

MANGO HILL INFRASTRUCTURE DEVELOPMENT CONTROL PLAN

Sector Plan No. 018-2000

for

**Town Centre Frame “B” Sector Two
North Lakes Drive / Central Access Road**

Town Centre Frame “B” Precinct

North Lakes Development

26 September 2005

(Approved by Council 15 March 2005 and subsequently approved amendments on 26 September 2005)

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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 Two – North Lakes Drive / Central Access Road** (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) North Lakes Drive to the south;
 - (ii) The balance of the Town Centre Frame “B” Precinct Plan 018 to the north and east; and
 - (iii) 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 transition in North Lakes Drive (west of its intersection with Memorial Drive) from the "green gateway" described in Precinct Plan 002, to a "main street" environment. The "main street" environment along the North Lakes Drive frontage of the Sector is to include a pedestrian-scale streetscape with buildings defining the street environment, footpaths and high quality urban design characteristics.

Development is to ultimately extend along North Lakes Drive with a continuous edge of buildings and landscaping. Buildings are to have an outward orientated design and active frontages. Development along North Lakes Drive must be a minimum of 8.0 metres high to achieve the "main street" environment described above. Pedestrian safety is to be a priority through the use of paving treatments to define, as well as encourage, use of pedestrian movement areas.

The Central Access Road, which runs along the Sector's western boundary, is to be developed in accordance with Sector Plan 018-1000 as a narrow, low vehicular traffic and pedestrian friendly environment. It is to function as a local street, and must enable access to carparking 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, carparking 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. A high level of pedestrian connectivity is required in order to link carparking areas with building arcades and with building entries at the front of the development on North Lakes Drive. Public access at the rear of buildings within the Sector is to be restricted. Buildings may be built up to the Central Access Road road alignment and are to be a minimum of two (2) storeys in height provided that a pedestrian thoroughfare is incorporated into the design at the ground floor adjacent to the Central Access Road.

Carparking areas should be designed as an attractive setting, integrating paving, landscaping, shading, and carparking spaces. Where utility and service areas are proposed they are appropriately screened from view and landscaped to minimise negative impacts on visual amenity and character.

Development in the Sector should:

- (i) provide a mixed and flexible environment to meet future employment and consumer needs;
- (ii) ensure connectivity, integration and strong functional and architectural relationships with the commercial developments within the Sector, Precinct and the balance of the Town Centre;
- (iii) ensure that car parking areas 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;
- (iv) continue surrounding landscaping themes along the Central Access Road to maintain a vista to the Town Common from North Lakes Drive;
- (v) where possible, provide opportunities for shared carparking and service areas between different developments and uses;
- (vi) promote a low speed, pedestrian compatible environment along the adjoining Central Access Road via the provision of pedestrian pathways and landscaping;
- (vii) establish a vibrant atmosphere and scale appropriate to a town centre; and
- (viii) 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; and
- (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.

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 North Lakes Drive which will permit minor variations and articulation in the façade to ameliorate the visual effects of building length and bulk;
- (ii) include a two (2) metre building setback distance to the Central Access Road 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 a zero (0) building setback distance; and
- (iii) 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) be generally in accordance with the measures referred to in section 5.4 of the DCP and in relation to Part 7, Special Requirements in Relation to Particular Development of the Planning Scheme;
- (ii) have a minimum building height of eight (8) metres along North Lakes Drive;
- (iii) for all other street frontages not mentioned in clause 3.4.3 (ii) above, be in context with and visually compatible with the height, scale and bulk of surrounding development and streetscape patterns;
- (iv) 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;
- (v) achieve active frontages and an internalised services and vehicular movement system;
- (vi) be of an open framed, light-weight appearance possibly including layered façade treatments;
- (vii) provide outward oriented, active frontages to all streets and an attractive façade to carparking areas at the rear of developments. This includes providing direct business and social activity along the street and opportunities for people to meet, ensuring a direct face with the street to undertake business, not from within a separate shopping centre or arcade and having well-proportioned access doorways which remain open during normal trading periods;
- (viii) include articulation and variation of the façade to minimise building bulk and minimise the visual impact of long blank walls;
- (ix) present an attractive and functional facade to both North Lakes Drive and the Central Access Road through the use of horizontal and vertical variations and other design features in the façade. Where openings are not provided, glazing must be maximised at ground floor level;

