

# **MANGO HILL INFRASTRUCTURE DEVELOPMENT CONTROL PLAN**

**Sector Plan No. 018-3000**

**for**

**Town Centre Frame “B” Sector Three  
North Lakes Drive / Memorial Drive**

**Town Centre Frame “B” Precinct**

**North Lakes Development**

**13 February 2007**

(Approved by Council 13 February 2007)

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## 1.0 Introduction and Statutory Context

- 1.1** The Mango Hill Infrastructure Development Control Plan (DCP) provides for the creation of a Sector within a Precinct and the preparation by the Principal Developer of a Sector Plan in accordance with the relevant provisions of the DCP.
- 1.2** This document constitutes the Sector Plan for the **Town Centre Frame “B” Sector Three – North Lakes Drive / Memorial Drive** (Sector Plan).
- 1.3** The location of the Sector within the DCP area is shown on *Figure 1 – Planning Context*. As illustrated on *Figure 2 – Cadastral Boundaries*, the Sector is bounded by:
- (i) Town Centre Frame “B” Sector Two - North Lakes Drive / Central Access Road – Sector 018-2000 to the south-west;
  - (ii) North Lakes Drive to the south;
  - (iii) Memorial Drive to the east;
  - (iv) Endeavour Boulevard to the north; and
  - (v) The Central Access Road (Town Centre Frame “B” Sector One – Town Common - Sector Plan 018-1000) to the west.
- 1.4** The location of the Sector within the Precinct Plan area is shown on *Figure 3 – Precinct Plan Map*.
- 1.5** This Sector Plan is the code of development for the land in the Sector. In the event that this Sector Plan does not provide development requirements, then the Planning Scheme provisions relevant to the particular form of development apply.

## 2.0 Land Use Rights

The final specification of land use rights for land in this Sector is contained in *Appendix A – Final Specification of Land Use for the Sector*.

## **3.0 Development Requirements & Guidelines**

### **3.1 INTRODUCTION**

Clause 2.4.2 of the DCP states that a Sector Plan must specify the requirements for development and car parking and the guidelines for design and siting, landscaping and signage for land in the Sector.

### **3.2 DEVELOPMENT CONCEPT**

The Sector is located close to the key entry to North Lakes, namely the Anzac Avenue and North Lakes Drive intersection, and is located in a visually prominent part of the town centre. There is to be a visual transition in the density of built form in North Lakes Drive (west of its intersection with Memorial Drive) from the "green gateway" described in Precinct Plan 002, to the higher density "main street" environment of the Town Centre Core.

Development within this Precinct at the western end of North Lakes Drive is encouraged to abut the eastern wall of Sector 018-2000 and continue the style of development established within the adjoining Sectors to the west. At a minimum the development is to form a continuous edge of buildings with an outward orientated design and active frontages to reinforce the "main street" environment. Landscaping will be required to the developed within the road reserve and will be in keeping with the existing treatments in North Lakes Drive. Development within this Precinct at the eastern end of North Lakes Drive may provide an increased front setback distance where the building line frames an open landscaped area on the corner of North Lakes Drive and Memorial Drive forming a landmark feature and the defining visual focal point of the Sector. Pedestrian safety is to be a priority through the use of paving treatments to define, as well as encourage, use of pedestrian movement areas.

Built form along Memorial Drive and Endeavour Boulevard is to be of a higher density and diversity in comparison to the northern Town Centre Frame areas and areas of the Sector are to be built to the road alignment along North Lakes Drive. Development may have an increased front setback distance with built-form in a landscaped setting that forms an edge to the streetscape as development extends north along Memorial Drive. When viewed from the street, all façades must be well presented and should feature a variety of architectural design elements that relieve building scale and bulk but are consistent with the overall building design character. Access and car parking along both the Endeavour Boulevard and the Memorial Drive frontages should be located away from the existing roundabout.

The Central Access Road, which runs along the Sector's western boundary, has been developed in accordance with Sector Plan 018-1000 as a narrow, low vehicular traffic and pedestrian friendly environment. It functions as a local street, and enables access to car parking areas located at the rear of development within the Sector. Development within the Sector which addresses or is visible from the Central Access Road must ensure integration of building design, landscaping, car parking areas, and convenient pedestrian linkages in order to create a visually cohesive design.

The rear façade must be well presented and should feature a variety of architectural design elements that relieve building scale and bulk but are consistent with the overall building design character.

The height of development within the Sector is to be a minimum of two (2) storeys high. Uses located with frontage to North Lakes Drive, Memorial Drive and Endeavour Boulevard should take advantage of the proximity to the Town Centre, being a high visibility and the pedestrian-friendly environment and are expected to include retail and office development along these major road frontages. In addition, development should provide linkages with established pedestrian circulation routes leading to the Town Common from the Town Centre Core and areas of the Town Centre Frame to the east of the Sector.

A high level of pedestrian connectivity is required in order to link car parking areas with building entries at the front of the development on North Lakes Drive, Memorial Drive and Endeavour Boulevard. Public access at the rear of buildings within the Sector is to be generally restricted. Buildings may be built up to the Central Access Road alignment provided that a pedestrian thoroughfare is incorporated into the design at the ground floor adjacent to the Central Access Road.

Basement car parking is encouraged. Basement car parks protruding above ground level are not encouraged adjacent to any road frontage or the Central Access Road. Minor protrusion above ground level may be considered provided appropriate building setbacks and landscaping are utilised. However, where at grade car parking is provided these areas should be designed as an attractive setting, integrating paving, landscaping and shading and located at the rear of any development. Where utility and service areas are proposed they are appropriately screened from view and landscaped to minimise negative impacts on visual amenity and character. These areas should generally be removed from any frontage or Central Access Road.

Development in the Sector should:

- (i) through distinctive design and relationship with the street, provide an open landscaped area within the expanded road reserve (which may include a public art feature) at the corner of North Lakes Drive and Memorial Drive framed by the adjacent building line to reinforce the importance of the Sector as a visual focus for the North Lakes Town Centre;
- (ii) provide a mixed and flexible environment to meet future employment and consumer needs;
- (iii) ensure connectivity, integration and strong functional and architectural relationships with the commercial developments within the Sector, Precinct and the balance of the Town Centre;
- (iv) provide high levels of pedestrian connectivity within the Sector and reinforce established circulation routes linking surrounding Town Centre Frame development with the Town Common;
- (v) provide basement car parking where possible and ensure car parking areas provided at grade in the Sector are enhanced by landscaped vehicular and pedestrian links. Potential conflict points between vehicular and pedestrian movements are to be minimised through considerate design;
- (vi) continue surrounding landscape/streetscape themes along:
  - (a) North Lakes Drive to reinforce the "main street" pedestrian orientated environment through active frontages and enhance public comfort and safety in all publicly accessible areas;
  - (b) Memorial Drive to enhance the existing boulevard environment and provide a landscaped commercial environment with accessible and well presented frontages;
  - (c) The Central Access Road to maintain a vista to the Town Common from North Lakes Drive;
- (vii) extend the boulevard environment of Memorial Drive along the Endeavour Boulevard frontage with a reduced setback distance to provide a transition from the landscaped commercial environment of the Town Centre to the civic and community recreation theme within the Town Common;
- (viii) where possible, provide opportunities for shared carparking and service areas between different developments and uses;
- (ix) promote a low speed, pedestrian compatible environment along Memorial Drive and the Endeavour Boulevard via the provision attractive frontages, wide pedestrian pathways, pedestrian shelter, street furniture and landscaping;
- (x) continue surrounding the low speed, pedestrian compatible environment along the adjoining Central Access Road via the provision of pedestrian pathways and landscaping;
- (xi) establish a vibrant atmosphere and scale appropriate to a town centre; and
- (xii) ensure that building design defines main pedestrian thoroughfares and provides an interesting and inviting panorama for both pedestrian and vehicular traffic.

**Figure 4 – Sector Plan Map** (an illustration of how these requirements may be satisfied).

### **3.3 DEVELOPMENT REQUIREMENTS**

**3.3.1** In respect of every development in this Sector the person who undertakes that development or uses the site must, unless already provided:

- (i) construct a full width pedestrian pavement to Council's specification for the full length of those road frontages required by Council to the development site;
- (ii) construct concrete kerb and channeling to the Council's specification for the full length of each road frontage to the development site;
- (iii) construct reinforced concrete industrial crossings to the Council's specification from the kerb and channeling to the property alignment of the development site at approved locations where vehicular access to the development site is required;
- (iv) provide drainage work specified by the Council as necessary in connection with the works set out above including debris traps where drainage discharges directly or indirectly to the lake and/or waterway system;
- (v) provide reticulated sewerage and water supply adequate for the purpose of the development by connection to the Council's services in accordance with the requirements of the Council;
- (vi) bear the cost of any alteration necessary to public utility mains, services or installations involved in the construction of the works referred to in this clause; and
- (vii) Any works within the road reserve must be undertaken in accordance with the North Lakes Town Centre design manual.

**3.3.2** In respect of every development in this Sector the person who undertakes that development or uses the site must:

- (i) have all landscaping designed by a qualified landscape architect;
- (ii) not impose a load on any public utility including the disposal of wastes, greater than that which is contemplated by the provisions of this Sector Plan;
- (iii) not cause interference with the amenity of the area by the operation of machinery or electrical equipment, or from light, noise, vibration, smell, fumes, smoke, vapour, steam, soot, ash, grit, oil, dust, waste water, waste products, electrical interference or otherwise; and
- (iv) prevent continuous or frequently occurring noise levels which when measured and assessed in accordance with the Environmental Protection Act 1994, at a boundary of the allotment:
  - (a) exceed those prescribed by the Environmental Protection Act 1994; or
  - (b) cause a nuisance.

#### **3.3.3 Requirements for Staging of Development**

- (i) On completion of work in any stage, the remainder of the lot must be cleared of all rubble, debris and construction material and equipment and landscaped to the satisfaction of Council so as to be capable of being maintained.



- (ii) Each stage must form a coherent development and any future development sites must be provided with temporary landscaping, so the presentation of the lot to the street does not give a temporary or partially completed appearance.

### **3.4 DESIGN & SITING MEASURES**

#### **3.4.1 Building Setbacks**

Building setbacks are to:

- (i) include a zero building setback distance to the western end of the Sector's North Lakes Drive frontage as shown on *Sector Plan Map – Figure 4*, which will permit minor variations and articulation in the façade to ameliorate the visual effects of building length and bulk.
- (ii) include a setback distance generally no less than three (3) metres from the road alignment to the eastern end of the Sector's North Lakes Drive frontage as shown on *Sector Plan Map – Figure 4*;
- (iii) include a two (2) metre building setback distance to the Central Access Road at the ground floor which will permit minor variations and articulation in the façade to ameliorate the visual effects of building length and bulk. Above the ground floor level, the building setback may be reduced to zero (0) metres;
- (iv) be generally no less than three (3) metres from the Memorial Drive frontage;
- (v) be generally no less than three (3) metres from the Endeavour Boulevard frontage; and
- (vi) generally be developed up to any pedestrian thoroughfares (not being a road).

#### **3.4.2 Site Coverage**

Site coverage and associated plot ratio are not restricted, provided the following elements are appropriately addressed by the design of the development:

- (i) architectural articulation and an appropriate level or design;
- (ii) buildings include well-presented frontages that provide a recognisable entrance;
- (iii) development is in context with, and visually compatible with the appearance of any neighbouring buildings;
- (iv) pedestrian facilities including pedestrian shelters are provided at ground level; and
- (v) sufficient on-site car parking is provided.

