage at rear of allotment



Typical single garage and boundary fence

Stroud district general building design (click here to view [original image](#))

16.25.1.2 Heritage Items

Development affecting heritage items should respond to and reflect the following principles:

Original Fabric

Original fabric must be retained in-situ in a sound and stable condition or accurately reconstructed with traditional construction techniques. In the exceptional circumstances where original fabric must be removed, it should be kept on site for future reference or possible reinstatement, and must be adequately recorded before removal.

Adaptive Reuse

Adaptive reuse must only occur where the original use is no longer viable and the new use does not compromise the inherent heritage significance and value of the building.

Adaptive reuse must ensure that additions, plant, equipment or services which are required to facilitate adaptive reuse are concealed from view within the broader streetscape.

Alterations and Additions

Additions and alterations to an identified heritage item must ensure that the significance and integrity of both the building and its curtilage are retained or enhanced. An application for additions or alterations must be accompanied by a Statement of Heritage Impact (SOHI) prepared by a suitably qualified heritage consultant.

Reconstruction

Where reconstruction of a heritage item is proposed these works must be based on historic information to allow accurate replication of the original fabric, building or structure. Reconstruction of demolished heritage item is only appropriate where:

- The item was of considerable historic significance and/or a landmark within the townscape;
- Reconstruction is important in the interpretation of a particular aspect of the town's history;
- There is sufficient documentary evidence to allow accurate reconstruction; and
- It is undertaken under the guidance of an appropriately qualified and experienced heritage consultant.

Rather than the actual reconstruction of demolished heritage buildings or other structures, their form may be interpreted through landscaping or sculptural works using recovered materials

Demolition

Demolition of any building requires Development Consent from Council.

Demolition of any building identified as a Heritage Item or as being within a Heritage Conservation Area will not be permitted unless:

The item is structurally unsound past the point of repair and represents a public danger; or
There is a concurrent Development Consent for a replacement structure.

An application for demolition of a Heritage Item or within the Heritage Conservation Area must be accompanied by a Statement of Heritage Impact (SOHI) prepared by a suitably qualified heritage consultant. Appendix B provides additional information on what an SOHI is and how to prepare this information.

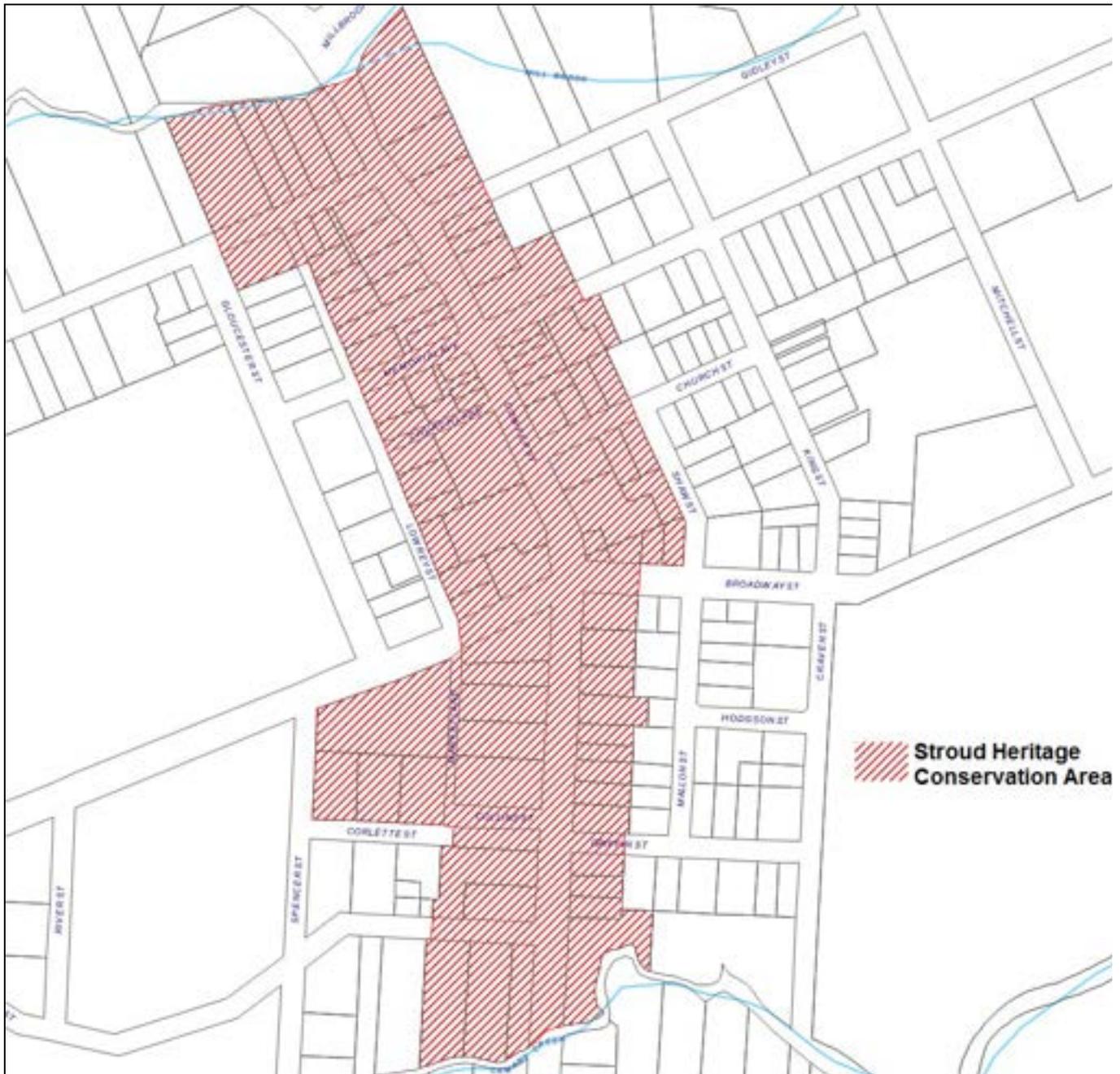
16.25.1.3 State Significant Items

Where a heritage item is noted as being of State Significance, a Conservation Management Plan may be required.

The Burra Charter states that cultural significance is “embodied in the place itself, its fabric, setting, use, associations, meanings, records, related places and related objects”.

As such, development of existing heritage items or buildings within the heritage conservation area must retain their original fabric wherever possible or strive for the authentic reconstruction of missing elements.

16.25.1.4 General Building Design for Heritage Conservation Area



Stroud Heritage Conservation Area (Click here to view [original image](#))

New Buildings

Controls

New buildings within the Heritage Conservation Area must:

- (1) Have a simple rectilinear plan, wherever possible.
- (2) Have a simple broad hipped or gable roof.
- (3) Have the roof constructed at approximately 30 degrees without unnecessary secondary projections or dormer windows.
- (4) Be consistent with the character and curtilage of any adjacent heritage items (by reference to two lots to either side).
- (5) Break up built form into massing elements of no greater than 12m (length) and 150m² (area).
- (6) Maintain the streetscape character through consideration of design, appearance and materials.

- (7) When a verandah is proposed, the verandah must be either at the same or a lower pitch than the main roof.
- (8) Use materials which are consistent with the overall character of the streetscape, and any heritage item in the vicinity (as defined by reference to two lots to either side).
- (9) Where relocated houses are used, ensure the design and appearance is consistent with the above guidelines and the historic character of Stroud.

Alterations and Additions

Controls

Alterations and additions to existing buildings within the Heritage Conservation Area and/or Heritage Items must:

- (1) Maintain the historic style of the existing design, unless such buildings are intrusive to the overall character of the town by virtue of their scale or massing.
- (2) Be located to the rear of existing buildings.
- (3) Be restricted to minor elements on the front of a building (e.g. verandahs).
- (4) Where a verandah is proposed, be designed and constructed in accordance with the era and/or design of the existing building.
- (5) Be clearly discernible as new work, though sympathetic to the character of the building.
- (6) Retain existing materials and finishes in-situ, and use compatible materials for new work.
- (7) Preserve significant fabric, buildings, structures or landscaping.
- (8) Not cause significant change to the existing roof form.
- (9) Retain original secondary elements such as chimneys and finials.
- (10) Primarily use traditional construction materials and techniques (e.g. lime mortar) for the repair or alteration of existing buildings, with modern materials or techniques used only where supported by conservation and structural practice