- (x) contribute to a desirable pedestrian environment and streetscape character in order to create safe, comfortable and pleasant public areas;
- (xi) orientate main entrances to address the street frontage and provide well-lit pedestrian access to the street environment;
- (xii) allow sensitive environmental responses to slope, access and integration requirements;
- (xiii) complement the overall character of the Sector and the DCP area generally, whilst allowing corporate identity for tenants;
- (xiv) incorporate materials and colours that are not highly reflective to avoid unreasonable glare nuisance to surrounding developments;
- (xv) for all non-residential buildings greater than 2500m² 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;
- (xvi) not include broken frontages along the North Lakes Drive frontage, unless to allow pedestrian linkages from the rear of the development;
- (xvii) for development fronting the Central Access Road, contribute to the pedestrian character of the street by use of open and accessible building forms; and
- (xviii) feature flexible frontages, such as bi-fold doors or swing doors. Manually operated sliding glass doors are not acceptable. If other forms of openings are proposed they are not to detract from the Planning intentions for active frontage development.

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 Discovery Drive, Endeavour Boulevard and the secondary access roads;
- 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:

- (i) 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;
- (ii) 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;
- (iii) include the integrated use of elements such as timber, glass and tin;
- (iv) 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;
- (v) incorporate brighter colour accents for minor detail elements such as window and door frames, columns, handrails, ornamental features and signage details; and
- (vi) 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) 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;
- (ii) 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;
- (iii) 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;
- (iv) 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;
- (v) incorporate the use of gas or solar hot water heaters and solar energy devices;
- (vi) implement energy efficient management systems for the building;
- (vii) where possible, use building materials which impose energy efficiency;
- (viii) 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
- (ix) 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 2,500m² 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) 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;
- (ii) 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;
- (iii) include safety lighting in open space and car parking areas which are to be used at night-time;
- (iv) 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;
- (v) have regard to the efficiency of energy consumption in the design of lighting systems; and
- (vi) 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 to be:

- (i) generally co-located with other telecommunications equipment installed in the Sector;
- (ii) constructed in a form complementary to the façade and roofline of the building on which it is to be mounted; and
- (iii) where possible, coloured so as to blend in with the background of the building on which it is to be mounted.

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 and identification.

The North Lakes Drive frontages of the Sector is anticipated to have an open landscape character with themed shade trees which are spaced along the verges, to provide partial shade to the kerbside carparking and the street furniture. Streetscape treatment along North Lakes Drive must include generous footpaths, street trees, street furniture and lighting.

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

3.5.3 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) include a two (2) metre wide footpath along the western boundary of the Sector in accordance with *Figure 4 – Sector Plan Map*, which is to be used as a pedestrian thoroughfare providing access along the edge of the Sector, to the adjoining car parking area and the Central Access Road;
- (iv) ensure access between the Central Access Road and the two (2) metre wide pedestrian thoroughfare are at or about the same level and that there is an appropriate standard cross fall for the full two (2) metre width of the pedestrian thoroughfare;
- (v) be designed to complement and integrate with the landscaping and design character of adjoining Sectors and Precincts;
- (vi) 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 and the Central Access Road. Street trees are intended to provide visual continuity to the street, reduce the road scale and provide shade to on-street car parking, bus stop waiting areas (if provided) and adjacent pedestrian areas. Predominantly native planting will be used;
- (vii) 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;
- (viii) carparking areas should be significantly screened from a drivers eye view from roadway by effective landscaping. The landscaping should include trees and shrubs but occasionally views of key elements of each proposed building may be provided;
- (ix) 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;

- (x) 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;
- (xi) be employed to reduce reflected glare from building facades;
- (xii) not compromise the safety of vehicles accessing sites within the Sector or in surrounding development;
- (xiii) include lighting of public areas, including carparking areas for public safety;
- (xiv) be capable of efficient and effective maintenance;
- (xv) generally frame entry areas to sites;
- (xvi) screen services such as electricity substations and transformers in a way that does not affect the streetscape;
- (xvii) delineate between the pedestrian and vehicular environments, as well as to provide some relief from headlight glare and visual monotony; and
- (xviii) 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.