### 3.4.3 Building Design

Buildings proposed in the Sector must:

- (i) have a minimum building height of eight (8) metres where a zero building setback distance is required along North Lakes Drive;
- (ii) for all other street frontages not mentioned in clause 3.4.3 (i) above, be a minimum height of two (2) storeys and in context with and visually compatible with the scale and bulk of surrounding development and streetscape patterns; and
- (iii) where building heights exceed three (3) storeys in height, assessment of the need to setback the taller components of any building to create a podium must be undertaken. The assessment must address at least the impact of bulk and form on the streetscape and pedestrian environments in the immediate vicinity, as well as the impact of overshadowing.
- (iv) provide an outward oriented, attractive frontage along the increased setback area at the corner of North Lakes Drive and Memorial Drive and ensure the building line frames the adjacent open landscaped area to form a landmark feature within the Sector;
- (v) an attractive frontage along the remainder of North Lakes Drive, Memorial Drive and the Central Access Road incorporating well presented facades featuring a variety of architectural design elements such as horizontal and vertical variations in the façade to relieve building scale and minimise the visual impact of long blank walls along all other street frontages;
- (vi) not include broken frontages at the western end of the Sector's North Lakes Drive frontage (unless to allow pedestrian linkages from the rear of the development) and feature flexible frontages, such as bi-fold doors or swing doors frontage. Manually operated sliding glass doors are not acceptable, however, other forms of openings may be appropriate if the design does not detract from the Planning intent for an active frontage in this area of the Sector;
- (vii) orientate main entrances to address each street frontage, providing well-lit pedestrian access to the street environment. On corner sites and dual road frontage sites the building must address all adjacent street frontages;
- (viii) for development fronting the Central Access Road, contribute to the pedestrian character of the street by use of open and accessible building forms;
- (ix) glazing must be maximised at ground level where ground floor openings are not provided along all other street frontages not mentioned in clause 3.4.3 (iv);
- (x) be of an open framed, light-weight appearance possibly including layered façade treatments;
- (xi) contribute to a pedestrian environment and streetscape character that has safe, comfortable and pleasant public areas;
- (xii) be designed with attractive rooflines that are compatible with surrounding commercial form and pitch, complement the overall building design and including varying elements for visual interest;
- (xiii) achieve an internalised services and vehicular movement system;
- (xiv) provide attractive façades to car parking areas at the rear of developments;
- (xv) allow sensitive environmental responses to slope, access and integration requirements;
- (xvi) complement the overall character of the Sector and the DCP area generally, whilst allowing corporate identity for tenants;

- (xvii) ensure car parking either partially or fully covered by a building (referred here after as basement car parking) does not protrude greater than one (1) metre above finished ground level adjacent to any major road frontage or the Central Access Road and is adequately screened by landscaping and/or mounding (this requirement does not apply where car parking is located above the ground floor which is occupied by another use such as but not limited to retail, office and commercial services) and is integrated within the building envelope;
- (xviii) incorporate materials and colours that are not highly reflective to avoid unreasonable glare nuisance to surrounding developments and not incorporate unfinished building materials such as concrete block work and concrete tilt-up slabs on external building facades; and
- (xix) for all non-residential buildings greater than 2500m<sup>2</sup> within this Sector, an Energy Efficiency Report must be submitted with the application for the Development Permit for Building Works. This report is to be certified by a suitably qualified person that the building generally complies with the energy efficiency guidelines in this Sector Plan.

#### 3.4.3.1 Building Design Guidelines

Building design within the Sector is encouraged to:

- (i) include innovative contemporary building design derivative from Queensland building traditions and designed to suit the climate, light and local culture;
- (ii) be designed to be multi-purpose and easily adapted for future changes;
- (iii) ensure that buildings relate physically and functionally with each other in terms of their architecture, location of major entries and any changes of level across the Sector; and
- (iv) ensure that the design and location of any buildings or structures within the Sector take account of:
  - (a) topography and the preference to minimise site earthworks;
  - (b) drainage;
  - (c) soil conditions;
  - (d) services;
  - (e) orientation towards focal points and aspect to achieve energy savings;
  - (f) microclimate considerations;
  - (g) pedestrian movement patterns;
  - (h) vehicular access to avoid or minimise the conflict points with pedestrians;
  - (i) streetscape and landscape design;
  - (j) adjoining developments in terms of design;
  - (k) minimising the effect of overshadowing on pedestrian areas;
  - (l) the functioning of North Lakes Drive, Memorial Drive, Endeavour Boulevard and the Central Access Road;
  - (m) landscape screening of retaining walls and other elements with low visual amenity; and
  - (n) views and vistas to prominent built and topographic features.

### 3.4.3.2 Material, Finish and Colour Guidelines

Building design within the Sector is encouraged to:

- (ii) reflect a distinctive contemporary architectural style, with buildings sharing a palette of compatible finishes, colours and details that contribute to a strong sense of place;
- (iii) use materials and colours relating to those in the local environment, including the use of key character elements, for example, block stone work may be incorporated into the base of buildings to relate to the stone detailing within North Lakes. Other key character elements may include the use of timber detailing, earthy tones, heavy plinth bases and feature species planting;
- (iv) include the integrated use of elements such as timber, glass and tin;
- (v) include corrugated pre-finished and coloured metal sheets for major roofing materials. The application of these materials must minimise any reflective nuisance to surrounding development;
- (vi) incorporate brighter colour accents for minor detail elements such as window and door frames, columns, handrails, ornamental features and signage details; and
- (vii) incorporate materials that:
  - (a) are robust, durable and resistant to vandalism;
  - (b) present a suitable finish to pedestrian areas;
  - (c) incorporate walls which present as solid and permanent elements;
  - (d) are of a high quality, clean and free of defects;
  - (e) are low maintenance, resulting in minimum use of detergents for cleaning; and
  - (f) assist with thermal performance and energy efficiencies, where practicable.

### 3.4.3.3 Design for Climate and Energy Efficiency Guidelines

Building design within the Sector is encouraged to:

- (i) collect and store roof water for toilet flushing and landscape use;
- (ii) minimise water consumption through incorporation of flow restrictors, AAA rated water efficient taps, shower roses and dual flush (3/6 litre) cisterns;
- (iii) include the use of external shade structures, ventilated spaces, overhangs and screens to allow enjoyment of the outdoors while also providing relief from the sun, wind and rain;
- (iv) maximise ventilation by taking advantage of prevailing breezes and the use of adequate and effective insulation materials in roof cavities and wall spaces of buildings in order to minimise demands for energy required for air-conditioning;
- (v) articulate and shade external walls, and particularly the longer external walls, with eaves, overhangs, sills or other treatments to reduce the exposure to direct sunlight, heat and glare, while windows in external walls should be recessed or shaded wherever possible to achieve energy savings;

- (vi) restrict the use of highly reflective materials on external walls or windows as a means of minimising energy requirements and excessive sunlight, glare and heat into adjoining developments;
- (vii) incorporate the use of gas or solar hot water heaters and solar energy devices;
- (viii) implement energy efficient management systems for the building;
- (ix) where possible, use building materials which impose energy efficiency;
- (x) where possible, orientate buildings to respond to westerly sun exposure, northerly exposure and solar access in the winter, potential impacts of cold westerly winds in winter and limited cooling breezes from the south in summer; and
- (xi) design and landscape car parking areas to reduce the impacts of reflected heat and glare into adjacent buildings, and to reduce the effects of heat storage during summer months.

#### **3.4.4 Safety and Crime Prevention**

The design and siting of any structures, landscaping, buildings and public spaces must:

- (i) avoid obscured corners and narrow or dead-end alleys;
- (ii) maximise the opportunity for casual surveillance of public spaces and car parking areas from surrounding buildings, roads and pedestrian areas;
- (iii) include lighting of public places; and
- (iv) include for a use with a gross floor area of 2,500m<sup>2</sup> or more, an Environmental Design assessment such as Crime Prevention Through Environmental Design (CPTED) or similar crime prevention safety audit, which must be undertaken by applicants during the design phase and properly taken into account in the final design of the project. A copy of the assessment shall be provided to Council at the time of lodging each development application for a Material Change of Use. This assessment is to have due regard to the design and maintenance of buildings and external areas within the Sector, as well as the factors outlined in this sub-section.

#### **3.4.5 Lighting & Glare Requirements**

Lighting and Glare Management within the Sector must:

- (i) wherever possible, include architectural floodlighting of a building or space through the integration of the luminaries into the fabric of the building;
- (ii) ensure lighting systems are designed to prevent direct and/or reflect glare to surrounding areas. This applies particularly to disabling and uncomfortable glare to pedestrian and vehicular movement or at entrances, steps, stairs and pedestrian paths;
- (iii) where provided within landscaped areas, the choice and location of lighting must allow for plant and tree growth, and conversely, not become obscured as the landscape matures;
- (iv) include safety lighting in open space and car parking areas which are to be used at night-time;

- (v) ensure that permanent strobe, laser, flashing, oscillating, moving or alternating lights are not permitted in locations within the Sector where they are likely to cause a nuisance;
- (vi) have regard to the efficiency of energy consumption in the design of lighting systems; and
- (vii) comply with the requirements of *AS4282 – Control of Obtrusive Effects of Outdoor Lighting*.

### 3.4.6 Plant & Equipment Requirements

The design and siting of plant and equipment must comply with the following requirements:

- (i) all air conditioning and ventilation plant and other equipment located on the roof or externally around the building are to be treated as an integral part of the building form and be suitably screened from view to match with surrounding materials;
- (ii) where lift motor rooms, plant rooms and the like are proposed, they are to be treated as an integral part of the building form in order to create a coherent roofscape;
- (iii) environmental management structures or control devices, such as gross pollutant traps, waste disposal bins, flues and the like are to be designed so as not to detract from the overall visual character of the town centre or the immediate area;
- (iv) contain design elements and buffer treatments to control any obtrusive effects where it is likely to adversely affect residential amenity, visual aesthetics, public safety and traffic safety;
- (v) if necessary, adopt effective air pollution mitigation measures to comply with the Environmental Protection Act, Environmental Protection Policy (Air) and other relevant legislation in relation to dust, smoke, fumes and gases, where necessary; and
- (vi) if necessary, adopt effective noise pollution mitigation measures to comply with the Environmental Protection Act, Environmental Protection Policy (Noise) and other relevant legislation, where necessary.

### 3.4.7 Telecommunications Equipment

Telecommunications equipment is not anticipated within this Sector.

### 3.4.8 Regrading

The earthworks approach for the Sector must:

- (i) ensure that changes of level at the site boundary allow non-discriminatory access to each allotment from the road frontage/s and to adjoining allotments;
- (ii) take into account the efficient management of earthworks;
- (iii) consider the visual impact of any batters and/or retaining walls along the North Lakes Drive frontage;
- (iv) be generally in accordance with surrounding approved Sector Plans; and
- (v) achieve a high level of functional and visual integration between the Town Centre Core and the Town Centre Frame.

## **3.5 LANDSCAPING / TOWNSCAPING**

### **3.5.1 Landscape / Townscape Concept**

The landscape framework for the Sector is represented by the design principles shown indicatively on *Figure 5 – Sector Landscape Plan*.

### **3.5.2 Character**

The landscape treatment of the Sector is to include a high quality streetscaped urban character. Landscape planting is intended to soften the appearance and minimise the scale and bulk of buildings within the Sector. The landscaping treatment will contribute to the character of the Sector through the articulation of urban spaces, provision of shade to carparking and pedestrian areas, and create an attractive and comfortable pedestrian friendly environment. The landscape treatment shall also contribute to the town centre identity and assist with visitor orientation.