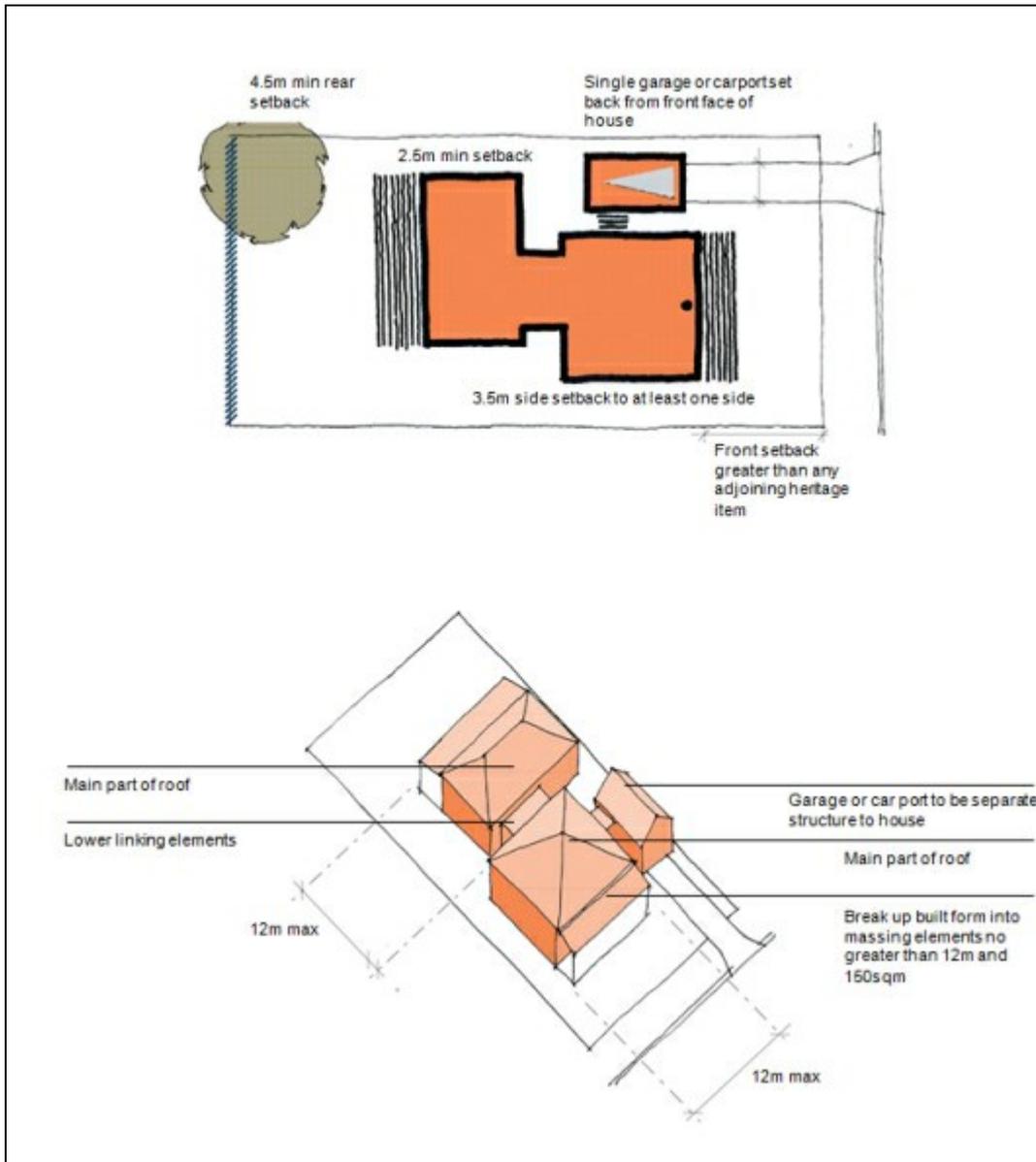
16.25.1.5 Setbacks

Objectives

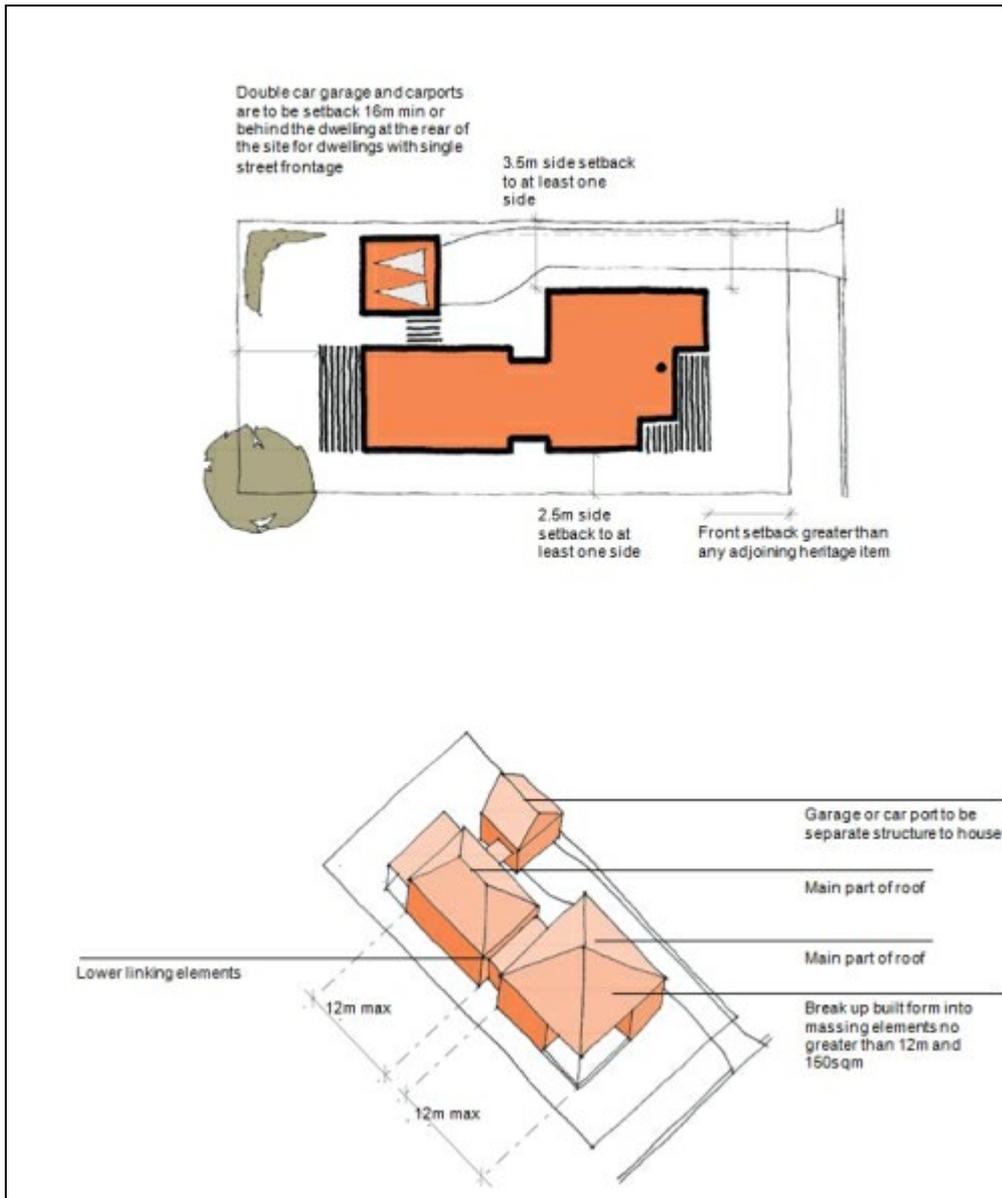
- To provide space between buildings to maintain streetscape character and provide for air flow, sunlight, landscaping and general amenity.

Controls

- (1) New dwellings must have primary and secondary road setbacks which are:
 - (a) greater than any adjoining heritage item, OR
 - (b) the average of or greater than the adjoining (non-heritage) buildings;
- (2) New dwellings must have one side boundary setback of at least 2.5m and one side boundary setback of at least 3.5m;
- (3) New dwellings must have a rear boundary setback of at least 4.5m.
- (4) Larger setbacks or higher levels of construction may be required to meet the guidelines for bushfire protection in bush-fire prone areas
- (5) Setbacks of new buildings in the vicinity of a heritage item must be equal to or greater than the setback of the heritage item, to ensure its prominence within the streetscape.



Stroud district setbacks single garage (click here to view [original image](#))



Stroud district setbacks double garage (click here to view [original image](#))

16.25.1.6 Site Cover and Outdoor Living Access

Objectives

- To maintain the open heritage setting of Stroud.

Controls

- Site cover is to be no greater than 40% in the Heritage Conservation Area.
- Outdoor living space must be provided for each dwelling, with direct access from main living areas with a minimum area of 24m² and minimum dimension of 4m.

16.25.1.7 Materials and Colours

Controls

- The preferred materials used for development within the Heritage Conservation Area and/or affecting Heritage Items include:

- (a) Timber weatherboards or vertical boarding.
 - (b) Corrugated iron for roofs.
 - (c) Timber trims for fascias.
 - (d) Timber framed windows and doors.
 - (e) Rendered, painted or bagged masonry.
- (2) Modern materials when used must be consistent with the general finish, appearance and proportions of surrounding original materials.
 - (3) Face brick when used, must be in soft red/brown tones with plain smooth faces. Strongly coloured, heavily mottled or textured bricks must not be used.
 - (4) Structural items should be fixed in a traditional way.
 - (5) Rainwater gutters and pipes should follow traditional patterns, such as quad or ogee gutters and circular downpipes; in preference to square section or full fascia gutters with perforated edges.
 - (6) Roof tiles must not be used within the Heritage Conservation Area.
 - (7) Colours for residential buildings within the Heritage Conservation Area and/or Heritage Items are to be in keeping with the heritage character of the Area and/or Item.
 - (8) The colour palettes should be referred to for guidance on which colours may be suitable.

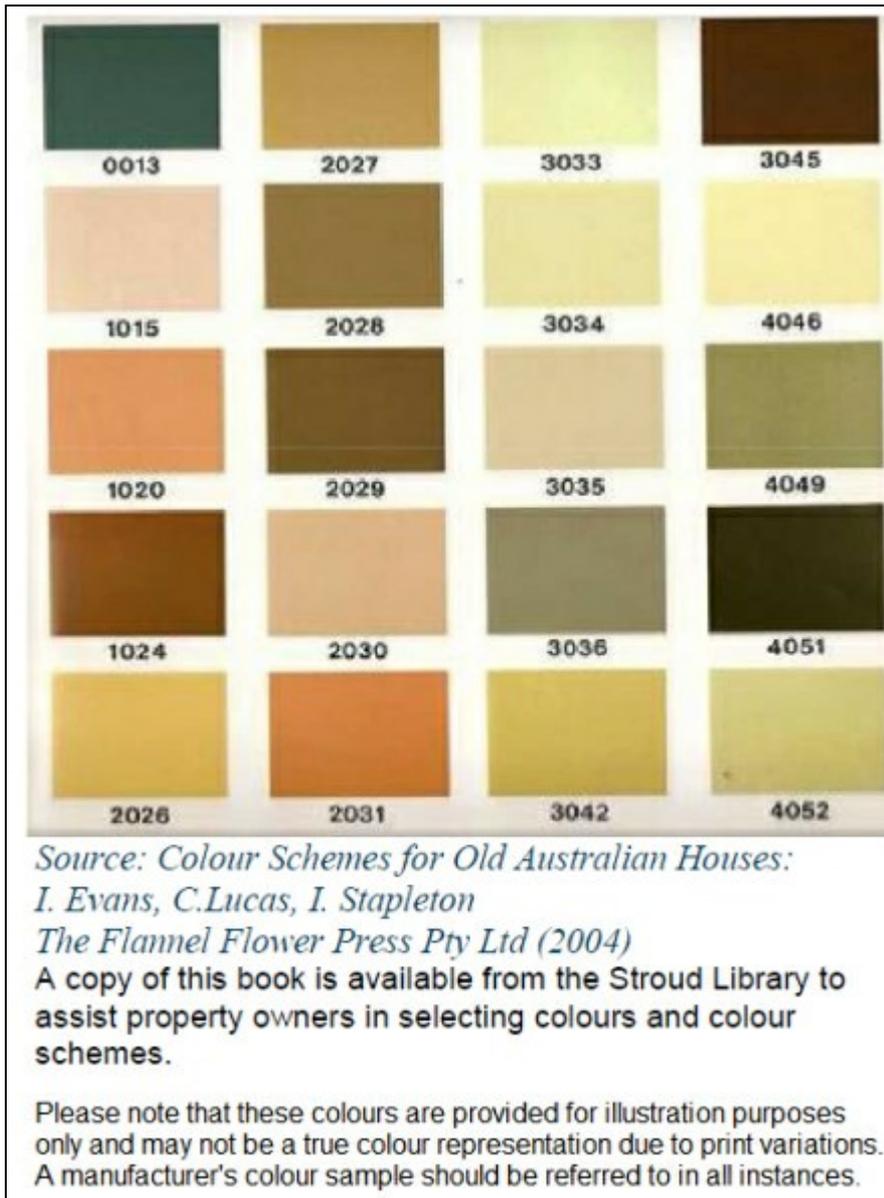
Recommended Colour Schemes

Up to about 1870

Buildings remaining from this period are restricted to those associated with the Australian Agricultural Company. These are brick buildings some of which have been rendered and painted at a later date.

The various lime washes and oil paints available at the time provided a range of colours varying through off-white, beige and pink-beige to the later use of salmon pink. Trim was usually in shades of beige, drab or dark green or stone but darker colours, including deep crimson, appeared later in the period.

Advice should be sought from Great Lakes Council or a suitably qualified practitioner regarding colour schemes for these buildings because of their high level of significance within the Heritage Conservation Area.



Suggested colours for up to about 1870 (click here to view [original image](#))

About 1870 - 1920's

Walls, if painted, were often in shades of beige, fawn, pink or brown. Trim could be in contrasting colours such as beige, biscuit, cream, deep red or deep green. Many timber dwellings in rural Australia were originally left unpainted and allowed to weather.

The range of colours generally used in rural areas was much simpler than richer variety of colours and contrasting effects used in fashionable city areas and a mid stone colour for walls with a contrasting darker stone or brown for trim became common during this period and lasted through to the 1930s.



Suggested colour scheme from about 1870 to 1920's (click here to view [original image](#))

1920's - 1930's

The colour schemes used at this time were often simpler than the preceding period. This is often referred to as the "Redwood era" because of the influence of Californian bungalow style. Red oxide and various deep red/brown colours were popular for walls with contrasting cream trim. Deep green walls with paler cream or biscuit trim was also used. These can produce eye catching colour schemes but can be seen as being too dark or unsuited to the Australian summer, so that paler colours such as fawn, cream or biscuit with contrasting trim are often preferred and are acceptable. Various shades of stone remained popular in rural areas throughout much of the period.



Source: Colour Schemes for Old Australian Houses:

I. Evans, C. Lucas, I. Stapleton

The Flannel Flower Press Pty Ltd (2004)

A copy of this book is available from the Stroud Library to assist property owners in selecting colours and colour schemes.

Please note that these colours are provided for illustration purposes only and may not be a true colour representation due to print variations. A manufacturer's colour sample should be referred to in all instances.

Suggested colour scheme for 1920's to 1930's ([click here to view original image](#))

1940's - 1950's

The 1940s and 1950s

This period saw a reaction to the dark colours and lighter cream or white for walls along with darker brown or green trim to create contrast became popular. Pastel blues began to appear in the period but are generally not acceptable unless there is historical evidence that the colour was originally used on the building.

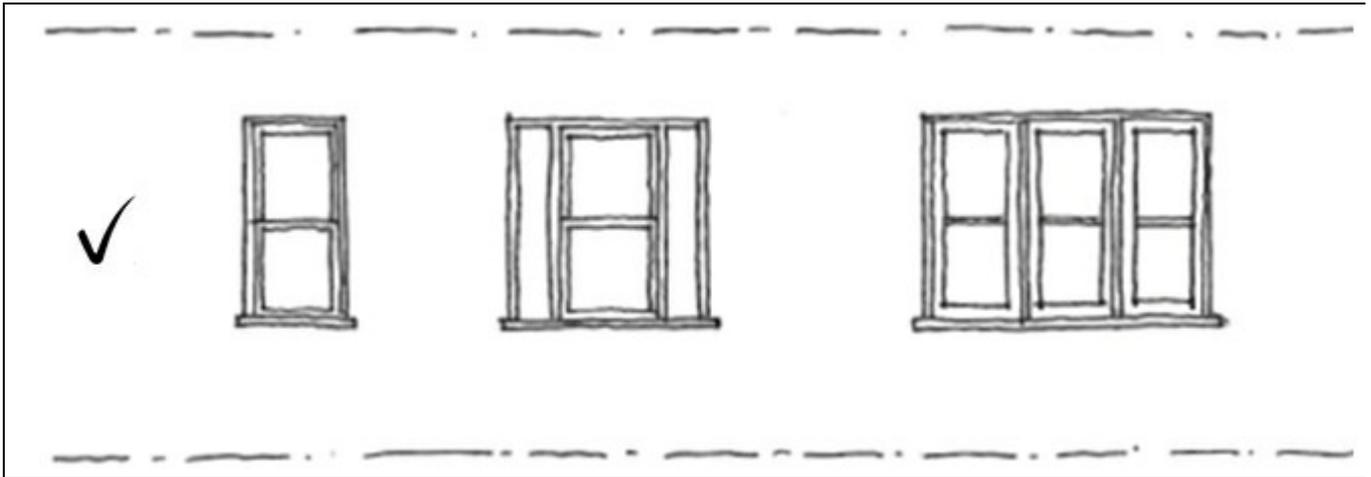


Suggested colour scheme 1940's to 1950's (click here to view [original image](#))

16.25.1.8 Doors and Windows

Controls

- (1) All window and door openings for residential buildings within the Heritage Conservation Area and/or Heritage Items must:
 - (a) Be of simple design and timber framed.
 - (b) Not use multi-paned sashes, false glazing bars or false arched heads.
 - (c) Be arranged on a regular spacing and with a consistent head and sill height across the façade.
 - (d) Be vertically proportioned and based on the traditional structural design rather than large voids or extended horizontal openings.
- (2) Window typologies all with either vertical proportions or made up of separate sashes with vertical preparations



Stroud district appropriate window design (click here to view [original image](#))