3.5.4 Fencing

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

- (i) fencing is not to be provided to the North Lakes Drive or Central Access Road 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.

3.5.5 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 in accordance with the Planning Scheme requirements current at the time of lodgement of the material change of use application, the DCP 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;
- (iii) 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;
- (iv) be controlled to minimise its impact on the surrounding road network, any internal circulation and other development adjacent to the Sector;
- (v) 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;
- (vi) ensure that pedestrian movement areas through car parks to a building are clearly defined;
- (vii) 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;
- (viii) 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;
- (ix) one (1) shower cubicle with ancillary change room per ten (10) bicycle spaces required by 3.6.1(vii) above. Facilities may be utilised by both males and females provided adequate privacy and accessibility is ensured for both sexes; and
- (x) 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.

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 one (1) 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 have been noted indicatively on *Figure 4* by the inclusion of 'no vehicular access permitted'

- designation;
- (iii) vehicular access points and the design and functioning of the Central Access Road, 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) the intersection of the Central Access Road with North Lakes Drive is to be developed as a pedestrian-friendly environment, with convenient pedestrian access and interaction, particularly to the Town Centre Core (Westfield Shopping Centre);
 - (vi) 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;
 - (vii) 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;
 - (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 or the Central Access Road;
- (ii) ensure that lighting of any signage will not cause a nuisance to drivers or pedestrians;
- (iii) be restricted to a minimum clearance of 2.4 metres to the pavement if located above pedestrian areas;
- (iv) be visible, legible and not result in a cluttered or discordant streetscape;
- (v) provide limited use of highly reflective finishes;
- (vi) incorporate professional and coordinated graphics;
- (vii) not permit bunting, streamers, sandwich boards and other low-quality, temporary, or opportunistic signs; and
- (viii) 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 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 2740m².

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.

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

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

- (i) minimum lot area – 1,000m²; 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 Infrastructure Agreement – Main Roads (MHIA-MR).

- (i) A four lane median divided arterial road (North Lakes Drive) between Node T and Node I in accordance with the Rezoning Conditions, the MHIA and the State Government. Agreements. The initial stage of operation will be as a two lane road between Node T and Node I;
- NB Kerbside parking in North Lakes Drive is to be restricted to the major shopping centre side of North Lakes Drive and across the frontage of the major shopping centre, to allow two lane westbound traffic operation if and when the calculated “degree of saturation” of the intersection of North Lakes Drive and The Corso exceeds 85% based on actual traffic counts at peak periods within a typical shopping week, or when observation indicates that queues on the approaching to the intersection are failing to clear in a single traffic signal cycle more than 3 times in one hour during such periods and cannot be alleviated by localised intersection or traffic signal improvement. Bus stops will continue to be provided along North Lakes Drive.
- (ii) A two (2) lane road (Central Access Road) with kerbside carparking along both sides. The Central Access Road is to be transferred to Council ownership, in association with the adjacent Town Centre Frame ‘A’ – (Community Facilities Precinct 008). A reciprocal access easement is to be created over the Central Access Road in favour of the balance of the Town Centre Frame “B” Precinct (Precinct Plan 018) and the adjoining Precinct to the west (Town Centre Frame “A” Precinct – Precinct Pan 008).
- (iii) The intersections of the Central Access Road with North Lakes Drive and Endeavour Boulevard to suit the standard of construction of these adjacent roads, including auxiliary left turn, right turn and stand up lands and traffic signals, if required.
- (iv) Bikeways and pathways required along the road frontages of the Sector and the Central Access Road 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 and the Central Access Road, 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

- (i) 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 July 2005; and
- (ii) The local bus service will be provided in accordance with Clause 7.2 (i) of this document.