Landscaping should be designed in accordance with CPTED principles and incorporate the provision of shade trees, adequate seating, appropriate paving and lighting treatments and where possible segregate vehicle and pedestrian environments.

Hard landscape elements are to be constructed of high quality materials and designs and coordinated with the architectural design and landscaping. Lighting is to be used to accentuate entries to buildings and car parking areas and maximise safety for pedestrians 24 hours a day. Lighting of areas not intended for night-time use is to be avoided and lighting of secondary facades is to be subdued. All pedestrian areas and paths must be provided with a safe level of lighting that provides a clear legible environment 24 hours a day.

### **3.5.3 Frontage to North Lakes Drive**

The western end of the Sector’s North Lakes Drive frontage will be enhanced by tree lined footpaths that clearly delineate the edge of built form continuing the “main street” theme of the Town Centre. An increased front landscaping setback distance may be provided at the eastern end of the Sector’s North Lakes drive frontage integrating built form with the landmark feature in a manner that softens the built form and reinforces the “green gateway” experience established at the North Lakes entry statement fronting Anzac Avenue. Plant species are to be selected which are capable of good growth and endurance in a commercial environment and effectively respond to the desired character of the sector and the North Lakes Town Centre.

### **3.5.4 Frontage to the Central Access Road and Endeavour Boulevard**

The landscape treatment of the Central Access Road frontage of the Sector has a close relationship to the “green gateway” environment of North Lakes Drive. However, the secondary nature of the Central Access Road has been clearly illustrated through the location, types and spacing of plantings. Landscaping must also be incorporated into private developed sites, particularly within carparking areas to complement and enhance the landscaping of the Central Access Road.

Landscaping along Endeavour Boulevard should provide a transition between the “green gateway” extended along the Central Access Road from North Lakes Drive and the boulevard landscape setting along Memorial Drive which is spotted with streetscape planting to soften, enhance and provide scale to the built form reflecting its role as a major connection road to the North Lakes residential community.

Landscaping adjacent to the intersection of Endeavour Boulevard and the proposed central access road must ensure vehicle drivers’ sightlines are maintained.

### 3.5.6 Frontage to Memorial Drive

The location of street tree planting and landscaping along the Memorial Drive frontage should reflect the importance of the Precinct as a key component of the heart of the Town Centre and a major connection road to the North Lakes residential community. The road frontage area is to be planted so as to create a high standard of presentation and a permeable landscape setting, which blends with the surrounding streetscape planting and supports active building facades. The landscaping of this area softens, enhances and provides scale to the built form without obscuring it from the road. Planting species are to be selected that are capable of good growth and endurance in the commercial environment of the sector.

### 3.5.7 Landscaped Car Parking Areas

Landscaping within car parking areas is to be provided in accordance with the DCP provisions and is to define pedestrian connections between car parking areas, the streetscape and buildings. Landscaping of car parking areas is to be varied and interesting through the use of different landscape treatments, to contribute to the visual interest and character of the sector and minimise the potentially negative amenity impacts of car parking facilities. Car parking aisles should also be landscaped with low planting to enhance the appearance of car parking areas, while seeking to maintain visibility and sightlines. Outdoor areas such as surface car parking must be planted with canopy shade trees and integrated with the planned network of landscaped pedestrian and road frontage treatments.

### 3.5.8 Requirements

Landscaping in the Sector must:

- (i) correspond with the design principles illustrated on *Figure 5 – Sector Landscape Plan*;
- (ii) generally achieve the landscape character described above and the landscape concept described in section 4.2 of the Precinct Plan;
- (iii) provide a minimum landscape strip of three (3) metres along Memorial Drive and three (3) metres along Endeavour Boulevard;
- (iv) include two (2) cross-sector landscaped pedestrian paths with a minimum width of 10 metres to link the Town Common with the landmark building/feature and surrounding Town Centre Frame development;
- (v) integrate with the footpath along the western boundary of the Sector provided by Sector Plan 018-1000, which functions as a pedestrian thoroughfare providing access along the edge of the Sector, to the adjoining car parking area and the Central Access Road;



- (vi) be designed to complement and integrate with the landscaping and design character of adjoining Sectors and Precincts;
- (vii) include canopy trees, planted by the Principal Developer, generally with a minimum clear trunk of 1.8 metres planted at informal intervals within the road reserve of North Lakes Drive, Memorial Drive and Endeavour Boulevard. Street trees will consist of predominantly native planting and are intended to provide visual continuity to the street, reduce the road scale and provide shade to on-street car parking and adjacent pedestrian areas;
- (viii) reduce the appearance of an expanse of carparking areas by providing advanced shade trees at the rate of not less than one (1) tree per six (6) parking spaces and by providing low plantings along carparking aisles which do not impact on drivers sightlines;
- (ix) carparking areas should be significantly screened from a drivers view from the roadway by effective landscaping. The landscaping should include trees and shrubs but occasionally views of key elements of each proposed building may be provided;
- (x) provide adequate landscaped areas so as to create a landscape setting and passive recreation space for development. Canopy shade trees must be planted so that integration with the planned network of landscaped pedestrian and road frontage treatments is achieved;
- (xi) allow for pedestrian linkages and landscape planting extending from entry points to development sites within the Sector to connect, where possible, through car park areas to the pedestrian pathway associated with internal driveways;
- (xii) be employed to reduce reflected glare from building facades;
- (xiii) not compromise the safety of vehicles accessing sites within the Sector or in surrounding development;
- (xiv) include lighting of public areas, including carparking areas for public safety;
- (xv) be capable of efficient and effective maintenance;
- (xvi) generally frame and define entry areas to sites;
- (xvii) screen services such as electricity substations and transformers in a way that does not affect the streetscape;
- (xviii) delineate between the pedestrian and vehicular environments, as well as to provide some relief from headlight glare and visual monotony; and
- (xix) where retaining walls or batters are required, provide a landscape buffer located clear of these works to reduce the impact of the wall if visible from a street. Retaining walls and batters must be of a scale and materials that complement the surrounding built environment while responding to landform.

### 3.5.9 Fencing

The requirements for fencing within the Sector are set out below:

- (i) fencing is not to be provided to the North Lakes Drive, the Central Access Road, Endeavour Boulevard or Memorial Drive frontages. However, fencing associated with temporary construction or as part of staged construction is permitted to be closer to the boundary; and

- (ii) if fencing is proposed to side and rear boundaries, the height of fencing must not exceed 1.8 metres and must be transparent through use of spaced timber palings or similar.

### 3.5.10 Plant Species Guidelines

Planting within the Sector is encouraged to incorporate:

- (i) plant species themes that are consistent and complimentary to surrounding development. The species of trees, shrubs, and groundcovers used within the Sector should be selected from the Plant List included in **Appendix B - Plant List**. Plants of similar characteristics may be substituted for a species in the Plant List, if approved by Council. The selection of landscape material is to be cognisant of safety considerations by excluding thorny or poisonous plants that may be hazardous; and
- (ii) the use of native species as the predominant plantings to visually reflect the original natural setting of the DCP area, as well as offer benefits of reduced maintenance and water requirements. Exotic and flowering species may be used occasionally as feature planting, to announce entries to the Sector, to provide shade trees in public outdoor spaces, or as accents of colour and texture within the framework of native plant material.

## **3.6 CARPARKING**

### **3.6.1 Car Parking**

Car parking in the Sector must:

- (i) be limited to the generalised carparking areas illustrated on **Figure 4 – Sector Plan Map**;
- (ii) be located at the rear of buildings fronting North Lakes Drive, Memorial Drive and Endeavour Boulevard;
- (iii) be in accordance with the Planning Scheme requirements current at the time of lodgement of the material change of use application, the DCP, Town Planning Schedule and the Council's Design Manual. For the purpose of this calculation this Sector is considered to be included in a Local Business Zone. Should the Planning Scheme be amended or replaced the car parking requirements are to be calculated on a similar basis under the new document;
- (iv) as part of the total car parking requirements, provide not less than one (1) car park per fifty (50) spaces (or part thereof) for people with disabilities;
- (v) be controlled to minimise its impact on the surrounding road network, any internal circulation and other development adjacent to the Sector;
- (vi) provide safe pedestrian routes which focus on the connectivity between the individual site, adjacent development, the Town Common and the balance of the Town Centre Frame;
- (vii) ensure that pedestrian movement areas through car parks to a building are clearly defined;

- (viii) minimise the visual impact of any structured or basement carparking from the surrounding roads. Any structured parking is to be 'sleeved' behind small scale incidental retail development fronting any road frontage. This 'sleeving' of the carparking area is intended to maintain active frontages, where required by this Sector Plan;
- (ix) employee and customer bicycle parking spaces and the type of bicycle parking devices are to be generally in accordance with **Appendix C – Bicycle Parking Requirements**;
- (x) one (1) shower cubicle with ancillary change room per ten (10) bicycle spaces required by 3.6.1(ix) above. Facilities may be utilised by both males and females provided adequate privacy and accessibility is ensured for both sexes;
- (xi) if the demand for the bicycle spaces is not consistent with the table contained in Appendix C, Council, on a case by case basis, may permit a reduction of the number of end of trip facilities; and
- (xii) Where basement car parking is provided, ensure that the basement does not protrude above the ground level by more than one metre, unless entirely covered by the building above.

### 3.6.2 Access

The requirements for access are set out below:

- (i) indicative vehicular ingress and egress points from major roads within and adjoining the Sector are limited to two (2) access point as shown on **Figure 4 – Sector Plan Map**. However, the location of the access point may vary along the road provided other access restrictions noted on **Figure 4** are not compromised;
- (ii) restrictions on vehicular access to North Lakes Drive, Endeavour Boulevard and the Central Access Road have been noted indicatively on **Figure 4** by the inclusion of 'no vehicular access permitted' designation;
- (iii) vehicular access points should ensure no queuing occurs across pedestrian areas or causes interruption to traffic on the surrounding roads;
- (iv) adequate measures to achieve a high level of public safety on the shared access laneways / driveways is to be provided and, where appropriate, should include:
  - (a) good visibility at all pedestrian crossings and establishing pedestrian priority, where appropriate;
  - (b) pavement treatments which achieve a very low traffic speed, while permitting easy and even-surfaces for desirable walking conditions for pedestrians;
  - (c) finishes that are in keeping with existing finishes within the road or the road verge;
  - (d) suitable barrier treatments at the entrance points;
  - (e) the provision of continuous pedestrian access between buildings, car parks and pedestrian areas; and
  - (f) the provision of site and building illumination within car park areas, pedestrian areas and along pedestrian paths during the hours of operation of any component of the development and, at other times, by the provision of security lighting.

- (v) access for all people including people with a disability is to be achieved by ensuring that development complies with Council provisions relating to access for people with disabilities;
- (vi) provide convenient and safe pedestrian and cyclist access within or to development adjacent to the Sector and to public transport facilities. Such access is to be integrated with the path and street system of the Central Access Road;
- (vii) direct access for emergency vehicles is to be provided to every building within the Sector by the provision of a minimum 3.5 metre clear carriageway width;
- (viii) consideration must be given to the design and location of access points adjoining the Sector so as to minimise potential conflicts with the car parking areas, pedestrian areas, paths and service areas within the Sector; and
- (ix) ensure that no reversing of vehicles, particularly service vehicles, shall occur in areas of high pedestrian activity.