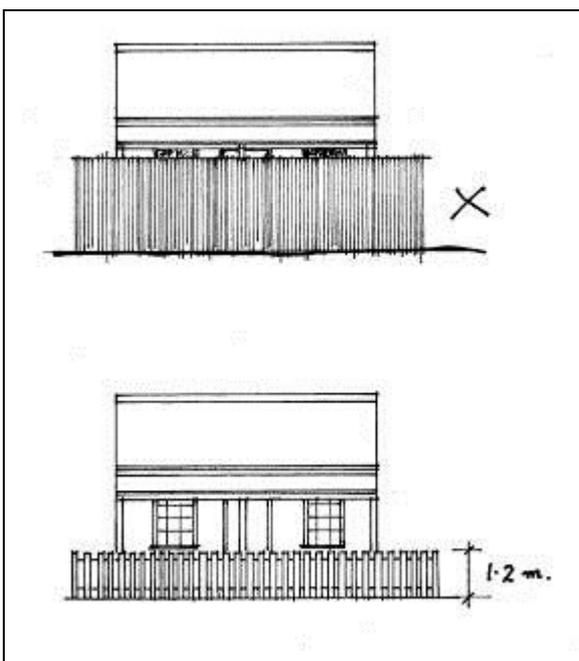
16.25.1.9 Fencing and Walls

Objectives

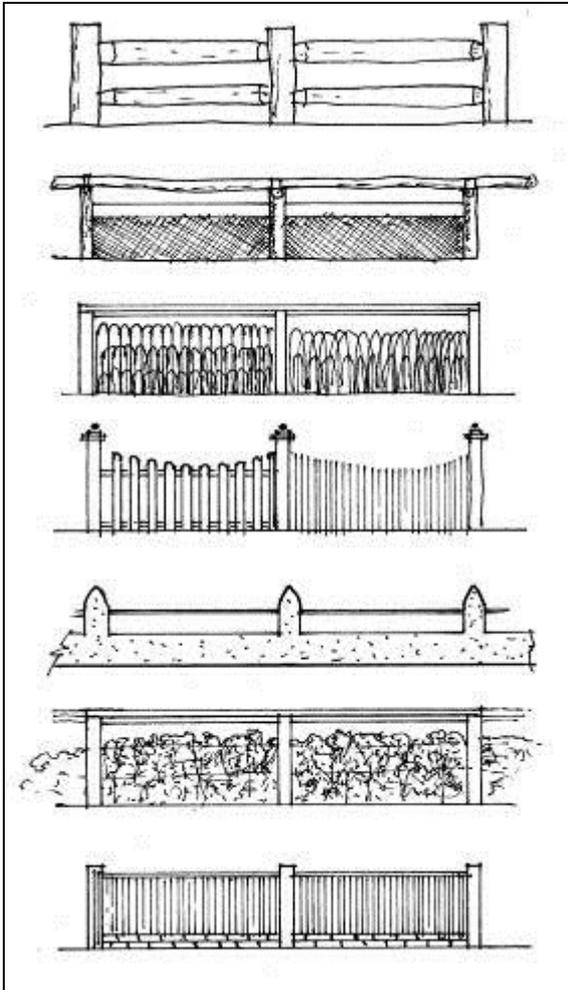
- To retain the style and era of existing buildings and streetscapes.

Controls

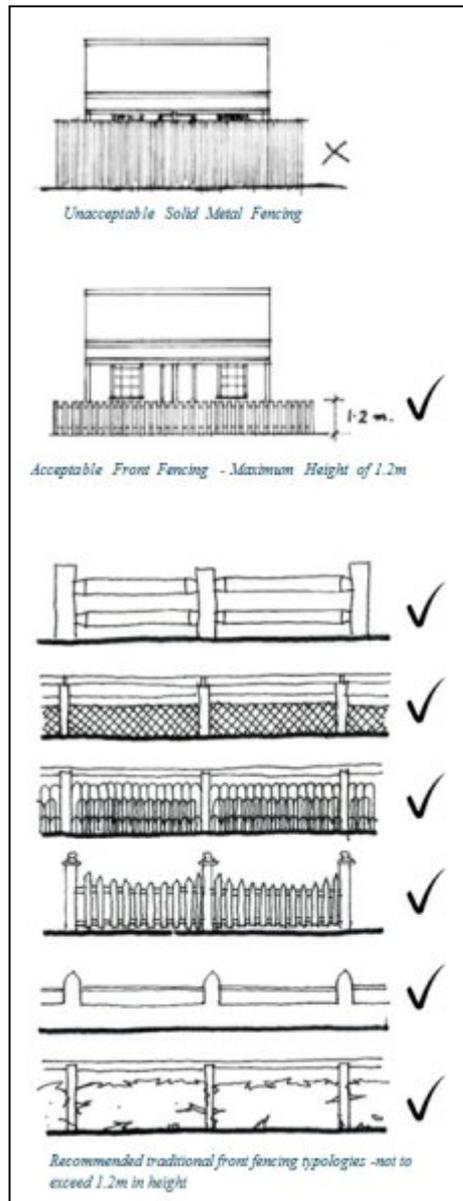
- Fences in front of the building line (front setback) must not exceed a maximum height of 1.2m.
- Fences behind the building line must not exceed a maximum height of 1.8m.
- Fences on bushfire-prone land must be constructed of non-combustible material or hardwood timbers.
- Solid metal fences and mesh fencing are not permitted within the Heritage Conservation Area.
- All fencing must be simple in design and be related to the style and era of the building.
- Retain and restore existing early fences, or reconstruct earlier fence types, particularly for heritage listed buildings.



(Click here to view [original image](#))



(Click here to view [original image](#))



(Click here to view [original image](#))

16.25.1.10 Car Parking and Access

Objectives

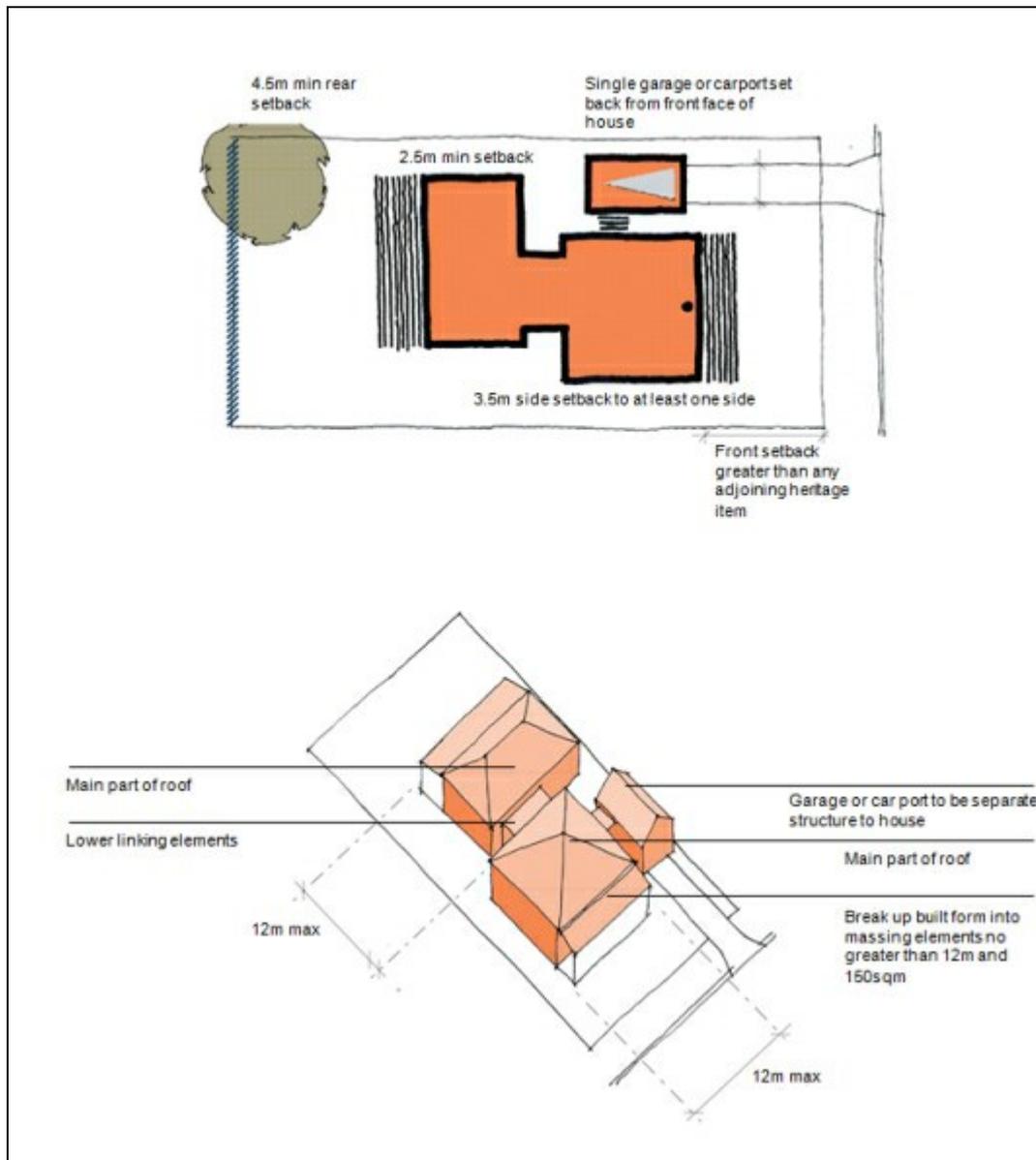
- To provide for the safe and efficient movement of vehicles, minimise on-street car parking and protect the amenity of the area.

Controls

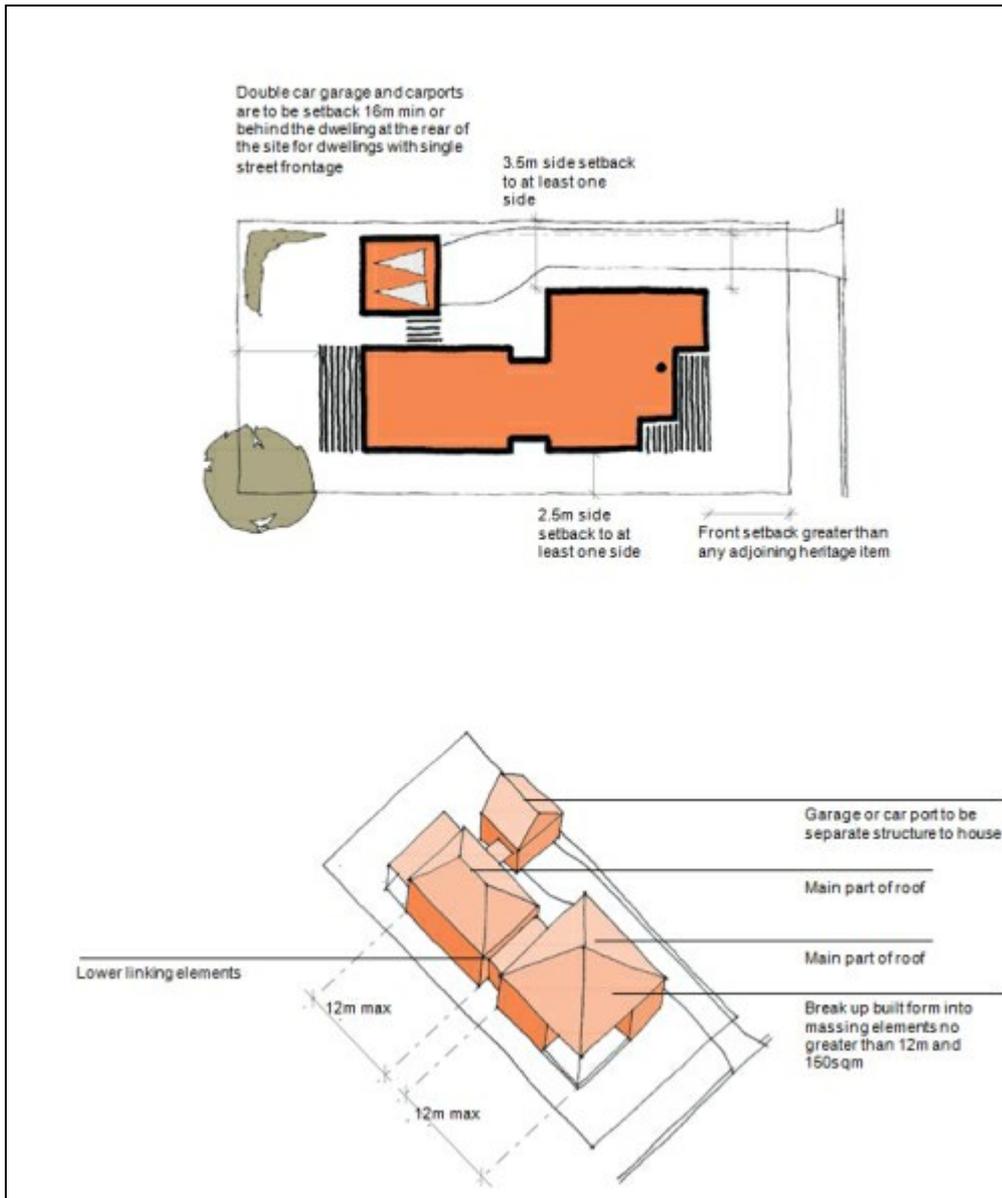
- Double car garages and carports are to be setback a minimum of 16m or behind the dwelling at the rear of the site, for dwellings with single street frontage.
- Single garages or carports must have a minimum 500mm setback from front face of house. Standard steel frame carports and garages must not be used in the Heritage Conservation Area.
- Car parking structures should have simple rectilinear plans and be of a complementary design to the main house.
- Car parking structures should have a gabled or hipped roof form, with roof pitch equal to or less than the house

roof.

- (5) Car parking structures should be detached from the main part of the dwelling.
- (6) Any structure connecting the main dwelling to a separate garage or carport should not be visible from the street.
- (7) Garage doors should be restricted to single car width, with multiple car garages having separate doors and posts in between.
- (8) Car parking structures should be constructed of materials that are the same or simpler than the main house. For example: plain weatherboards, vertical shiplap boards, and corrugated iron as a roofing material.
- (9) Driveways and crossovers are limited to one per frontage; and located to minimise the removal of street trees located within the road reserve



Stroud district setbacks single garage (click here to view [original image](#))



Stroud district setbacks double garage (click here to view [original image](#))

16.25.2 Commercial Development

General Design

Objectives

- To maintain the historic character of the commercial centre of Stroud.