### **3.6.3 Servicing**

Development within the Sector must provide:

- (i) if required, loading zone parking which is to be access from the internal vehicle circulation areas;
- (ii) storage for refuse and recyclable materials which are suitably screened from circulation areas;
- (iii) service connection points incorporated into hard and soft landscaping areas;
- (iv) service connections that do not protrude from paving or driveways or cause any hazard for pedestrians or vehicles;
- (v) where appropriate, provide landscaping and other screening devices to undesirable views of service areas, loading bays, refuse areas and plant and machinery, within the Sector and in adjacent Sectors; and
- (vi) sharing of service areas, where possible.

## **3.7 SIGNAGE**

Signage in the Sector must:

- (i) with respect to signage that identifies development within the Sector and associated development, such as the Town Common, be generally integrated into any frontage walls, entry statements or entry structures, if provided. This signage may be located along the frontage of North Lakes Drive, the Central Access Road, Endeavour Boulevard or Memorial Drive;
- (ii) not permit primary signage such as Pylon/Column signs and Large Pylon signs;
- (iii) ensure that lighting of any signage will not cause a nuisance to drivers or pedestrians;
- (iv) be restricted to a minimum clearance of 2.4 metres to the pavement if located above pedestrian areas;
- (v) be visible, legible and not result in a cluttered or discordant streetscape;

- (vi) provide limited use of highly reflective finishes;
- (vii) incorporate professional and coordinated graphics;
- (viii) not permit bunting, streamers, sandwich boards and other low-quality, temporary, or opportunistic signs; and
- (ix) ensure that any support structure or cabling to illuminate signs will not be visible.

### 3.7.1 Signage Guidelines

- (i) Signage guidelines are included at *Appendix D - Town Centre Signage Guidelines*. The Signage Guidelines are to be taken into consideration, along with other relevant issues, when considering matters regarding signs and architectural graphics of all kinds. They are not to be interpreted as giving rights to any number or types of signage.
- (ii) A Coordinated Signage Plan is to be submitted with any development application for Material Change of Use within this Sector. The Coordinated Signage Plan must distinguish between artworks/murals, on-site business advertising, animated signage, and “third party” advertising in terms of sign dimension, location, illumination and animation on the face of the sign.

### 3.7.2 Public Artwork Guidelines

Urban Art including paving patterns, water features, sculptures, ornamental features, murals and graphics are encouraged to be located along the North Lakes Drive frontage of the Sector and in particular integrated into the design of the landmark building/feature provided on the corner of North Lakes Drive and Memorial Drive, and are encouraged to address the following:

- (i) Artworks are to contribute strongly to the landscape environment of the Sector and adjoining Sectors and to the surrounding built form;
- (ii) public art to which this clause relates may be permanent and may take the form of freestanding (or free flowing) objects or be integrated with features such as paving;
- (iii) public artworks should be site specific, relating thematically to the use and identity of the Sector and public open space within the broader context of the DCP area;
- (iv) where the artwork is intended to be permanent, the materials used should be durable and appropriate for use in an urban space;
- (v) the design and construction of the artwork is to be appropriate to the need for public safety;
- (vi) maintenance responsibility for the artwork is to be established prior to commissioning. A conservation and maintenance repair report must be completed and lodged with Council prior to commissioning the artwork; and
- (vii) where the artwork is intended to be of a temporary nature, the materials are to be appropriate for the anticipated life of the artwork in an urban space.

## 4.0 Environmental Management

There is no Environmental Management Plan having application to this Sector.

Management systems for land within the Sector must be implemented to ensure that the Objectives and Performance Indicators referred in the following sections of the Precinct Plan continue to be met throughout the life of the development and the use of the Sector:

Development within this Sector must comply with:

- (i) Section 5.1 – Environmental Management Objectives;
- (ii) Section 5.2 – Stormwater Management Objectives; and
- (iii) Section 5.3 – Earthworks Management Objectives.

## 5.0 Subdivision Requirements

As shown in *Appendix E – Proposed Metes and Bounds Description* the area of the Sector is 32,090m<sup>2</sup>.

Indicative areas and frontage widths of allotments within the Sector are shown on *Figure 6 - Indicative Plan of Subdivision*.

Access to the Sector is to be from the Central Access Road and Memorial Drive.

Reciprocal access easements are to be created where shared access is proposed for adjoining lots.

The layout of any future or proposed allotment within the Sector must retain the indicative landscaped pedestrian connections with the Town Common in the general location shown on *Figure 4 Sector Plan Map and Figure 5 Sector Landscape Plan*.

The minimum area and frontage of any future/or proposed allotment within the Sector is to be as follows:

- (i) minimum lot area – 1,000m<sup>2</sup>; and
- (ii) minimum lot frontage – 30m.

## 6.0 Infrastructure

### 6.1 INFRASTRUCTURE TO BE PROVIDED

The infrastructure required to be provided by the Principal Developer to serve the Sector includes internal and external infrastructure provisions in accordance with the Rezoning Conditions, the Mango Hill Infrastructure Agreement 1999 (MHIA) and agreements made with the State Government in accordance with the DCP. These obligations are summarised as follows:

#### 6.1.1 Roads

Unless already constructed the Principal Developer must construct the following roads including carriageways, stormwater drainage, verges, bus setdowns, footpaths, bikeways, landscaping, traffic control devices, traffic signals and street lighting as applicable. Any reference to initial construction in this section is a reference to construction approved by Council in accordance with the rezoning conditions, the MHIA and where applicable, the Mango Hill Agreement – Main Roads (MHIA-MR).

- (i) Bikeways and pathways required along the road frontages of the Sector in accordance with the MHIA.

(refer to *Figure 7 – Road Layout*).

The construction of the abovementioned infrastructure to the final standard is to be undertaken in accordance with the staging and timing outlined in the MHIA. The initial standard of construction referred to above is to be undertaken to suit the rate of development of the Sector. Where initial construction is not stated, the road is to be constructed to the standard described above to suit the rate of development of the Sector.

#### 6.1.2 Water Supply

The Principal Developer is required to:

- (i) Construct reticulation systems along all internal roads to service all properties in the Precinct;
- (ii) Construct a water supply network within the DCP area necessary to service the anticipated demand in the Sector, including those sections of the mains shown on *Figure 8 – Water Supply Headworks*; and
- (iii) Make contribution towards water headworks and bulk water supply in accordance with the MHIA.

### 6.1.3 Sewerage

The Principal Developer must construct all internal sewerage systems to service the properties in the Sector and contribute towards sewerage headworks, unless otherwise agreed with Council:

- (i) Construct the trunk gravity main from the existing Council sewerage infrastructure to connect with each lot in the Sector as required (refer to **Figure 9 – Sewerage Headworks**); and
- (ii) Provide sewerage headworks contributions in accordance with the MHIA.

### 6.1.4 Park

The requirements for park provision throughout the DCP area are provided for in the MHIA. No area within this Sector will be dedicated as park.

### 6.1.5 Stormwater

Unless otherwise agreed with Council, the Principal Developer must:

- (i) Comply with the provisions of the Stormwater Management Plans for Tributary C as approved by Council and construct stormwater management works so far as they relate to this Sector.
- (ii) Stormwater management works so far as they relate to the Sector are to be provided in accordance with the MHIA, Council's Design Manual, the Stormwater Management Plan for Tributary C, including the construction of all drainage and landscaping works in Tributary C.
- (iii) In addition, the Principal Developer is to construct stormwater drainage systems and stormwater management systems as required by the MHIA and the Environmental Protection (Water) Policy.

### 6.1.6 Electricity Supply, Gas, Lighting and Communications

The Principal Developer must provide:

- (i) underground electricity distribution to all properties within the Sector, by Energex or another appropriate supplier of electricity, to Council standards;
- (ii) public lighting to all roads, streets, parks and other public areas and facilities within the Sector (including North Lakes Drive, Endeavour Boulevard and Memorial Drive) constructed to relevant Australian Standards and in accordance with the requirements of Energex or alternative supplier of electricity and Council standards;
- (iii) high voltage electricity services to the Sector through Energex or another supplier of electricity and to Council standards;
- (iv) all electricity services and distribution systems as underground services, including conduits along all road verges within the Sector and adjacent roads to meet the anticipated demand of the DCP area; and
- (v) gas services for all lots in the Sector to meet the anticipated demands of the DCP area.



## **6.2 INFRASTRUCTURE AFFECTED OR REQUIRED BY DEVELOPMENT OF THE SECTOR**

- (i) The development of the Sector may place demands on the following infrastructure:
  - (a) Roads external to the DCP area and the Sector;
  - (b) Water supply infrastructure;
  - (c) Sewerage infrastructure;
  - (d) Stormwater infrastructure;
  - (e) Parks;
  - (f) Community facilities;
  - (g) Electricity and gas supply;
  - (h) Communications systems; and
  - (i) State Government Infrastructure.
- (ii) The infrastructure described in clause 6.1 above, together with the obligations of the Principal Developer under infrastructure agreements will mitigate the adverse affects on the above infrastructure.

## **6.3 HOW THE REQUIRED INFRASTRUCTURE RELATES TO THE INFRASTRUCTURE AGREEMENTS**

The infrastructure agreements describe the infrastructure that must be provided by the Principal Developer as part of its obligations to provide infrastructure, as envisaged by Chapter 12 of the DCP. The works described in clause 6.1 of this document are the Principal Developer's obligations under the rezoning conditions and the infrastructure agreements.

## **7.0 Detailed Infrastructure Program**

### **7.1 ESTIMATED DATE FOR PROVISION OF INFRASTRUCTURE**

The Principal Developer is to provide the infrastructure referred to in clause 6.1 of this document at times to satisfy the requirements of the MHIA. Initial infrastructure works are estimated to be constructed by December 2006.

### **7.2 INTENDED PROVIDER**

The Principal Developer is to provide the infrastructure referred to in Section 6.1 at times to satisfy the requirements of the Rezoning Conditions and the MHIA which provides for the infrastructure to be constructed to meet the rate of development in the Sector.

There are no items of State Government infrastructure to be provided by the Principal Development in conjunction with the development of the Sector.

### **7.3 OTHER WORKS DEPENDENT ON INFRASTRUCTURE PROVISION**

No other works depend on the provision of the infrastructure specified in Section 6.1.

Council is to use its best endeavours, including its powers of resumption if lawful, to obtain all necessary rights to permit the construction of water and sewerage infrastructure if such infrastructure is constructed on land external to the DCP area over which Council does not have such rights.

### **7.4 OTHER RELEVANT INFORMATION**

#### **7.4.1 Estimated Water and Sewerage Demands**

As required by the MHIA, the Principal Developer states as follows:

- (i) For the purpose of assessing water supply capacity, the estimated number of Equivalent Tenements for this Sector is 48.2 ET (3.209ha x 15ET/ha); and
- (ii) For the purpose of assessing sewerage capacity, the estimated number of Equivalent Persons for this Sector is 96.3 EP (3.209ha x 30EP/ha).
- (iii) If a future use of the Sector imposes a greater demand on minimum water supply and sewerage infrastructure than assigned in an approved development site within the Sector, Council is to approve the use provided the developer demonstrates that:
  - (a) To do so will not adversely impact on water supply and sewerage infrastructure standards within the DCP area and elsewhere if considered appropriate by Council's engineer having taken into consideration development approved in the DCP area at the time of an application and future development in the DCP area as provided for by the DCP;

- (b) The principle developer has confirmed, in writing, that the increased demand will not prevent servicing the total number of ETs and EPs provided in the MHIA; and

In the event the developer satisfies Council of the requirements in (a) and (b) above, the Council will require payment of headworks changes for ETs and EPs not already paid in respect of the proposed development.