(Click here to view [original image](#))

New Buildings

Controls

- (1) New commercial buildings within the Heritage Conservation Area and/or affecting a Heritage Item must:
 - (a) Have a domestic scale.
 - (b) Be built to or only slightly back from the street boundary, consistent with adjoining commercial premises.
 - (c) Have either a hipped or gabled roof.
 - (d) Have a verandah over the footpath, or to the street boundary if the building is set back.
 - (e) Have low key parapets consistent with other commercial buildings.
 - (f) Be consistent with the provisions for development within the Heritage Conservation Area and/or affecting Heritage Items.
- (2) New commercial buildings within all other urban areas of Stroud should reflect the heritage significance of the existing commercial centre.
- (3) New buildings are not required to be constructed as replicas of buildings within the commercial centre, but must give consideration to:
 - (a) Minimising the visual impact of car parking, service areas and items;
 - (b) The potential impact on surrounding residential development;
 - (c) The historic pattern of commercial development being located along main traffic thoroughfares; and
 - (d) The low scale and predominantly single storey pattern of commercial development within Stroud.

Alterations and Additions

Controls

- (1) Alterations and additions to existing commercial buildings within the Heritage Conservation Area must:
 - (a) Retain existing verandahs and where possible encourage the reconstruction of missing details
 - (b) Be of an appropriate style and detail for the design of the building where the original verandah is reconstructed.

Shop Fronts

New Buildings

Controls

- (1) New commercial buildings within the Heritage Conservation Area should reflect the traditional shop front arrangement of adjoining premises.

Alterations and Additions

Controls

Alterations and additions to existing commercial buildings within the Heritage Conservation Area:

- (1) Must retain traditional shop fronts and their features.
- (2) Should incorporate remnants of original shop fronts into new layouts.
- (3) Should reconstruct original shop front where the shop front has been replaced.
- (4) Should retain non-typical shop fronts which indicate the former use of a place, unless there is sufficient historic information to allow accurate reconstruction of an earlier form.

Verandahs

Almost all commercial buildings in Australia constructed before and around the turn of the century would have had a verandah over the footpath. While lacking any particularly flamboyant verandahs that were the hallmark of many larger country towns, Stroud is fortunate to retain verandahs on most of its commercial buildings and they take on a particularly prominent role in the streetscape.

Controls

- (1) New commercial buildings within the Heritage Conservation Area should include a verandah consistent with the following provisions.
- (2) Verandahs on all commercial buildings within the Heritage Conservation Area must:
 - (a) Avoid modern or pseudo-historic materials and details, such as aluminium lace, metal pipe framing or tightly rolled bull nosed iron.
 - (b) Correspond to the building by extending to adjacent verandahs or awnings to provide continuous weather protection for pedestrians beneath.
 - (c) Not run unbroken across adjacent buildings where they are clearly of different construction, even though they may now function as one.
 - (d) Be set back from the kerb by 600mm, to minimise the risk of damage by motor vehicles.
 - (e) Where the base of posts has rotted, galvanised steel brackets or straps may be used to support the post, however these should be no more than 10cm high. Concrete plinths, cast metal or plastic foot moulds must not be used. If the post has rotted beyond retention it should be replaced with one of a similar timber species, size and detailing to match.



(Click here to view [original image](#))

Signs

Controls

- (1) Signage on commercial buildings within the Heritage Conservation Area should:
 - (a) Retain any historic signage including building name or date lettering, former business names, and advertising signs.
 - (b) Where signs are fixed to a building, restrict wording to the name and nature of the business. More detailed description of individual products for sale should be restricted to smaller removable panels e.g. chalk boards.
- (2) All commercial buildings must have a sign with their business name in a traditional style on the awning or verandah fascia.
- (3) Other advertising signs within the Heritage Conservation Area must be restricted to the following locations:
 - (a) Panels above the verandah roof edge
 - (b) Fascias on the return ends of verandahs
 - (c) Spandrel panels above shop front windows
 - (d) Within shop front windows
 - (e) Suspended beneath an awning or verandah
 - (f) Side walls
 - (g) Fence panels
- (4) Signs on parapets must be restricted to the name of the building/business, and be located so as to respect the symmetry or grid of the façade.
- (5) Signs which must not be used include:
 - (a) Internally illuminated or flashing/scrolling signs, except on a small scale within shop front windows.
 - (b) Projecting wall signs
 - (c) Ridge signs, or mid-span on verandah roof
 - (d) Sky signs raised on poles above the roof
 - (e) 3-dimensional signs
- (6) Suitable signs within the Heritage Conservation Area must be located and designed so that:
 - (a) They do not obscure the architectural features of a building.
 - (b) They are capable of being moved or replaced without damaging building fabric.
 - (c) The overall number of signs on any one building is reduced, and has consistency in terms of proportions,

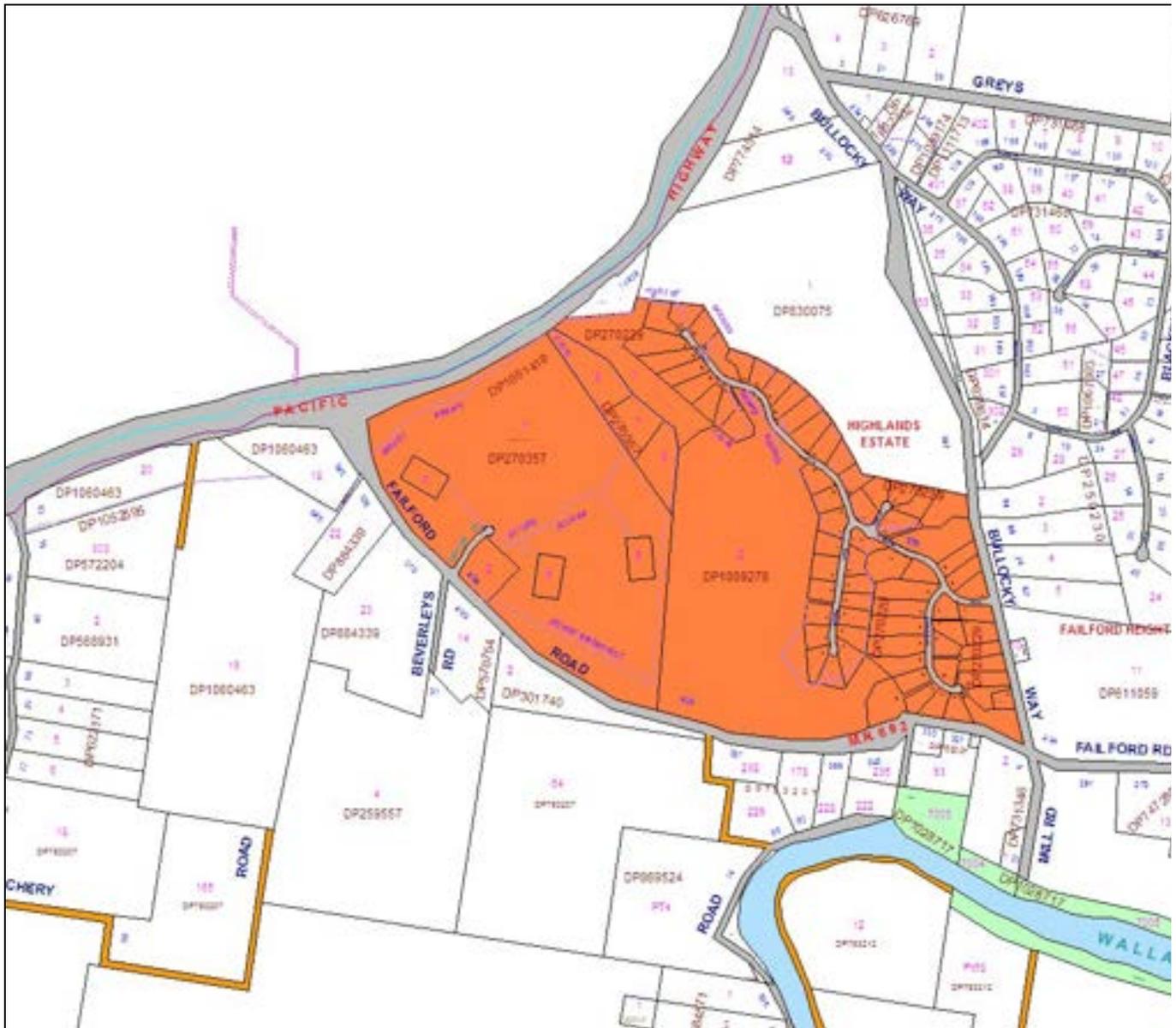
colour and style.

- (d) Lettering is in a traditional style consistent with the age of the building and/or any original signage.
- (7) Corporate image requirements should be adapted to suit the specific site, and should not dominate the character of the building.



(Click here to view [original image](#))

16.26 Tipton's Land, Failford



(Click here to view [original image](#))

16.26.1 Development Principles

Objectives

The aim of the plan is to guide development of the land so that it is undertaken in an ecologically sustainable manner. Sustainable development of the land will ensure the quality of life for current and future generations whilst supporting the quality of the natural environment through conservation of biological diversity and ecological integrity. This will be achieved by:

- Appropriate management of development in the catchment to minimise environmental pollution, including maintenance of catchment water quality;
- Installation and management of appropriate on-site effluent disposal systems to Council's satisfaction which will not cause any environmental degradation;
- Preservation and management of remnant vegetation and habitat for threatened species;
- Preservation and management of corridors to facilitate fauna movement as part of a regional corridor network;
- Maintenance of an appropriate fire regime which takes into account impact on natural and cultural assets; and
- Maintenance of the visual attractiveness of the area.

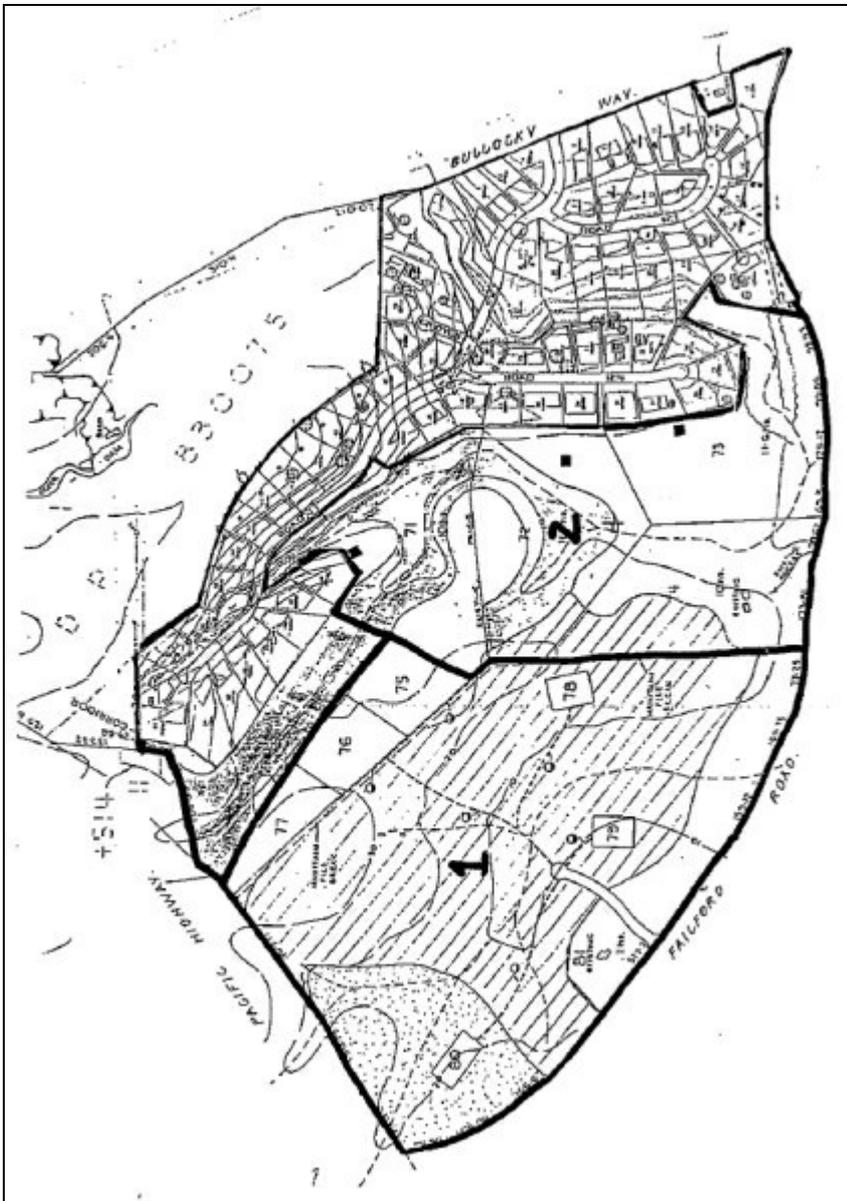
To achieve these goals, a set of development standards have been included in this plan with which development

proposals will be required to be complied with or addressed. The Management Statement prepared for subsequent Community title subdivision of the land must also incorporate the principles of this Plan, in particular, the provisions set out in "[Conservation Measures](#)".

Subdivision Concept Plan

This plan incorporates a Subdivision Concept Plan which was submitted to Council in support of the rezoning application for the site. This subdivision plan is based on various reports and observations conducted by the applicant and Council officers and includes provisions for residential development of the site, conservation of habitat and vegetation, bushfire risk reduction and controls on clearing and domestic pets. This Plan does not constitute approval for the conceptual subdivision plan.