# **APPENDIX A**

## **FINAL SPECIFICATION OF LAND USE FOR THE SECTOR**

**FINAL SPECIFICATION OF LAND USE  
(TOWN CENTRE FRAME 'B' PRECINCT)  
FOR TOWN CENTRE FRAME 'B' SECTOR THREE**

Purposes for which premises may be erected or used without the consent of Council (Permitted Development)  COLUMN A	Purposes for which premises may be erected or used without the consent of Council subject to conditions (Permitted Development subject to conditions)  COLUMN B	Purposes for which premises may be erected or used only with the consent of Council (Permissible Development)  COLUMN C	Purposes for which premises may not be erected or used (Prohibited Development)  COLUMN D
Self Assessable	Code Assessable	Impact Assessable Development	
Caretaker's residence Local utilities Park	Accommodation units (Lot 34 only) Apartments Amusement premises Car park Car wash (associated with an existing building or within a basement carparking area) Catering premises Child care centre Commercial services Community premises Communication station (radio signals only and on Lot 34 only) Convention centre Cultural facility Educational establishment Entertainment library Family day care centre Hardware centre (associated with an existing building) Hotel Indoor recreation Licensed club Motel Office Passenger terminal (associated with an existing building) Place of worship (associated with an existing building) Restaurant Retail nursery (associated with an existing building) Shop <300m <sup>2</sup> GFA Special Use Technology industry Tourist facility Townhouse units Vehicle hire depot (within a building on Lot 34 only) Veterinary clinic	Any other use not listed in Column A, B or D.	Adult product shop Agriculture Air strip Animal husbandry Aquaculture Bulk garden supplies Camping grounds Caravan park Cattery Cemetery Concrete batching plant Contractor's depot Correctional institution Crematorium Dairy Extractive industry Fuel depot General industry Hazardous industry Heavy vehicle parking Heavy vehicle sales Host farm Junk yard Kennels Lot feeding Motor sport or shooting Piggery Poultry farm Rural industry Shopping centre >1,500m <sup>2</sup> GLA Showground Simulated conflict Stable Stock sales yard Transport terminal Transportable home village Turf farming

# **APPENDIX B**

## **PLANT LIST**

**Appendix B: Indicative Plant Schedule -  
Town Centre Frame "B" Sector Three –  
North Lakes Drive / Memorial Drive**

<b>Botanical Name</b>	<b>Common Name</b>
<b>Trees &amp; Palms</b>	
Acmena smithii	Lilly Pilly
Agathis robusta	Kauri Pine
Allocasuarina littoralis	Black She Oak
Allocasuarina torulosa	Forest She Oak
Araucaria cunninghamia	Hoop Pine
Archontophoenix cunninghamia	Pickabean Palm
Backhousia citriodora	Lemon Scented Myrtle
Backhousia myrtifolia	Carrol
Banksia integrifolia	Coast Banksia
Barklya syringifolia	Crown of Gold Tree
Brachychiton acerifolium	Flame Tree
Brachychiton rupestre	Bottle Tree
Buckinghamia celsissima	Ivory Curl Flower
Callistemon salignus	Pink Tips
Callistemon viminalis	Weeping Bottlebrush
Callitris columellaris	Bribie Island Pine
Cassia fistula	Golden Shower Tree
Cassia javanica/Cassia siamea	Cassia
Castanospermum australe	Black Bean
Casuarina cunningghiana	River She Oak
Casuarina glauca	Swamp She Oak
Cupaniopsis anacardioides	Tuckeroo
Elaeocarpus eumundii	
Eucalyptus citriodora	Lemon Scented Gum
Eucalyptus ptychocarpa	Swamp Bloodwood
Eucalyptus curtisii	Plunkett Mallee
Euodia elleryana	Pink Euodia
Ficus Hillii	Hill's Fig
Ficus macrophylla	Moreton Bay Fig
Ficus rubiginosa	Port Jackson Fig
Flindersia australis	Crows Ash
Flindersia pimenteliana	Flindersia
Flindersia schottiana	Bumpy Ash
Grevillea robusta	Silky Oak
Harpullia pendula	Tulipwood
Hymenosporum flavum	Native Frangipani
Jacaranda mimosifolia	Jacaranda
Lagerstroemia indica	Crepe Myrtle
Livistona australis	Livistona
Livistona decipiens	Weeping Cabbage Palm
Livistona nitida	Livistona
Lophostemon confertus	Brush Box
Lophostemon suaveolens	Swamp Box
Melaleuca linariifolia	Snow in Summer
Melaleuca leucadendron	Small Leaved Paperbark
Melaleuca quinquenervia	Broadleaved Paperbark
Metrosideros queenslandicus	Queensland Golden Myrtle
Oreocallis sp. nova (wickhamii)	Tree Waratah
Peltophorum pterocarpus	Yellow poinciana
Phoenix canariensis	Canary Island Palm

**Appendix B: Indicative Plant Schedule -  
Town Centre Frame "B" Sector Three –  
North Lakes Drive / Memorial Drive**

<b>Botanical Name</b>	<b>Common Name</b>
<b>Trees &amp; Palms</b>	
Podocarpus elatus	Brown Pine
Roystonea regia	Cuban Royal Palm
Syzygium australe	Scrub Cherry
Syzygium francisii	Giant Water Gum
Syzygium jambos	Rose Apple
Syzygium leuhmanii	Small Leaved Lilly Pilly
Syzygium paniculatum	Dwarf Magenta Cherry
Tristaniopsis laurina	Water Gum
Waterhousia floribunda	Weeping Myrtle
Xanthostemon chrysanthus	Golden Penda
<b>Shrubs</b>	
Baeckea sp. Mt Toza	Dwarf Baeckea
Baeckea virgata	Twiggy Myrtle
Baeckea virgata dwarf	Dwarf Baeckea
Banksia Birthday Candles	Dwarf Banksia
Banksia ericifolia	Heath Banksia
Banksia integrifolia	Coastal Banksia
Banksia robur	Swamp Banksia
Banksia spinulosa var collina	Hairpin Banksia
Callistemon Dawson River	Dawson River
Callistemon Little John	Little John
Callistemon Ned Kelly	Ned Kelly
Callistemon pachyphyllus	Bottlebrush
Cyathea australis	Rough Tree Fern
Gardenia Florida	Double Gardenia
Grevillea "Coconut Ice"	Coconut Ice
Grevillea "Majestic"	Majestic
Grevillea "Robyn Gordon"	Grevillea
Grevillea "Superb"	Superb
Grevillea banksii	Red Silky Oak
Grevillea Honey Gem	Honey Gem
Grevillea Ned Kelly	Ned Kelly
Hibiscus rosa sinensis	Hibiscus
Hovea acutifolia	Pointed Leaf Hovea
Leptospermum flavescens	Tantoon Tea Tree
Leptospermum petersonii	Lemon Scented Tea Tree
Leptospermum Pink Cascade	Pink Cascade
Melaleuca linariifolia Snowflake	Dwarf Tea Tree
Murraya paniculata	Orange Jessamine
Pittosporum revolutum	Brisbane Laurel
Pittosporum undulatum	Mock Orange
Syzygium Blaze	Dwarf Lilly Pilly
Syzygium Elite	Compact Lilly Pilly
Syzygium Tiny Trev	Dwarf Lilly Pilly
Tibouchina jules	Tibouchina
Westringea fruticosa	Wynyabbie Gem



**Appendix B: Indicative Plant Schedule -  
Town Centre Frame "B" Sector Three –  
North Lakes Drive / Memorial Drive**

<b>Botanical Name</b>	<b>Common Name</b>
<b>Groundcovers</b>	
Agapanthus africanus	Lily of the Nile
Agapanthus orientalis	Lily of the Nile
Agapanthus Peter Pan	Dwarf Agapanthus
Anigozanthos hybrids	Kangaroo Paws
Blechnum cartilagineum	Fern
Cissus rhombifolium	Grape Ivy
Cissus Ellen Danica	Grape Ivy
Crinum pendunculatum	River Lily
Dianella revoluta	Flax Lily
Dietes bicolor	Japanese Iris
Dietes grandiflora	Japanese Iris
Evolvulus pilosus	Blue Sapphire
Gardenia radicans	Dwarf Gardenia
Grevillea Bronze Rambler	Bronze Rambler
Grevillea Royal Mantle	Prostrate Grevillea
Hardenbergia violacea	Purple Coral Pea
Hardenbergia violacea Bushy Blue	Bushy Blue
Helichrysum ramosissimum	Yellow Buttons
Hemerocallis species	Day Lily
Hibbertia dentata	Toothed Guinea Flower
Hibbertia scandens	Snake Vine
Liriope "Evergreen Giant"	Liriope
Lomandra hystrix	Creek Mat rush
Lomandra longifolia	Mat Rush
Lomandra multiflora	Long Leaved Mat Rush
Myoporum ellipticum	Creeping Boobialla
Myoporum parvifolium	Myoporum
Pittosporum Miss Muffet	Dwarf Pittosporum
Pittosporum tobira	Miss Muffet
Viola hederaceae	Native Violet
Zierra Carpet Star	Carpet Star
<b>Grasses</b>	
Cynodon dactylon	Green Couch
Danthonia induta	Wallaby Grass
Digitaria didactyla	Blue Couch
Greenlees Park	Hybrid Couch
Poa australis	Native Poa
<b>Vines</b>	
Jasminum polyanthum	Jasmine
Pandorea pandorana	Wonga Wonga Vine
Pandorea jasminoides	Bower of Beauty
Trachelospermum jasminoides	Variegated Star Jasmine
Trachelospermum jasminoides	Star Jasmine

# **APPENDIX C**

## **BICYCLE PARKING REQUIREMENTS**

**BICYCLE PARKING REQUIREMENTS  
(TOWN CENTRE FRAME 'B' PRECINCT)  
FOR TOWN CENTRE FRAME 'B' SECTOR THREE**

<b>Land use</b>	<b>Employee Bicycle Parking spaces</b>	<b>Class</b>	<b>Visitor/Shopper Bicycle Parking spaces</b>	<b>Class</b>
Accommodation Units (above ground level)	1 space per 4 habitable rooms	1	1 space per 16 habitable rooms	3
Amusement premises	1 space per 4 employees	2	2 plus 1 per 50m <sup>2</sup> GFA	3
Apartments (above ground level)	1 space per 4 habitable rooms	1	1 space per 16 habitable rooms	3
Car park	1 space per 750m <sup>2</sup> GFA	1	1 space per 50 car parking spaces	3
Car wash (associated with an existing use)	1 space per 750m <sup>2</sup> GFA	2	N/A	
Catering premises	1 space per 100m <sup>2</sup> GFA public area	2	2 space per 750m <sup>2</sup> GFA	3
Child care centre (where the use is included within an existing building)	1 space per 1500m <sup>2</sup> GFA	2	2 spaces + 1 space per 1500m <sup>2</sup> GFA	3
Commercial services	1 space per 200m <sup>2</sup> GFA	2	1 space per 750m <sup>2</sup> GFA over 1000m <sup>2</sup> GFA	3
Convention Centre	1 space per 750m <sup>2</sup> GFA	2	1 space per 750m <sup>2</sup> GFA over 1000m <sup>2</sup> GFA	3
Cultural Facility	1 space per 750m <sup>2</sup> GFA	2	1 space per 750m <sup>2</sup> GFA over 1000m <sup>2</sup> GFA	3
Educational establishment	1 space per 100 full time students	1 or 2	1 space per 100 full time students	3
Entertainment library	1 space per 300m <sup>2</sup> GFA	2	1 space per 200m <sup>2</sup> GFA	3
Hardware centre (where the use is included within an existing building)	1 space per 300m <sup>2</sup> GFA	2	1 space per 200m <sup>2</sup> GFA	3
Hotel (accommodation generally above ground floor level)	1 space per 40 rooms	1	N/A	N/A
Indoor recreation	1 space per 4 employees	1 or 2	1 space per 200m <sup>2</sup> GFA	3
Licensed club	1 per 25m <sup>2</sup> bar floor area and 1 per 100m <sup>2</sup> lounge, beer garden	1	2 space per 750m <sup>2</sup> GFA	3
Motel (accommodation generally above ground floor level)	1 space per 40 rooms	1	N/A	N/A
Office	1 space per 200m <sup>2</sup> GFA	2	1 space per 750m <sup>2</sup> GFA over 1000m <sup>2</sup> GFA	3
Passenger Terminal	1 space per 750m <sup>2</sup> GFA public area	1 or 2	1 space per 750m <sup>2</sup> GFA	3
Place of worship (where the use is included within an existing building)	1 space per 750m <sup>2</sup> GFA public area	1 or 2	1 space per 750m <sup>2</sup> GFA	3