Initial subdivision of the land to which this plan applies may be made under Torrens Title of three lots. These areas are shown as Areas 1, 2 and 3 in the Conceptual Plan. Subsequent development of these lots may only be made under the Community Land Development Act 1989 for the purposes of Community Title development. All land zoned for environmental conservation will be contained in the Community property in a Community Title subdivision.



Tipton's Land Failford proposed layout ([click here to view original image](#))

16.26.2 Subdivision

Objectives

- To ensure that subdivision and subsequent development occur so as to ensure sustainable development of the site.
- To ensure suitable house sites are available on each lot created which:
 - will result in minimal disturbance of vegetation and soils;
 - will result in minimal disturbance of vegetation and soils within the Association property;
 - are not within low-lying, flood affected areas;
 - will be energy efficient and provided with an adequate water supply.
 - relate to the topography of the site;
 - are not within high bushfire hazard areas; and
 - allow for the disposal of household effluent in a manner which will not pollute nearby streams or water bodies.

Controls

- (1) The land to which this plan applies may be subdivided into three lots under Torrens Title as indicated in the Conceptual Plan. Subsequent subdivision may only occur under the Community Land Development Act 1989 with the consent of Council.
- (2) A plan of subdivision indicating lot boundaries and building envelopes must be submitted with any Development Application.
- (3) Lots created by Torrens Title subdivision may be further subdivided as follows:
 - (a) Land within Area 1 as shown in the Conceptual Plan may have a maximum lot yield of 8 lots, including the existing residence and the Association property;
 - (b) Land within Area 2 as shown in the Conceptual Plan may have a maximum lot yield of 5 lots, including the existing residence and the Association property; and
 - (c) Land within Area 3 as shown in the Conceptual Plan may have a maximum lot yield of 71 lots, including the Association property.
- (4) A plan of subdivision must generally follow the conceptual subdivision plan at in Conceptual Plan or otherwise meet the objectives and performance criteria of this Plan.
- (5) A Management Statement is to be prepared for the ongoing management of the development, which will address relevant management issues, including those outlined in "Conservation Measures".
- (6) Residential lots are to be located within areas zoned R5 Large Lot Residential. Land zoned E2 Environmental Conservation is to become part of the Association Property lot under the Community Land Development Act 1989.
- (7) Each lot is to be designed to have a minimum of one building envelope with a minimum area of 1000m², avoiding:
 - (a) Flood prone land;
 - (b) Land which is classified as having a high hazard bushfire potential; and
 - (c) Land within 50m of any other intermittent or permanent watercourse for all lots zoned for development.
- (8) The perimeter of the building envelopes shall be located a minimum distance of 5m from the boundaries of the lot with the exception of a 18m setback to the road frontage. Building envelopes shall have a setback of three meters to the Association property. Building envelopes shall be located outside the buffer to the quarry.
- (9) The building envelope for each lot is to be nominated on the proposed plan of subdivision and submitted with any Development Application.
- (10) Any increase in runoff occurring as a result of the development of the site is to be contained to the site. No runoff from the site is to enter the Pacific Highway corridor as defined by the Roads and Maritime Services (RMS).

16.26.3 Access

Objectives

To ensure all weather access is available to all allotments while:

- minimising disturbance to vegetation and soil;
- being constructed to minimise dust nuisance to landowners; and
- incorporating erosion and sediment controls to minimise impacts on nearby watercourses and the need for ongoing maintenance.

Controls

- (1) Roads servicing the site are to be constructed by the developer to the minimum standards as specified in the RTA Guidelines for Traffic Generating Development and Council guidelines.
- (2) The intersection of site access and Failford Road and Bullocky Way is to be upgraded in accordance with the Traffic Engineers guidelines for intersections (Austroads).
- (3) Any increase in runoff occurring as a result of the development of the site is to be contained to the site. No runoff from the site is to enter the Pacific Highway corridor as defined by the RMS.
- (4) Access constructed to lots will be gained via all-weather access trails which are suitable for use by two-wheel drive and fire control vehicles. Turning points which would enable a fire fighting vehicle to turn, or two vehicles to pass, are to be provided in accordance with Planning for Bushfire Protection. Access trails are to be located so as to retain mature vegetation.
- (5) Details of the road design, construction standard and erosion and sediment controls are required to be submitted for approval prior to the issue of the construction certificate.
- (6) Road surfaces shall be bitumen sealed.
- (7) Details of the road design, construction standard and erosion and sediment controls are required to be submitted for approval prior to the issue of the construction certificate.
- (8) Access to all lots fronting Bullocky Way is to be from internal roads only.

16.26.4 Effluent Disposal

Objectives

In accordance with the objectives of the above effluent disposal guidelines, the objectives of the plan are as follows:

- Prevention of public health risk, by minimisation of contact with effluent, particularly for children. Residuals such as composted material, should be handled carefully. Treated sewerage should not be used on edible crops consumed raw.
- Protection of lands. On-site sewerage management systems should not cause deterioration of land and vegetation quality through soil structure degradation, salinisation, waterlogging, chemical or soil erosion.
- Protection of surface waters. On-site sewerage management systems should be selected, sited, designed, constructed, operated and maintained so that surface waters are not contaminated by any flow from treatment systems and land application areas (including effluent, rainfall run-off and contaminated groundwater flow).
- Protection of groundwaters. On-site sewage management systems should be selected, sited, designed, constructed, operated and maintained so that groundwaters are not contaminated by any flow from treatment systems and land application areas.
- Conservation and reuse of resources. The resources in domestic waste water (including nutrients, organic matter and water) should be identified and utilised as much as possible within the bounds posed by other performance objectives; water conservation should be practiced and waste water production should be minimised.
- Protection of community amenity. On-site sewage management systems should be selected, sited, designed, constructed, operated and maintained so that they do not unreasonably interfere with the quality of life, and,

where possible, so that they add to the local amenity - special consideration should be given to aesthetics, odour, dust, vectors and excessive noise.

Controls

- (1) Effluent disposal systems should not be located:
 - (a) below the 1 in 100 year flood contour;
 - (b) in sheltered areas in respect of sun and wind exposure;
 - (c) on slopes > 15o;
 - (d) on the following landforms where possible: concave side slopes and footslopes and should not be located on drainage plains or incised channels;
 - (e) should not occur on soils susceptible to erosion or where signs of erosion are present;
 - (f) where there is potential for run-on and upslope seepage. This should be diverted;
 - (g) on poorly drained soils, such as clay;
 - (h) where inadequate land area is available;
 - (i) where there is >20% rocks and rock outcrops occurring in the disposal area;
 - (j) less than 250 horizontal metres upstream from domestic groundwater wells;
 - (k) less than 100 metres to permanent surface waters; and
 - (l) less than 40 metres to other waters.
- (2) Effluent disposal systems must have adequate storage for periods when rainfall exceeds evaporation and in the case of system failure.
- (3) Details of effluent treatment systems and disposal areas must be submitted for Council's approval prior to approval of construction of dwellings. Geotechnical data must be submitted with each application.
- (4) All on-site effluent disposal systems must be consistent with EPA On-Site Sewage Management for Single Households and the Local Government Act as amended.

16.26.5 Development

Objectives

To ensure buildings are located and designed to:

- require minimal disturbance of vegetation and soils;
- have low visibility from the surrounding rural area;
- have appropriate effluent disposal facilities where appropriate; and
- be energy efficient and provided with an adequate water supply.
- minimise impact on the adjacent heritage building; and
- permit fauna movement; and
- minimise bushfire risk.

Controls

- (1) Buildings are to be located within the building envelopes nominated on the plan of subdivision.
- (2) Where buildings and driveways are proposed on slopes in excess of 10o the application is to be accompanied by an erosion and sediment control plan and the driveway is to be bitumen or concrete sealed.
- (3) No buildings are to be on land zoned for environmental conservation purposes.
- (4) Buildings must comply with setbacks from vegetation which poses a bushfire hazard in accordance with the document titled "Planning for Bushfire Protection" (as amended).

- (5) No buildings are to be located within 60m of the heritage building at the corner of Failford and Bullocky Way, unless it can be demonstrated to Council's satisfaction that development within this zone will not be detrimental on the context of the historic item. Remaining trees from the original avenue to the heritage house are to be identified and retained as part of landscaping for the development.
- (6) All dwellings constructed adjoining the heritage building at the corner of Bullocky Way and Failford Road are to be designed so as to be complementary to the design and style of the existing dwelling. Development adjoining this dwelling are to include appropriate landscaping to minimise impact on the house.
- (7) Dwellings are to generally be orientated with a north to north-easterly aspect to:
 - (a) maximise warmth from winter sun;
 - (b) maximise shade from summer sun by use of awnings, pergolas etc;
 - (c) gain advantage of north-easterly breezes; and
 - (d) make best advantage of north facing outdoor living areas.
- (8) Fencing should not occur in community property or areas zoned for environmental conservation. Where necessary the following requirements should be met:
 - (a) use of materials and types of fence which prevent the movement of fauna such as barbed wire are not be used; and
 - (b) clearing around fence lines should be limited to that necessary for construction and maintenance works. Clearing should not exceed 2.5m each side of the fence.
- (9) Any increase in runoff occurring as a result of the development of the site is to be contained to the site. No runoff from the site is to enter the Pacific Highway corridor as defined by the RMS.

16.26.6 Landscaping

Objectives

To provide appropriate landscaping for:

- public areas, such as road side verges;
- visual isolation of the heritage item on Bullocky Way; and
- enhancement of fauna habitat.

Controls

- (1) Landscaping principle plans should be lodged with the Development Application for the site and actual landscape design plans should be lodged with the application for a construction certificate.
- (2) The Landscape Plan and Plan of Management shall include public plantings as appropriate and landscaping adjacent to the heritage item on Bullocky Way. Plans and proposed vegetation in relation to the heritage item shall be agreed to by Council's Heritage Officer or equivalent.
- (3) Species should be locally occurring natives, with preference given to regionally uncommon or rare species.
- (4) A vegetated buffer is to be maintained along Bullocky Way which is to be a minimum of 10 metres wide or by agreement of Council and the developer.

16.26.7 Conservation Measures

Objectives

- To ensure the biological diversity and population levels of native flora and fauna on the land are maintained or improved;
- To protect remnant vegetation and habitats;
- Facilitate fauna movement in a regional context; and
- Protect the rural character and scenic attributes of the land.

Controls

- (1) The owner or occupier of any lot, shall not remove, fell, damage or destroy any trees or understorey shrubs which occur in Association property except in accordance with a fire management strategy agreed to by Council or in other exceptional circumstances as agreed to by Council's Environmental Officer.
- (2) The proprietor or occupier of any lot, shall not remove, fell, damage or destroy any trees growing within 30m of the centreline of any other intermittent or permanent watercourse. Understorey shrubs should be retained to provide shelter and a food source for native fauna.
- (3) No sewerage disposal system or roofwater disposal system is to be constructed so as to discharge within 100m of any permanent watercourse or within 40m of other waters.
- (4) Water saving devices are to be fitted to plumbing systems wherever possible, eg controlled flow shower roses and faucets, dual flush or low flush toilet cisterns, front loading washing machines.
- (5) Dogs, other than those used as guide dogs for vision or hearing impaired occupiers, are to be confined to private lots between dusk and dawn, and all cats are to be confined to dwellings or buildings associated with dwellings on private lots between dusk and dawn. This requirement is to be incorporated in the management statement for land subdivided under the Community Land Development Act. The aim of this requirement is to confine 'predator type' domestic animals during the period when native fauna are most active. Cats and dogs are not permissible on lots zoned large lot residential, within the Association property.
- (6) A north-south fauna corridor has been identified between proposed lots 54 and 55 and Lot 11, DP 830075. This corridor should be sign posted and fenced to restrict human access, however should not prevent fauna movement through this area. Any requirements for bush fire hazard control in this area shall be accommodated on land zoned large lot residential.
- (7) A vegetated corridor has been identified through proposed lots 1, 21 - 25 and 27. The following development standards apply to these lots or any other lots that may occur over this vegetation, and will be stated in the Management Statement prepared for the development:
 - (a) Fencing at the rear perimeter of these lots through this corridor is not permitted;
 - (b) Vegetation is not permitted to be removed unless as part of the approved Bushfire Management Plan;
 - (c) Landscaping species should only include those that are native and locally occurring; and
 - (d) Traffic calming measures will be installed and maintained where any road is proposed to cross this corridor.

16.26.8 Management Measures

A Management Statement relating to all community title lands must be prepared and submitted with the application for a subdivision certificate. The principle emphasis of the Management Statement is the long term management of conservation values applicable to all community title areas, however the Management Statement will also include details of access roads, perimeter fencing, fire trails and communal garbage receptacle storage areas, where proposed.