Land use	Employee Bicycle Parking spaces	Class	Visitor/Shopper Bicycle Parking spaces	Class
Restaurant	1 space per 100m <sup>2</sup> GFA public area	1 or 2	2 space per 750m <sup>2</sup> GFA	3
Retail Nursery (where the use is included within an existing building)	1 space per 300m <sup>2</sup> GFA	1 or 2	1 space per 200m <sup>2</sup> GFA	3
Shop < 300m <sup>2</sup> GFA	1 space per 300m <sup>2</sup> GFA	1 or 2	1 space per 200m <sup>2</sup> GFA	3
Special Use	1 space per 750m <sup>2</sup> GFA	2	1 space per 750m <sup>2</sup> GFA	3
Technology industry	1 space per 300m <sup>2</sup> GFA	1 or 2	1 space per 200m <sup>2</sup> GFA	3
Tourist facility	1 space per 300m <sup>2</sup> GFA	1 or 2	1 space per 200m <sup>2</sup> GFA	3
Vehicle Hire Depot (where the use is included within an existing building)	1 space per 750m <sup>2</sup> GFA (excluding outdoor vehicle display area)	2	1 space per 200m <sup>2</sup> GFA	3
Veterinary clinic	1 space per 200m <sup>2</sup> GFA	1 or 2	1 space per 750m <sup>2</sup> GFA over 1000m <sup>2</sup> GFA	3
Notes:-				
1. GFA – Gross floor area, as defined in the DCP;				
2. The provision of bicycle spaces recommended in the table may be staged initially depending on the demand for use, however space should be set aside to allow 100% provision in the event that the full demand for bicycle parking is realised.				

### Types of Parking Devices

Class	Security Level	Description	Main User Type
1	High	Fully enclosed individual lockers	Bike and ride commuters at railway and bus stations.
2	Medium	Located compounds fitted with Class 3 facilities. Communal access using duplicate keys or electronic swipe cards	Regular employees, students, regular bike and ride commuters.
3	Low	Facilities to which the bicycle frame and wheels can be locked	Shoppers, visitors to public offices, places of employment where there is security supervision of the parking facilities.

# **APPENDIX D**

## **TOWN CENTRE SIGNAGE GUIDELINES**



## NORTH LAKES

### NORTH LAKES TOWN CENTRE CORE SIGNAGE GUIDELINES

#### 1.0 OBJECTIVES

The objectives of the signage standards for North Lakes are:

- (i) To implement design standards consistent with the existing and future character of North Lakes
- (ii) To ensure that signs and advertisements complement the attractiveness, safety, legibility and amenity of the North Lakes environment, both day and night
- (iii) To support the role of signs and advertising as an important factor in the marketing of North Lakes and in identifying the commercial character in areas of the development.

#### 2.0 DEFINITIONS

**Animated Signage:**

An animated sign is an advertisement with a changing display, such as flashing or chasing bulbs, or any other non-static illuminated displays.

**Third Party Advertising:**

A "third party" advertising sign is an advertisement for a business not conducted on the land on which the sign is located, or a commodity not available on that land, and includes an advertisement for a particular brand of product sold or distributed from the premises. However, an advertising sign which incorporates the North Lakes logo as an integral element of the signage, or a sign which includes only a generic reference to the type of product available on the land is not a "third party" advertising sign in terms of the inclusion of the North Lakes logo or the generic product reference.

**On- Site Business Advertising:**

An on-site business advertising sign is an advertising sign which is limited in its content to the name of a business premises and the name and services offered by the occupants of the business premises. An on-site business advertising sign may also incorporate the North Lakes logo as an integral element of the signage.

**Artworks/Murals:**

Artwork and murals are architectural graphics and other artworks which do not contain any implied or direct reference to a business undertaking or service or commodity available from a business undertaking. However, artworks and murals may incorporate the North Lakes logo as a supporting or an ancillary element.

### **3.0 SIGNAGE GUIDELINES**

Except in the case of road signs, the following guidelines will be applied to all advertising signage erected in the North Lakes Town Centre Core. The following guidelines are to be read in association with the guidelines contained in Section 7.9.1 of this Sector Plan.

These guidelines are intended to apply for individual signs, but where they form part of a coordinated signage plan, they can be varied.

#### **3.1. Scale and Location of Signs on Buildings**

The scale of the sign shall be compatible with the building and building elements on which it is affixed and to which it is in proximity, as well as nearby buildings, streets and other existing signs. Consideration shall be given to the sign's relationship to the overall appearance of the development as well as surrounding development.

The number and area of signs, if specified, are intended to be maximum standards.

#### **3.2. Principal Developer Signs**

Within road reservations and on land in ownership of the Council or the principal developer, signage content is limited to the message requirements of the principal developer and traffic control. Generally content of signs within these areas will be restricted to directional information for identifying locations, buildings, services and events. Commercial business names or logos will generally not be permitted except for sponsorships on temporary event signs.

#### **3.3. Traffic Safety**

A sign must not obstruct pedestrians' views of traffic or vehicle drivers' views of pedestrians, other traffic or the road ahead. A sign must not create possible confusion for drivers at critical locations such as intersections, traffic signals, or merging and weaving situations eg. red and green lit signage near traffic intersections.

#### **3.4. Installation Fixings**

No support, fixing, suspension or other systems required for the installation of a sign shall be exposed, unless designed as an integral feature of the sign. Conduits, wiring, switches etc shall be discreetly placed out of general view.

#### **3.5. Animated Signs**

Animated signs, where parts or all of the sign components move, may be acceptable in non-residential environments where no significant adverse impacts are likely to adjacent or nearby sensitive land uses.

#### **3.6. Clutter**

The visual amenity of the local area and the effectiveness of the message on the sign will be enhanced by reducing signage clutter. Proposed signs shall be assessed in the context of the number, type, size and location of existing signs on the site and surrounds.

### 3.7. Illumination

The luminance of an externally illuminated advertisement in the Town Centre Core (measured in candelas per square metre) is not to exceed 500 cd/m<sup>2</sup>.

The luminance level of an advertisement may exceed this level where it can be shown that the increase in luminance level is unlikely to contribute to a traffic hazard or cause an inappropriate loss of amenity.

The external illumination of signs is to be carried out in such a way as to minimise the spill effects beyond the target sign. An illuminated sign must be designed to make the best possible use of the energy efficient equipment and light sources available.

At street level sign illumination is to be consistent with the general level of lighting so as to eliminate shadows and promote the safety of adjoining public areas.

The intensity of lighting and hours of illumination must not unreasonably impact on any residential properties or traffic operations.

### 3.8. Environmental Controls

A sign must not be nailed or similarly fixed to a tree. Every sign shall be maintained and kept in good repair.

### 3.9. Performance Controls

Unless otherwise approved under the coordinated signage plan, a proposed sign must meet the performance criteria outlined in the following section. The acceptable standards associated with each type of sign are provided as examples and should not be seen as precluding other solutions. However, where alternative solutions are proposed, the onus will be on the proponent to demonstrate that the relevant performance criteria are met.

#### **SIGNS PERFORMANCE CRITERIA**

**Signs shall:**

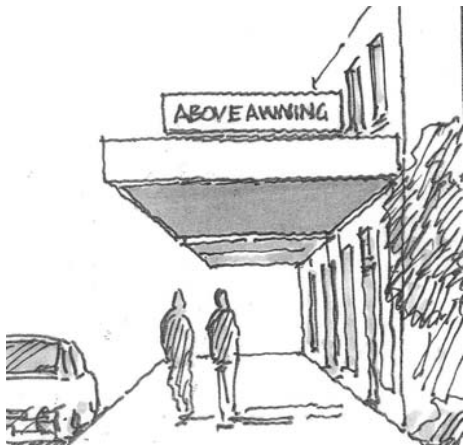

- (i) not create a hazard to traffic or pedestrians**
- (ii) be of character and design standard consistent with the objectives and controls for this sector plan**
- (iii) complement the streetscape and amenity of the locality by virtue of their size, location, illumination, utilisation of complementary shapes, forms, colours, durable quality materials and design concepts**
- (iv) if affixed to a building, complement the architectural style of the building by virtue of their size, location, illumination, utilisation of complementary shapes, forms, colours, durable quality materials and design concepts; and**
- (v) not unnecessarily repeat or duplicate similar signs.**

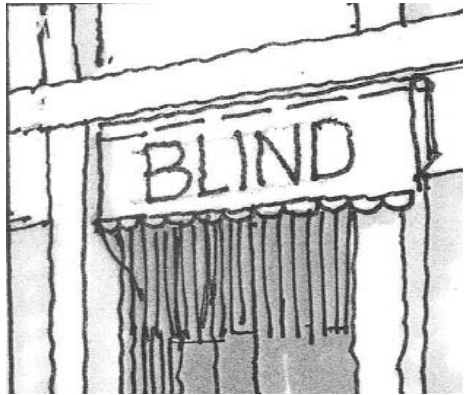
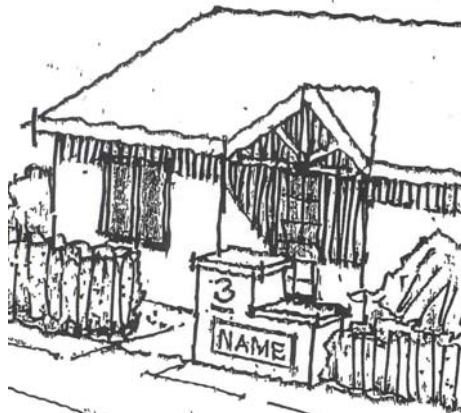


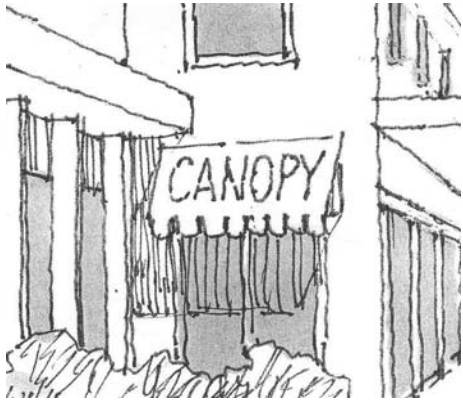

#### 4.0 TYPES OF SIGNS


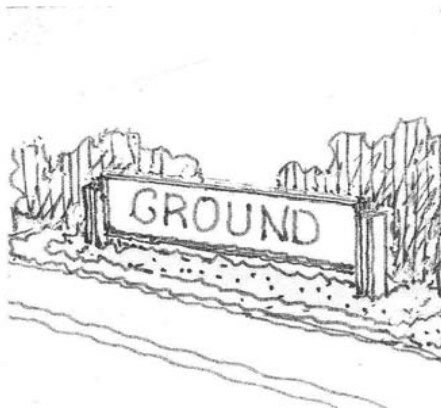
The following schedule sets out maximum criteria for various types of signs. Such signs may be permitted subject to the overall performance standards being met.



- (i) Above Awning Sign
- (ii) Awning / Fascia Sign
- (iii) Blind Sign
- (iv) Business Plate
- (v) Canopy Sign
- (vi) Created Awning Sign
- (vii) Footway Sign
- (viii) Ground Sign
- (ix) Hamper Sign
- (x) Highrise Building Sign
- (xi) Lantern Sign
- (xii) Projecting Flag Sign
- (xiii) Projecting Sign
- (xiv) Stallboard Sign
- (xv) Under Awning Sign
- (xvi) Vertical Banner Building Sign
- (xvii) Wall Sign
- (xviii) Window Sign


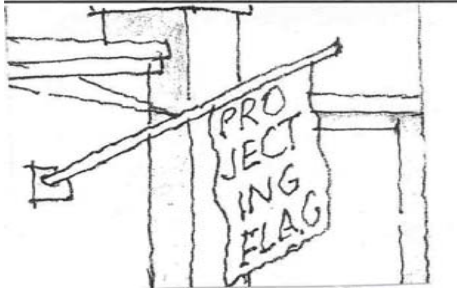
TYPE OF SIGN	EXAMPLE OF TYPE OF SIGN	ACCEPTABLE STANDARD FOR SPECIFIC SIGN STYLE	
<p><b>ABOVE AWNING SIGN</b>                      An Above Awning Sign is an advertisement above an awning, verandah roof or the like.</p>		<p>Maximum size</p> <p>Maximum height above awning</p> <p>Extent</p> <p>Other requirements</p>	<p>Length - 2.7 metres</p> <p>Height - 0.6 metres</p> <p>Width - 0.3 metres</p> <p>1.0 metre</p> <p>Not to project beyond the edges of the awning</p> <p>No unsightly supports or rear view of sign. Any unsightly supports required for structural reasons are to be set back behind edges of sign</p>
<p><b>AWNING/FASCIA SIGN</b>                      An Awning/Fascia Sign is an advertisement painted or otherwise affixed to the fascia of a building, an awning, verandah or return end of an awning.</p>		<p>Maximum extent</p> <p>Maximum height</p> <p>Maximum thickness</p>	<p>Not projecting above or below the fascia</p> <p>0.6 metre</p> <p>0.1 metre out from fascia</p>

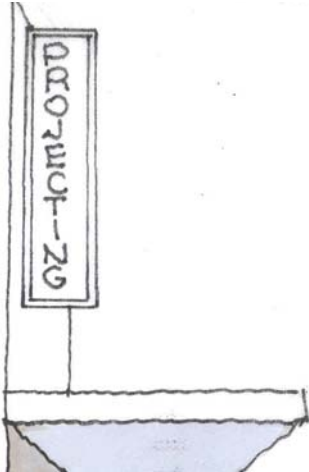

TYPE OF SIGN	EXAMPLE OF TYPE OF SIGN	ACCEPTABLE STANDARD FOR SPECIFIC SIGN STYLE	
<p><b>BLIND SIGN</b>                      A Blind Sign is an advertisement painted on or otherwise affixed to solid or flexible material suspended from the edge of an awning, verandah or wall.</p>		<p>Minimum clearance between the lower most point of the sign and the footway                      Maximum number</p>	<p>2.4 metres                      1 per tenancy frontage</p>
<p><b>BUSINESS PLATE</b>                      A Business Plate is a small advertisement identifying the name and/or trade, business or calling of the occupant or business premises. A Business Plate may be painted or affixed to a wall.</p>		<p>Maximum surface area of sign residence in a residential area                      Maximum surface area per business occupant of premises in commercial and mixed use areas</p>	<p>0.3 square metres                      0.3 square metres</p>

TYPE OF SIGN	EXAMPLE OF TYPE OF SIGN	ACCEPTABLE STANDARD FOR SPECIFIC SIGN STYLE	
<p><b>CANOPY SIGN</b>                      A Canopy Sign is an advertisement, painted or otherwise affixed, to a canopy, whether the canopy is constructed from flexible or solid material.</p>		<p>Minimum clearance between the lower most part of the sign and the footway                      Maximum number</p>	<p>2.4 metres                      1 per tenancy frontage</p>
<p><b>CREATED AWNING LINE SIGN</b>                      A Created Awning Line Sign is an advertisement attached to and extending beyond a fascia of an awning or the like.</p>		<p>Extent                      Maximum area                      Minimum clearance</p>	<p>Not more than 0.6 metre above the fascia to which it is attached                      The created area is not to exceed 25% of the fascia                      2.4 metres to the footpath pavement</p>



TYPE OF SIGN	EXAMPLE OF TYPE OF SIGN	ACCEPTABLE STANDARD FOR SPECIFIC SIGN STYLE	
<p><b>FOOTWAY SIGN</b> A Footway Sign is a portable, freestanding advertisement, normally supported by an 'A' or inverted 'T' frame, and typically displayed on a footway.</p>		<p>Maximum size</p> <p>Maximum number Location</p> <p>Other requirements</p>	<p>Height - 1.0 metre Width - 0.6 metre Depth - 0.6 metre</p> <p>1 per tenancy</p> <p>A Footway Sign on a footway is to be positioned near the kerb (but not closer than 0.25 metre) so as to leave clear passage for pedestrians along the footway, particularly the visually disadvantaged who rely on clear passage along the frontage of shops.</p> <p>No footway sign is to be positioned so as to obstruct, clutter or detract from street landscaping, furniture or artwork</p> <p>A Footway Sign not to be located on a public road.</p> <p>A Footway Sign is not to have moving, rotating or animated parts, such as a spinner sign. A Footway Sign is to be displayed only during trading hours and is not to be used for the display of merchandise</p>
<p><b>GROUND SIGN</b> A Ground Sign is a monolithic sign which, in effect, sits on or rises out of the ground.</p>		<p>Setting</p> <p>Maximum height Maximum surface area Maximum setback from side boundary Maximum number</p>	<p>Erected within a landscaped environment.</p> <p>Not erected to expose an unsightly back view of the sign.</p> <p>When in a residential area, only permitted where used in a name of a multi-unit development site</p> <p>1.8 metres</p> <p>10 square metres</p> <p>3 metres</p> <p>One per frontage for frontages up to 100 metres</p> <p>For frontages over 100 metres, spacing of signs to be no less than 60 metres</p>

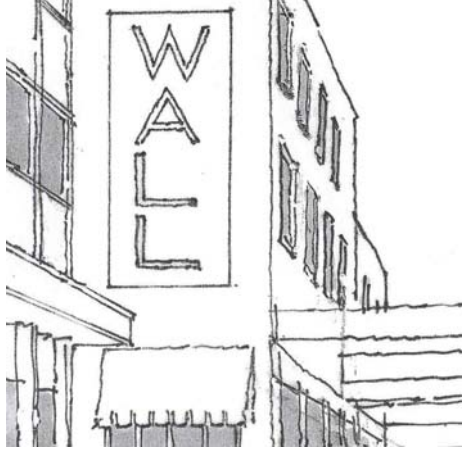
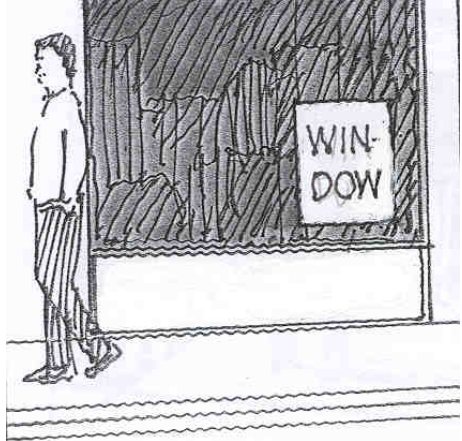
TYPE OF SIGN	EXAMPLE OF TYPE OF SIGN	ACCEPTABLE STANDARD FOR SPECIFIC SIGN STYLE	
<p><b>HAMPER SIGN</b>                      A Hamper Sign is an advertisement, painted or otherwise affixed, between a door head and an awning, or their equivalent levels.</p>		<p>Maximum thickness                      Maximum Extent</p>	<p>0.3 metre from the face of the wall                      The size and form are to be compatible with the building on which they are located.</p>
<p><b>HIGH RISE BUILDING SIGN</b>                      A High Rise Building Sign is an advertisement naming or identifying a high rise building by the use of a logo or the like.</p>		<p>Maximum extent                       Maximum number                      Other requirements</p>	<p>Contained within the actual or created outline of a building or appears as if it was part of the original building if part of a structure creating a changed building outline                      One per building frontage                      A High Rise Building Sign is not to contain third party advertising</p>

TYPE OF SIGN	EXAMPLE OF TYPE OF SIGN	ACCEPTABLE STANDARD FOR SPECIFIC SIGN STYLE	
<p><b>LANTERN SIGN</b>                      A Lantern Sign is a translucent lighting fixture displaying the name and/or trade, business or calling of the occupant.</p>		<p>Maximum number for a Home Occupation or Business</p> <p>Maximum edge dimension of lantern</p> <p>Maximum height</p> <p>Maximum illumination</p>	<p>One</p> <p>0.5 metre (ie to fit into a Cube of 0.5 x 0.5 x 0.5 metres)</p> <p>2 metres</p> <p>Not greater than a standard 100 watt incandescent bulb</p>
<p><b>PROJECTING FLAG SIGN</b>                      A Projecting Flag Sign is a non-illuminated, wall-mounted corporate flag.</p>		<p>Maximum size</p> <p>Maximum number</p> <p>Minimum spacing</p> <p>Minimum clearance</p>	<p>0.3 square metre per face</p> <p>4 per site</p> <p>2 metres</p> <p>2.4 metres to the footpath pavement.</p>

TYPE OF SIGN	EXAMPLE OF TYPE OF SIGN	ACCEPTABLE STANDARD FOR SPECIFIC SIGN STYLE	
<p><b>PROJECTING SIGN</b>                      A Projecting Sign is a double-faced sign projecting at right angles to a wall and fixed to the wall. A Projecting Sign is not an Under Awning Sign.</p>		<p>Minimum clearance between the lowermost point of the sign and the footway</p> <p>Maximum number                      Orientation                      Extent</p> <p>Maximum size</p>	<p>2.4 metres</p> <p>One per building frontage                      Vertical                      Not projected above the height of the wall to which it is attached                      Height - 3.0 metres                      Width - 0.75 metre</p>
<p><b>STALLBOARD SIGN</b>                      A Stallboard Sign is an advertisement, painted or otherwise affixed, at the base of a shopfront, normally below a shop window</p>		<p>Fixing</p> <p>Maximum Extent</p>	<p>Fitted flush</p> <p>The size and form are to be compatible with the building on which they are located.</p>