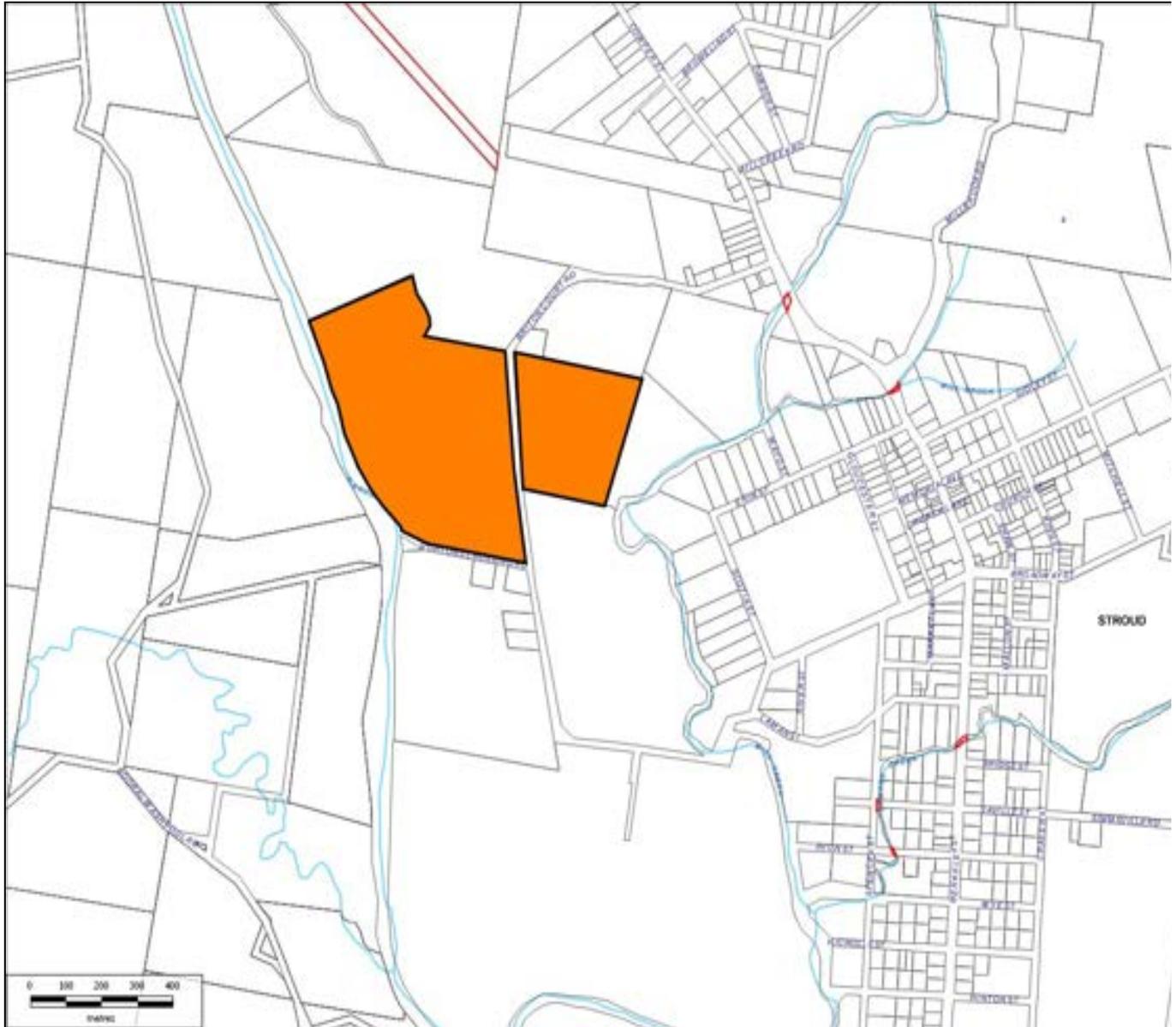
Controls

- (1) A draft Management Statement consistent with this Plan will be submitted with the Development Application for community title subdivision.
- (2) A Management Statement consistent with this Plan and the [Community Land Development Act 1989](#) must be submitted to Council with the application for a subdivision certificate for the site.
- (3) Where land is subdivided under the Community Land Development Act 1989, the Community Association is to be responsible for the control, management, operation and maintenance of the Association Property, including conservation areas, perimeter fencing, fire trails and communal garbage receptacle storage areas, where proposed.

- (4) Any discoveries of Aboriginal relics during subdivision or building construction are to be reported to the Director of the National Parks & Wildlife Service. Where works may damage, deface or destroy the relic, such works are to cease until the written approval of the Director of National Parks & Wildlife Service is given to the destruction, removal or otherwise of these relics.

16.27 Briton Court Road, Stroud

This chapter sets out Council's requirements for all applications for subdivision and development of land at Briton Court Road Precinct, Stroud being Lot 1 DP 1045567.



Briton Court Road Precinct, Stroud, Lot 1 DP 1045567 (click here to view [original image](#))

Objectives

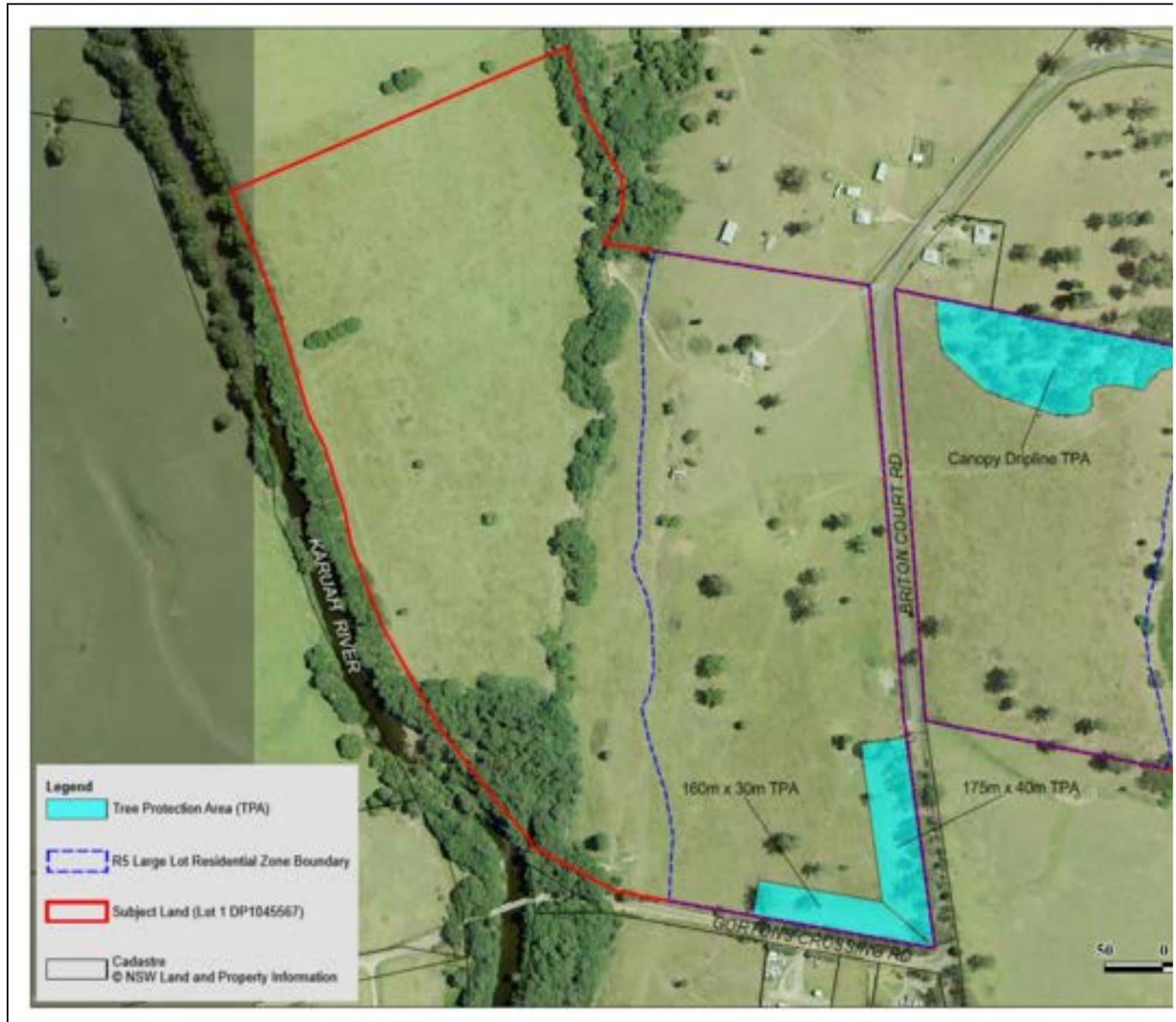
To ensure the protection of existing natural values, minimise the environmental impacts of future subdivision of the land and safeguard future occupants of the land. This will be achieved by:

- Preserving remnant vegetation and habitat for threatened species;
- Connecting all new habitable buildings to the existing reticulated sewerage network to Mid Coast Water's satisfaction.
- Ensuring all habitable buildings are set back a safe distance from the nearby gas storage facility.

Controls

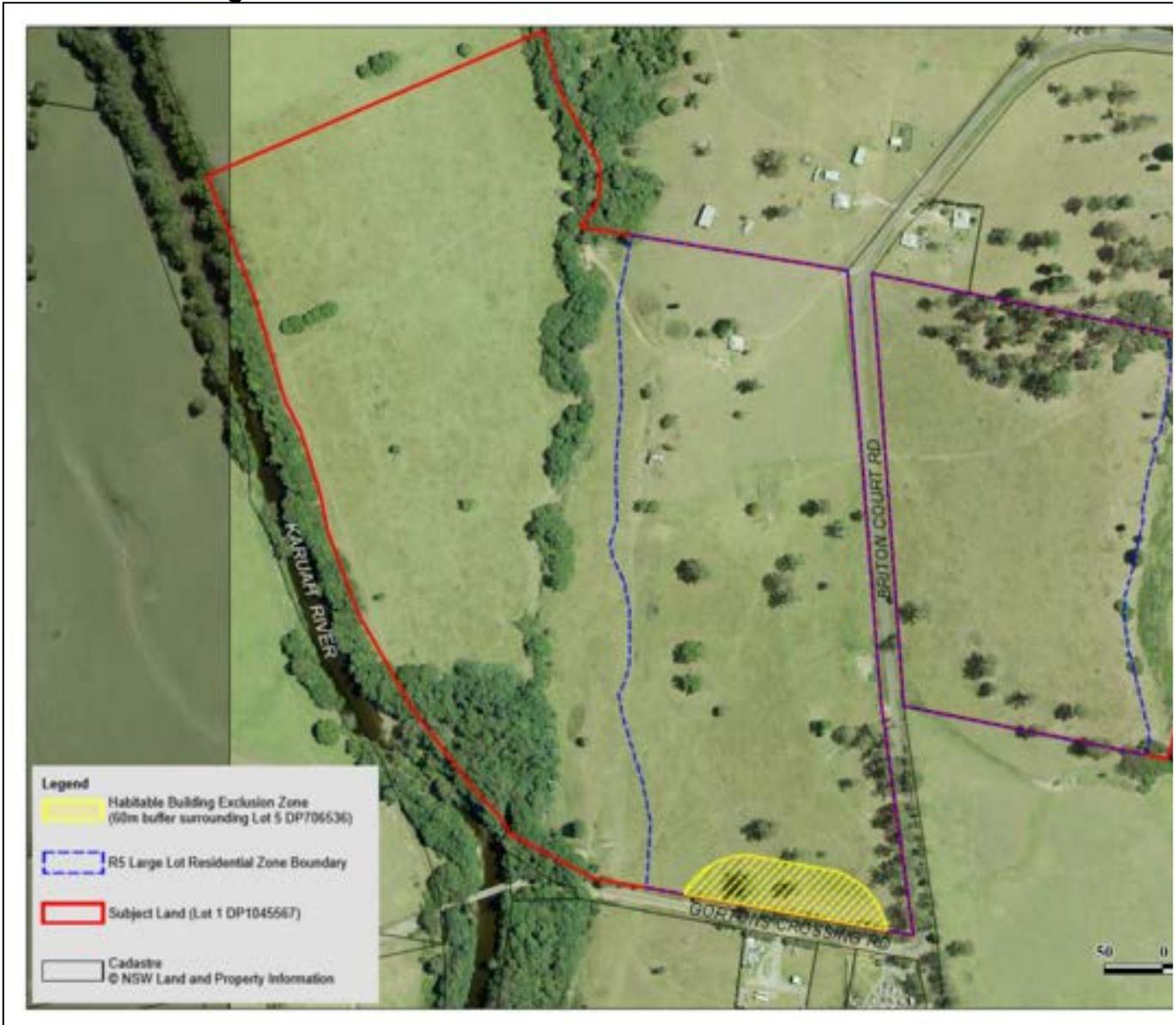
- (1) The subdivision layout is to ensure that all habitable buildings on all lots can drain by gravity to Mid Coast Water's reticulated sewerage network.
- (2) At the development application stage for subdivision, a building envelope must be identified for each new allotment.
- (3) The entire building envelope must be capable of draining via gravity to Mid Coast Water's reticulated sewerage network.
- (4) All trees as shown in the Tree Protection Area below, are to be retained. NB: This includes trees within the road reserve.
- (5) Building envelopes for each new lot must be wholly located to ensure no removal of existing vegetation will occur as a result of bush fire requirements (including the 10/50 Vegetation Clearing Code of Practice for New South Wales).
- (6) Driveway access must be designed to, wherever possible, avoid tree removal.
- (7) Wherever possible, all hollow-bearing trees within the R5 zoning must be retained to preserve important habitat.
- (8) Subdivision layout and building envelopes must ensure that all habitable buildings are located outside the Habitable Building Exclusion Zone shown below.

Tree Protection Area



Briton Court Road, Stroud, Tree Protection Area (Click here to view [original image](#))

Habitable Building Exclusion Zone



Briton Court Road, Stroud, Habitable Building Exclusion Zone (Click here to view [original image](#))

16.28 Hawks Nest Village

Land to which this plan applies

These controls apply to the following land in Hawks Nest as shown in the **Hawks Nest Site Map**.

- Commercial Precinct
- Village Precinct
- Beachfront Precinct

Link to Great Lakes Local Environmental Plan 2014

Development should have regard for the objectives and provisions of the following land use zones:

- Zone B1 Neighbourhood Centre
- Zone B4 Mixed Use
- Zone R3 Medium Density Residential
- Zone E2 Environmental Conservation

Development should have specific regard for development standards in the following sections:

- Clause 4.3 Height of Buildings
- Clause 4.4 Floor Space Ratio
- Clause 7.9 Protection of Wildlife Corridors
- Clause 7.13 Active Street Frontages
- Schedule 1 – Additional Permitted Uses: 8 Use of certain land bounded by Beach Road and Booner, Margaret and Mirreen Streets, Hawks Nest.



Hawks Nest Site Map (click here to view [original image](#))

Desired Future Character & Site Specific Controls

The following sections of this DCP should be read in conjunction with this part:

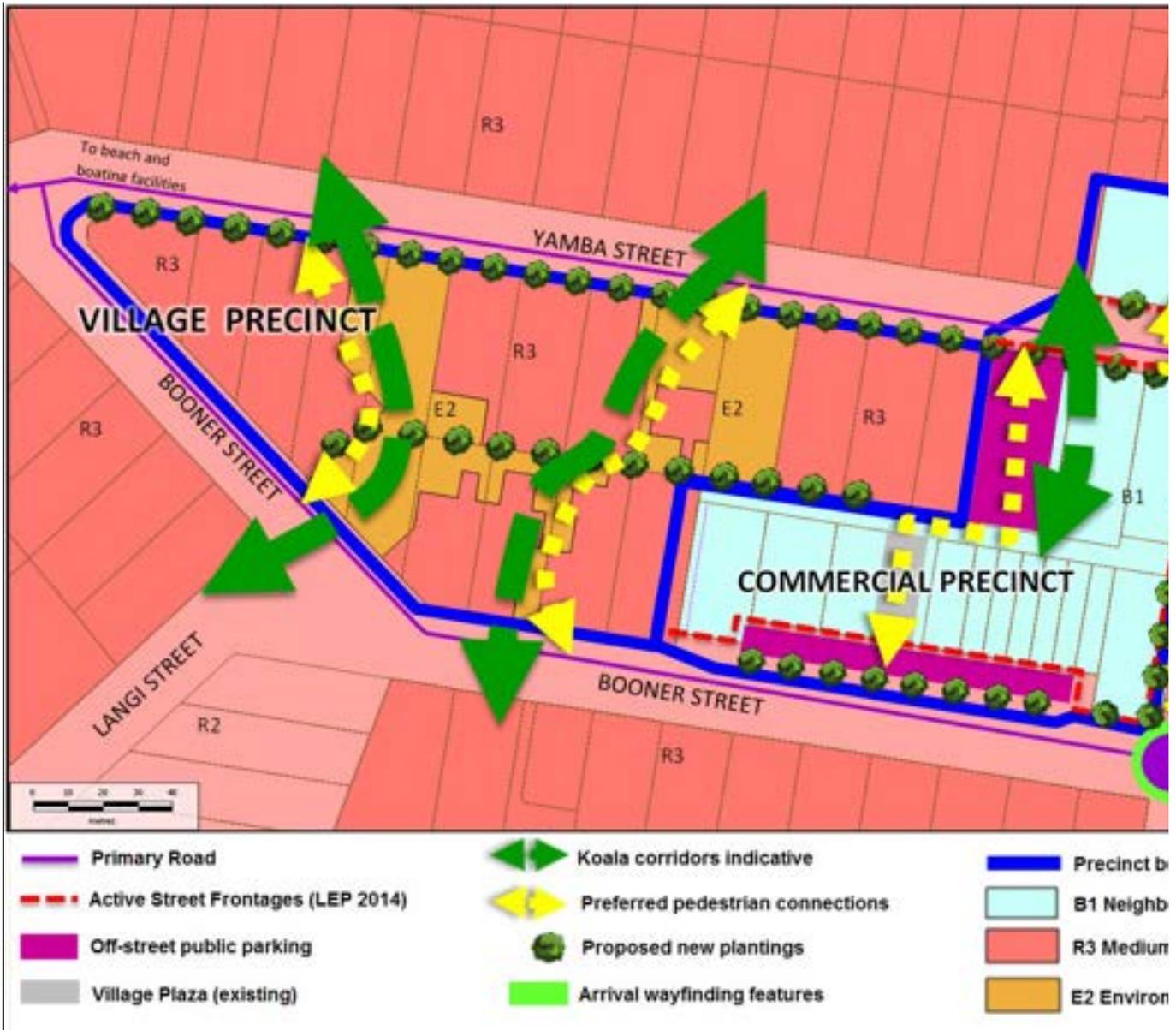
- 3.1.2 Tea Gardens and Hawks Nest Additional Character Statements
- 3.1.2.2 Hawks Nest
- 3.3.3 Medium Density Residential Development (Village Precinct)
- 6.7.2.1 Coastal Towns and Centres Additional Controls – Tea Gardens and Hawks Nest (Beachfront Precinct)
- 6.1.3 Coastal Town Concept Plans – Hawks Nest

In the event of any inconsistencies, the site specific provisions in this part shall prevail.

16.28.1 Commercial Precinct

This section applies to the Commercial Precinct as shown in the **Hawks Nest Site Map**

Hawks Nest Village Centre Concept Plan



Hawks Nest Village Centre Concept Plan (click here to view [original image](#))

Character Statement

The Commercial Precinct will continue to be the main focus area for new commercial development in Hawks Nest. The concept plan for the Commercial Precinct is illustrated in the **Hawks Nest Village Centre Concept Plan**.

The Commercial Precinct will be an active and engaging place. Businesses will provide active and attractive street frontages with opportunities for outdoor dining, popup shops, coffee carts, music and art installations, markets and festivals encouraging residents and visitors to stay longer in the village centre.

Businesses in this area will continue to cater for the day to day needs of permanent residents and visitors.

Business and retail uses will occupy ground floor spaces, with opportunities for people to live above offices and shops.

Preferred pedestrian connections as shown in the **Hawks Nest Village Centre Concept Plan** will be retained and embellished to offer convenient access between parking areas and shopfronts.

Landscaping and urban koala habitat in the Commercial Precinct will be protected and enhanced where possible, including the provision of new plantings in public spaces.

Objectives and controls

Proposed development within the Commercial Precinct must be consistent with the following development objectives and controls:

Commercial Development Objectives

- To encourage commercial development that is compatible with the bushland character of the locality
- To encourage the redevelopment or reuse of existing commercial buildings for business uses.

Visitor Experience and Place Activation Objectives

- To promote activities which bring more people into the area to support local businesses.

Car Parking

This part should be read in conjunction with Chapter 10 Car Parking, Access and Alternative and Active Transport. In the event of any inconsistencies, the site specific provisions in this section shall prevail.

Objectives

- To ensure that adequate car parking is available for any development
- To enable development to utilise existing car parking in the area.

Controls

1. Development applications lodged before 1 January 2025 for the redevelopment of properties within the Commercial Precinct will be provided with car parking credits for existing commercial and/or residential floor areas, at the car parking rate specified within this DCP.

Landscaping and Urban Koala Habitat

Objectives

- To protect and enhance koala habitat and movement corridors.
- To ensure that development does not result in the unreasonable loss of koala habitat or food trees.

Controls

1. Development proposals in the Commercial Precinct are to include a landscaping plan, detailing the potential loss and future planting of trees and specimen shrubs of ecological value to the local koala population.
2. Any loss of koala habitat or food trees will require compensatory replanting and maintenance of satisfactory numbers and types of koala food and habitat trees in those areas marked 'proposed new plantings' as shown in **Hawks Nest Village Centre Concept Plan** and the wider Hawks Nest area, at a ratio determined by MidCoast Council.

16.28.2 Village Precinct

This section applies to the Village Precinct as shown in the **Hawks Nest Site Map**.

Character Statement

The Village Precinct will provide for medium density residential development intermingled with areas of environmental conservation. The plan for development within the Village Precinct is illustrated in the **Hawks Nest Village Centre Concept Plan**.

Development in this location is to be of high quality design and in keeping with the bushland character of Hawks Nest. A variety of housing choice will provide opportunities to grow the permanent population and increase patronage to businesses in the adjacent Commercial Precinct.

Urban landscaping in the Village Precinct will offer attractive areas for permanent residents and visitors to relax and socialise while also acting to sustain the Hawks Nest and Tea Gardens Endangered Koala Population.

Objectives and Controls - General

Proposed development within the Village Precinct must be consistent with the following development objectives and controls. If a development application is seeking a departure from the development and design controls contained within any part of this DCP it must demonstrate:

1. That the nominated development and design controls are unreasonable or unnecessary in the circumstances of the case.
2. How the proposed alternative solution or design approach will deliver an outcome that is consistent with the relevant element objectives and with the desired future character.

Residential Development

Development in this location is to be consistent with the relevant section of Chapter 6 Residential Apartment Buildings, Mixed Use Development and Business Premises.

Objectives

- To provide for high quality residential development to grow the permanent population of Hawks Nest.
- To ensure development has regard for the bushland character of Hawks Nest.

Controls

1. In locations where proposed residential development abuts land zoned E2 Environmental Conservation; measures shall be put in place to preclude the introduction of or the keeping of any dogs or cats (other than “assistance animals” as defined by the *Companion Animals Act 1998* and *Commonwealth Disability Discrimination Act 1992*). Details of how this is to be achieved must be submitted with the development application.

Environmental Conservation Land

Objectives

- To protect and enhance the land zoned E2 Environmental Conservation.
- To ensure the land zoned E2 Environmental Conservation is effectively managed into the future
- To consolidate the land zoned E2 Environmental Conservation.

Controls

1. Development and structures adjoining any land zoned E2 Environmental Conservation shall be located in a manner that protects the integrity and function of the E2 Environmental Conservation zone.
2. A mechanism satisfactory to Council is to be established for the long term effective management of the land zoned E2 Environmental Conservation.
3. Councils preferred mechanism for the ongoing management of the land zoned E2 Environmental Conservation is through either Land Dedication or Community Title subdivision.
4. In locations where proposed residential development abuts land zoned E2 Environmental Conservation; measures shall be put in place to preclude the introduction of or the keeping of any dogs or cats (other than “assistance animals” as defined by the *Companion Animals Act 1998* and *Commonwealth Disability Discrimination Act 1992*). Details of how this is to be achieved must be submitted with the development application.
5. Any management regime proposed as part of a development application that affects land zoned E2 Environmental Conservation is to address the following issues:
 - proactive and strategic urban tree preservation and management;
 - management of companion animals;
 - management of noxious and invasive environmental weeds;
 - ecological management;
 - pollution control and stormwater management;
 - the provision of community access facilities (walking paths, seating, etc.);
 - mechanisms by which residents may manage, use and enjoy environmentally sensitive lands without detrimentally affecting biodiversity;
 - landscape and amenity management.
6. Any development application that affects land zoned E2 Environmental Conservation is to:
 - ensure the land zoned E2 Environmental Conservation is subdivided and contained within a single lot; and
 - be consolidated with any adjoining areas of E2 Environmental Conservation land in the same ownership.

Landscaping and Urban Koala Habitat

The location of koala habitat and landscaping corridors along with proposed locations for additional tree plantings in the Village Precinct is shown in the **Hawks Nest Village Centre Concept Plan**.

Objectives

- To protect and enhance landscaping and urban koala habitat
- To ensure the effective management of landscaping and urban koala habitat.

Controls

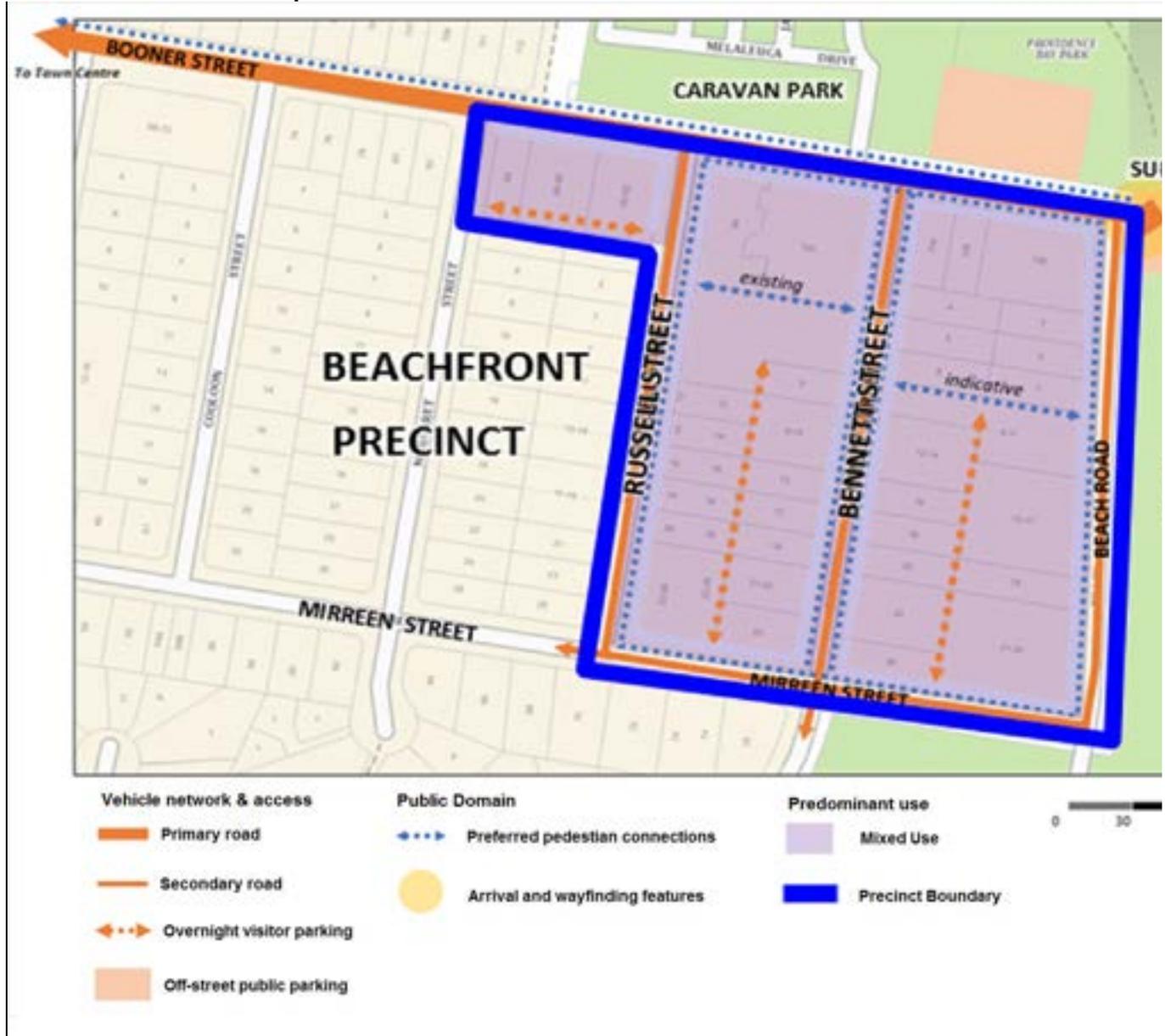
1. Urban koala habitat will be protected and enhanced through appropriate landscaping within development lots and along existing streets consistent with the **Hawks Nest Village Centre Concept Plan**. Development and subdivision applications are to include urban koala habitat management plans.
2. Development and structures shall be designed and located to ensure there are no, unacceptable impacts on native trees, their tree protection zones (and structural root zones), trunks and canopies.