TYPE OF SIGN	EXAMPLE OF TYPE OF SIGN	ACCEPTABLE STANDARD FOR SPECIFIC SIGN STYLE	
<p><b>UNDER AWNING SIGN</b> An Under Awning Sign is an advertisement suspended under an awning or verandah.</p>		<p>Orientation Minimum clearance between the lowermost point of the sign and footway Extent Location Minimum distance between under awning signs Maximum dimensions</p> <p>Minimum setback from side boundary</p>	<p>At right angles to the building frontage 2.4 metres</p> <p>Not to project beyond the awning or verandah Central to each shop or tenancy or shopping arcade entrance 3.0 metres</p> <p>Length - 2.7 metres or not greater than 75% of the width of the awning or verandah which ever is lesser Height - 0.6 metres Width – 0.3 metres 1.5 metres</p>
<p><b>VERTICAL BANNER BUILDING SIGN</b> A Vertical Banner Building Sign is an advertisement of non-rigid material normally fixed at the top and bottom to brackets projecting from a building.</p>		<p>Maximum height Maximum width Minimum clearance between lowermost point of the sign and the footway Maximum area Minimum spacing between signs Minimum setback from side or rear boundary</p>	<p>Not to project above the height of the adjacent part of the building to which it is fixed and not to exceed 5 metres above ground level 0.75 metre 2.4 metres 2.4 square metres 6.0 metres 3.0 metres</p>

TYPE OF SIGN	EXAMPLE OF TYPE OF SIGN	ACCEPTABLE STANDARD FOR SPECIFIC SIGN STYLE	
<p><b>WALL SIGN</b> A Wall Sign is an advertisement, painted or otherwise affixed, flat to a wall.</p>		<p>Maximum thickness (or projection from wall) Maximum number Maximum surface area  Location</p>	<p>0.3 metre  One per tenancy 20% of wall space or 6 m<sup>2</sup>, whichever is the lesser Ground floor level and first floor level and not to project beyond the edge of the wall.</p>
<p><b>WINDOW SIGN</b> A Window Sign is an advertisement, painted or otherwise affixed, to the glass of a display window.</p>		<p>Maximum surface area of sign</p>	<p>25% of the area of the glass panel or panels on which it is displayed</p>

# **APPENDIX E**

## **PROPOSED METES & BOUNDS DESCRIPTION**

# **METES & BOUNDS**

## **TOWN CENTRE FRAME 'B' PRECINCT**

### **TOWN CENTRE FRAME 'B' SECTOR THREE**

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FROM THE POINT OF COMMENCEMENT BEING ON AMG COORDINATES  
EASTING – 501813.284 METRES, NORTHING – 6986957.992 METRES, THENCE  
IN AN EASTERLY DIRECTION AT A BEARING OF 81°0'  
FOR A DISTANCE OF 2.082 METRES (MORE OR LESS), THENCE  
IN AN EASTERLY DIRECTION AT A BEARING OF 84°50'  
FOR A DISTANCE OF 19.137 METRES (MORE OR LESS), THENCE  
IN AN EASTERLY DIRECTION AT A BEARING OF 89°10'  
FOR A DISTANCE OF 19.171 METRES (MORE OR LESS), THENCE  
IN AN EASTERLY DIRECTION AT A BEARING OF 92°40'  
FOR A DISTANCE OF 84.241 METRES (MORE OR LESS), THENCE  
IN A SOUTHERLY DIRECTION AT A BEARING OF 189°0'  
FOR A DISTANCE OF 183.983 METRES (MORE OR LESS), THENCE  
IN A SOUTHERLY DIRECTION AT A BEARING OF 194°20'40"  
FOR A DISTANCE OF 17.037 METRES (MORE OR LESS), THENCE  
IN A SOUTH WESTERLY DIRECTION AT A BEARING OF 206°0'  
FOR A DISTANCE OF 18.664 METRES (MORE OR LESS), THENCE  
IN A SOUTH WESTERLY DIRECTION AT A BEARING OF 220°0'  
FOR A DISTANCE OF 17.683 METRES (MORE OR LESS), THENCE  
IN A SOUTH WESTERLY DIRECTION AT A BEARING OF 226°47'45"  
FOR A DISTANCE OF 35.714 METRES (MORE OR LESS), THENCE  
IN A SOUTH WESTERLY DIRECTION AT A BEARING OF 221°00'15"  
FOR A DISTANCE OF 4.036 METRES (MORE OR LESS), THENCE

IN A SOUTH WESTERLY DIRECTION AT A BEARING OF 215°12'40"  
FOR A DISTANCE OF 49.785 METRES (MORE OR LESS), THENCE  
IN A NORTH WESTERLY DIRECTION AT A BEARING OF 302°29'05"  
FOR A DISTANCE OF 37.492 METRES (MORE OR LESS), THENCE  
IN A NORTH WESTERLY DIRECTION AT A BEARING OF 294°03'15"  
FOR A DISTANCE OF 35.984 METRES (MORE OR LESS), THENCE  
IN A WESTERLY DIRECTION AT A BEARING OF 289°55'30"  
FOR A DISTANCE OF 9.946 METRES (MORE OR LESS), THENCE  
IN A NORTHERLY DIRECTION AT A BEARING OF 19°55'30"  
FOR A DISTANCE OF 73.47 METRES (MORE OR LESS), THENCE  
IN A WESTERLY DIRECTION AT A BEARING OF 290°44'55"  
FOR A DISTANCE OF 39.988 METRES (MORE OR LESS), THENCE  
IN A NORTHERLY DIRECTION AT A BEARING OF 19°55'30"  
FOR A DISTANCE OF 44.433 METRES (MORE OR LESS), THENCE  
IN AN EASTERLY DIRECTION AT A BEARING OF 110°0'  
FOR A DISTANCE OF 5.998 METRES (MORE OR LESS), THENCE  
IN AN EASTERLY DIRECTION AT A BEARING OF 97°40'  
FOR A DISTANCE OF 11.995 METRES (MORE OR LESS), THENCE  
IN AN EASTERLY DIRECTION AT A BEARING OF 88°40'  
FOR A DISTANCE OF 11.995 METRES (MORE OR LESS), THENCE  
IN AN EASTERLY DIRECTION AT A BEARING OF 76°40'  
FOR A DISTANCE OF 11.995 METRES (MORE OR LESS), THENCE  
IN A NORTH EASTERLY DIRECTION AT A BEARING OF 67°30'  
FOR A DISTANCE OF 11.995 METRES (MORE OR LESS), THENCE  
IN A NORTH EASTERLY DIRECTION AT A BEARING OF 55°40'

FOR A DISTANCE OF 11.995 METRES (MORE OR LESS), THENCE  
IN A NORTH EASTERLY DIRECTION AT A BEARING OF 46°30'  
FOR A DISTANCE OF 11.995 METRES (MORE OR LESS), THENCE  
IN A NORTH EASTERLY DIRECTION AT A BEARING OF 34°40'  
FOR A DISTANCE OF 11.995 METRES (MORE OR LESS), THENCE  
IN A NORTH EASTERLY DIRECTION AT A BEARING OF 25°20'  
FOR A DISTANCE OF 11.995 METRES (MORE OR LESS), THENCE  
IN A NORTHERLY DIRECTION AT A BEARING OF 13°40'  
FOR A DISTANCE OF 11.995 METRES (MORE OR LESS), THENCE  
IN A NORTHERLY DIRECTION AT A BEARING OF 4°10'  
FOR A DISTANCE OF 11.995 METRES (MORE OR LESS), THENCE  
IN A NORTHERLY DIRECTION AT A BEARING OF 352°40'  
FOR A DISTANCE OF 11.995 METRES (MORE OR LESS), THENCE  
IN A NORTHERLY DIRECTION AT A BEARING OF 343°10'  
FOR A DISTANCE OF 11.995 METRES (MORE OR LESS), THENCE  
IN A NORTH WESTERLY DIRECTION AT A BEARING OF 331°40'  
FOR A DISTANCE OF 11.995 METRES (MORE OR LESS), THENCE  
IN A NORTH WESTERLY DIRECTION AT A BEARING OF 322°0'  
FOR A DISTANCE OF 11.995 METRES (MORE OR LESS), THENCE  
IN A NORTH WESTERLY DIRECTION AT A BEARING OF 310°30'  
FOR A DISTANCE OF 13.307 METRES (MORE OR LESS), THENCE  
IN A NORTHERLY DIRECTION AT A BEARING OF 354°50'  
FOR A DISTANCE OF 19.821 METRES (MORE OR LESS)  
TO THE POINT OF COMMENCEMENT AND CONTAINING AN AREA OF  
3.209 HECTARES (MORE OR LESS).

We, PMM Group Pty Ltd A.C.N. 010 370 448 hereby certify that the Metes and Bounds description contained herein has been prepared by the company and the AMG connection used for the commencement point has been determined by field survey.

.....  
Cadastral Surveyor/Director

# **APPENDIX F**

## **STREETScape / CHARACTER IMAGES**



**NORTH LAKES DEVELOPMENT  
STREETSCAPE / CHARACTER IMAGES  
TOWN CENTRE FRAME "B" SECTOR THREE (SECTOR PLAN 018-3000)**



**Image 1 – Acceptable**

Innovative contemporary building design. Includes integrated use of elements such as block work, glass and tin and horizontal and vertical variations in the façade for visual interest.



**Image 2 – Acceptable**

Attractive, clearly identified and defined entry which allows for pedestrian linkages and landscape planting extending from carparking areas to development.



**Image 3 – Acceptable**

Landscaping along carparking aisles and between carparking spaces reduces the appearance of an expanse of carparking areas.



**Image 4 – Acceptable**

Buildings located on corner allotments should define the street environment by providing and outward orientated building design and where appropriate, generous footpaths, awnings, display windows and a high quality streetscape urban design character.



**Image 5 - Acceptable**

Built form framing corner landscaping/landmark feature and reinforcing the civic nature of the area by providing outward orientated shop fronts at ground level. Access to the development clearly defined through a pedestrian path lined with landscaping.



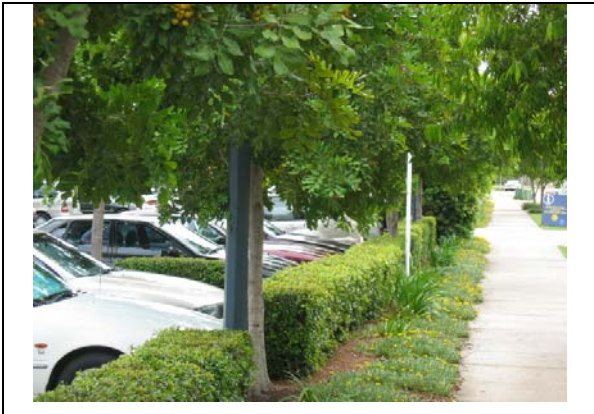
**Image 6 – Acceptable**

Directional signage can include business logo.

**Unacceptable**

Signage should be integrated with landscaping frontage treatment.

**NORTH LAKES DEVELOPMENT  
STREETSCAPE / CHARACTER IMAGES  
TOWN CENTRE FRAME "B" SECTOR THREE (SECTOR PLAN 018-3000)**



**Image 7 – Acceptable**

Convenient and safe pedestrian and cyclist access within or to development adjacent to the Sector. Such access is to be integrated with the path, carpark and street system. This is the desirable outcome for the Central Access Road.



**Image 8 – Unacceptable**

Multiple signs and repetition.



**Image 9 - Unacceptable**

Incoherent layout and access arrangement with no landscaping to soften and enhance the built form. Unattractive built form and roofscape that does not provide visual relief or provide visual interest for passers by.



**Image 10 - Unacceptable**

Inappropriate streetscape treatment due to lack of landscaping and signage clutter and exposed carparking.



**Image 11 – Acceptable**

Windows overlooking carpark and building provides a variety of architectural design elements that relieve building scale and bulk such as eaves and recesses.

**Unacceptable** – No landscaping within carpark area.



**Image 12 – Acceptable**

Pedestrian facilities, including pedestrian shelters are provided at ground level.