3. Where tree removal is unavoidable, offset replanting will be required at the following ratios:
 - 2:1 for non-preferred koala habitat trees
 - 4:1 for preferred koala habitat trees
4. Replanting in association with any approved tree removal should enhance those areas identified for 'Proposed new plantings' in the **Hawks Nest Village Centre Concept Plan**.

16.28.3 Beachfront Precinct

This section applies to the Beachfront Precinct as shown in the **Hawks Nest Site Map**.

Beachfront Precinct Concept Plan



Beachfront Precinct Concept Plan (click here to view [original image](#))

Character Statement

The Beachfront Precinct is intended to offer residents and visitors a vibrant beachfront experience. The concept for future development in the Beachfront Precinct is illustrated in the **Beachfront Precinct Concept Plan**.

The Beachfront Precinct will retain its residential character. This area will be the preferred location for residential development catering for short stay visitors, as well as weekend or seasonal residents.

The Beachfront Precinct will provide for small scale commercial opportunities including outdoor and destination based activities. The range of retail on offer will encourage visitors to linger, such as cafes, takeaways and restaurants, artisan shops and galleries, boutique clothing shops, and recreational equipment hire facilities.

Commercial development in this location will complement, rather than compete with commercial development in the existing Commercial Precinct.

The preferred location for outdoor dining is at the intersection of Booner Street and Bennet Street, near existing tourist facilities. Other temporary uses, such as festivals, markets, and music/art installations, may be accommodated in existing parklands, and will respect the predominantly residential nature of the area.

Pedestrians will be prioritised. Continuous footpath connections should be maintained throughout the precinct where possible. The existing mid-block pedestrian connections between Russell Street and Bennett Street, utilising the existing private car parks, should also be retained. Creating a new mid-block pedestrian connection between Bennet Street and Beach Road would improve permeability. An indicative alignment for this new connection, taking advantage of an existing dual-frontage lot, is shown in the **Beachfront Precinct Concept Plan** however alternative alignments will be considered.

Retention of trees will be a priority. Tree replanting will occur in conjunction with any development at the rear of lots, associated with private open space and car-parking, and along pedestrian connections.

Off-street parking for overnight visitors will be encouraged at the rear of lots, where access permits and there is minimal ecological impact.

Objectives and controls

Proposed development within the Beachfront Precinct must be consistent with the following development objectives and controls:

Commercial Development

Objectives

- To ensure the predominately residential nature of the Beachfront Precinct is maintained.
- To ensure commercial development does not impact on the amenity of the area.
- To encourage a diverse range of commercial developments to service the recreational and boutique needs of permanent residents and visitors.
- Commercial development in this area will complement, rather than compete with commercial development in the Commercial Precinct.

Controls

1. The total gross floor area of any business premises in this area should not exceed 120m².
2. Where the total gross floor area of a proposed business premises is in excess of 120m² applicants must demonstrate how the development will not unreasonably compete with business premises in the Commercial Precinct.
3. Shops and reception areas for commercial uses should be located on the ground floor of buildings.

Visitor Experience and Place Activation

Objectives

- To promote activities which bring more people into the area.

Landscaping and Urban Koala Habitat

Objectives

- To protect, enhance and increase existing urban koala habitat and food resources.

Controls

1. For any new development or subdivision, complete and accurate details are to be provided on urban koala habitat and greenspace management.
2. For any development loss of native trees is to be minimised through detailed design.
3. Where the removal of native trees is unavoidable off-site offsetting with suitable species would be considered. Details are to be submitted with each development application.
4. New tree plantings will be required in front and rear setbacks for new development.

16.28.4 General Controls For All Sites

This part applies to development in the Commercial, Village and Beachfront Precincts.

Environment and Landscaping

Hawks Nest contains important landscaping and urban koala habitat that contributes to the amenity and social and economic well-being of the community. Trees in the urban landscape sustain the Hawks Nest and Tea Gardens Endangered Koala Population and provide for movement, feeding, refuge, breeding and dispersal. The proactive management of landscaping and urban koala habitat is an important strategic consideration.

The following sections should be read in conjunction with this part:

- Chapter 12 Tree and Vegetation Preservation and Chapter 13 Landscaping and Open Space.

In the event of any inconsistencies, the controls in this section shall prevail.

Objectives

- To ensure that all landscaping is compatible with the ecological characteristics of the area.

Controls

1. Landscaping provided with any new development should use locally endemic koala preferred species to strengthen the integrity of existing koala corridors*.

**A list of koala preferred species is provided in Chapter 12 Section 9 Table 1: Identified species of koala habitat and food trees in Hawks Nest and Tea Gardens.*

Removal of Koala Habitat and Food Trees

Council does not support the removal of koala habitat food trees and requires that trees on development sites are demonstratively managed using a "avoid - mitigate - compensate" decision-hierarchy.

Avoidance means avoiding direct and associated harm to trees and their root zones.

Mitigate means reducing or alleviating harm to or loss of trees using targeted actions such as arboriculture pruning, root zone treatments, building design, etc.

Compensating means the provision of a satisfactory number of suitably-advanced offset plantings and the maintenance and management of such.

Objectives

- To ensure that development does not negatively impact upon koala movement corridors or food resources.
- To ensure that all revegetation and future planting is compatible with the ecological character of the area.

Controls

1. Trees which have been approved for removal as part of a development application must be adequately compensated through new plantings of sufficient quantities of suitable species.
2. Any replanting's should use locally endemic koala preferred species to strengthen the integrity of existing koala corridors.

Fencing

The following sections should be read in conjunction with this part:

- 5.9 Fencing and walls (Hawks Nest and Seal Rocks – Additional Site Specific Controls)
- 6.2.6 Fences

In the event of any inconsistencies, the site specific provisions in this section shall prevail.

Fencing is not encouraged in Hawks Nest. Where fencing is required for privacy or security reasons fencing should be consistent with the following development objectives and controls.

Objectives

- To ensure that fencing does not adversely affect the movement of koalas through the area.

Controls

1. Fencing should be designed and located to avoid or minimise loss of or damage to trees; and
2. Fencing should be made of timber (i.e. lapped and capped fencing);

3. If timber fencing is not used, then the fencing must:
 - provide a gap of 0.3 metres (high) x 1.0 metres (wide) between the existing ground and the bottom of the fence for every 10 metre length of fencing, except where the fencing is associated with a swimming pool, or
 - provide koala climbing poles, installed adjacent to the fence at 10m intervals, except where the fencing is associated with a swimming pool .

Details of how this is to be achieved must be shown in the Landscape Plan submitted with the development application.

17. Manufactured Home Estates and Caravan Parks

The Part only applies to manufactured home estates or caravan parks, where

- on a single development site of one hectare or greater; and
- manufactured homes are to be installed for resident or visitor accommodation.

The objectives and controls within this section of the DCP are to be read in conjunction with the provisions and requirements of:

[State Environmental Planning Policy No 21 – Caravan Parks](#) (or as amended)
[State Environmental Planning Policy No 36 - Manufactured Home Estates](#) (or as amended)
[Local Government \(Manufactured Home Estates, Caravan Parks, Camping Grounds and Moveable Dwellings\) Regulation 2005](#)

17.1 Objectives

- Encourage high quality developments which feature a high standard of urban design and provide a high level of amenity for residents;
- Ensure sufficient site area is provided to accommodate communal and private open space areas, including areas for deep soil planting and natural site drainage;
- Ensure the development layout and design, streetscape treatment and built form demonstrate visual compatibility and cohesion with the surrounding neighbourhood; and
- Ensure that adequate infrastructure and community/support services are available to meet the needs of residents

17.2 Development Controls

17.2.1 Setbacks and Separation

- a) Site layouts for manufactured homes shall be designed to provide for articulation and diversity along street frontages.
- b) Buildings and manufactured homes are to be grouped/clustered to provide a high level of pedestrian permeability. Each group is to be separated by an access road or a pedestrian path, with communal landscaped areas.
- c) The setbacks provided between buildings and manufactured homes, are to be designed to ensure acoustic and visual privacy to residents.
- d) The property boundary setbacks to buildings and manufactured homes are to be maximised, to provide visual separation from the street and adjoining properties.
- e) Setbacks shall be sufficient to avoid any land use conflicts with adjoining zones and uses.

17.2.2. Landscaping

- a) Setbacks to manufactured homes are to be screened, fenced and landscaped to ensure an attractive streetscape, to both internal and public roads. Setbacks to public roads are not to be used for administrative buildings, community buildings/amenities, camping sites or parking facilities.
- b) Deep soil planting and semi-mature street trees are to be provided in the property boundary setbacks and between groups/clusters of manufactured homes, to provide visual buffers and shaded areas in communal open spaces.

17.2.3. Building Design of Manufactured Homes

- a) Building articulation and habitable rooms in dwellings must enable passive surveillance of access roads.
- b) Building materials and colour schemes must be selected to demonstrate compatibility with surrounding residential development.
- c) Building designs on corner lots should avoid blank walls and include design features that provide visual interest to, and passive surveillance of, access roads.

17.2.4 Visitor Parking

- a) Visitor parking is required to be accessible at all times by residents and visitors to the development.
- b) Where the number of dwellings and/or sites is 100 or fewer, a centralised visitor car parking facility is to be provided.
- c) Where the number of manufactured homes and/or sites is more than 100, visitor parking is to be spread throughout the development site. A minimum of 4 spaces and maximum of 10 spaces per parking facility are to be provided in any location.

17.2.5 Caravan and Boat Storage

- a) Where a separate parking facility is to be provided for caravan and boat storage, the facility is to incorporate a wash down facility.
- b) The siting, design and security of this facility is to have regard to the need to minimise the opportunity for crime.

17.2.6 Services and Infrastructure

- a) The entrance of a development with more than 25% long-term/permanent occupancy sites, is to be within 400m of a bus stop serviced with daily bus services or provided with a private daily bus service for residents.
- b) Any onsite administration, retail, community facilities and amenity buildings are to be accessible to all residents.
- c) Garbage facilities on the site are to be designed to be accessible to all residents and provided with screening from manufactured homes and long-term/permanent occupancy sites, adjoining properties and public areas.

17.3 Additional Lodgement Requirements

17.3.1 A Visual Impact Assessment which addresses:

- a) The landscape and visual context of the locality;
- b) The potential impact of the development, in particular, when viewed from surrounding residential development, public spaces and/or facilities; and
- c) Any relevant 'local character' statements for the town, village or locality.

The Visual Impact Assessment is to include illustrations, photomontages and/or artists' impressions.

17.3.2 An Access Audit that provides details on the following:

- a) Gradients, widths and lengths of pedestrian pathways; and
- b) Access to and within administrative and communal buildings and structures.

17.3.3 A Social Impact Assessment which considers:

- a) An assessment of how the development location and design addresses the requirements of residents; and

- b) Connectivity between the development site, surrounding neighbourhood and community.

17.3.4 A Traffic assessment which considers:

- a) the impact of traffic generated by the development upon the existing road network. Note: dependent upon the scale of the development relative to its location, a full Traffic Impact Assessment may be required.

17.3.5 A water and sewer servicing plan detailing:

- a) The capacity of the reticulated water and sewerage systems in the locality; and
- b) Details of any additional infrastructure (on and off-site) required to connect to existing systems and/or provide sufficient capacity to cater for the increase in demand.

17.3.6 To enable a visual impact assessment for the development of the manufactured home estate provide:

- a) a minimum of five manufactured home designs, including at least one design appropriate for corner blocks (where relevant); and
- b) information on the design and location of any centralised mail facility for residents.

17.3.7. To enable a visual impact assessment for the development of the caravan park where proposing manufactured homes in the park:

- a) identify sites where manufactured homes are proposed; and
- b) provide a minimum of five manufactured home designs, including at least one design appropriate for corner blocks (where relevant).

17.3.8. Any caravan park established on land in a rural or environmental zone may not accommodate more than 25% of sites for use as long term sites.

17.3.9. Caravan parks and manufactured home estates require a community plan to be lodged that identifies the location and nature of occupancy, of all resident and visitor sites.

17.3.10. Caravan parks and manufactured home estates may also be required (depending on scale and location) to provide an Economic Impact Assessment which considers:

- a) the potential impact on local businesses, services and facilities within the town, village and/or locality; and
- b) the potential impact on local businesses, services and facilities within the MidCoast region.

17.3.11. All applications for caravan parks and manufactured home estates are required to demonstrate how they meet the Crime *Prevention Through Environmental Design* (CPTED) principles.