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.

The following items of State Government Infrastructure are to be provided by the Principal Developer in conjunction with the development of the Sector in accordance with the Infrastructure Agreements with the State Government. These include the provisions of works to State Controlled Roads.

- (i) A local bus service will service the Sector in accordance with the Infrastructure Agreement with Queensland Transport; and
- (ii) The Principal Developer must contribute towards the cost of providing kerbside infrastructure associated with the public transport system. Such contribution is to be in accordance with the Infrastructure Agreement with the State Government.

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 4 ET (0.274ha x 15ET/ha); and
- (ii) For the purpose of assessing sewerage capacity, the estimated number of Equivalent Persons for this Sector is 8 EP (0.274ha x 30EP/ha).

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 TWO**

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 (above ground level) Amusement premises Apartments (above ground floor) Car park Car wash (associated with an existing building) Catering premises Child care centre (where the use is included within an existing building) Commercial services Convention centre Educational establishment Entertainment library Hardware centre (Where the use is included within an existing building) Hotel Indoor recreation Licensed club Motel (accommodation generally above ground level) Office Passenger terminal (where the use is included within an existing building) Place of worship (where the use is included within an existing building) Restaurant Retail nursery (where the use is included within an existing building) Shop <300m ² GFA Shopping centre <1,500m ² GFA Technology industry Tourist facility Vehicle hire depot (where the use is included within an existing building) 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 ² 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 Two –
North Lakes Drive / Central Access Road**

Botanical Name	Common Name
Trees & Palms	
Acmena smithii	Lilly Pilly
Agathis robusta	Kauri Pine
Allocasuarina littoralis	Black She Oak
Allocasuarina torulosa	Forest She Oak
Araucaria cunninghamia	Hoop Pine
Archontophoenix cunninghamia	Pickabeen 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 Frangipanii
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 Two –
North Lakes Drive / Central Access Road**

Botanical Name	Common Name
Trees & Palms	
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
Shrubs	
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 Two –
North Lakes Drive / Central Access Road**

Botanical Name	Common Name
Groundcovers	
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
Grasses	
Cynodon dactylon	Green Couch
Danthonia induta	Wallaby Grass
Digitaria didactyla	Blue Couch
Greenlees Park	Hybrid Couch
Poa australis	Native Poa
Vines	
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 TWO**

Land use	Employee Bicycle Parking spaces	Class	Visitor/Shopper Bicycle Parking spaces	Class
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 ² 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 ² GFA	1	1 space per 50 car parking spaces	3
Car wash (associated with an existing use)	1 space per 750m ² GFA	2	N/A	
Catering premises	1 space per 100m ² GFA public area	2	2 space per 750m ² GFA	3
Child care centre (where the use is included within an existing building)	1 space per 1500m ² GFA	2	2 spaces + 1 space per 1500m ² GFA	3
Commercial services	1 space per 200m ² GFA	2	1 space per 750m ² GFA over 1000m ² GFA	3
Convention Centre	1 space per 750m ² GFA	2	1 space per 750m ² GFA over 1000m ² GFA	3
Cultural Facility	1 space per 750m ² GFA	2	1 space per 750m ² GFA over 1000m ² 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 ² GFA	2	1 space per 200m ² GFA	3
Hardware centre (where the use is included within an existing building)	1 space per 300m ² GFA	2	1 space per 200m ² 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 ² GFA	3
Licensed club	1 per 25m ² bar floor area and 1 per 100m ² lounge, beer garden	1	2 space per 750m ² GFA	3
Motel (accommodation generally above ground floor level)	1 space per 40 rooms	1	N/A	N/A
Office	1 space per 200m ² GFA	2	1 space per 750m ² GFA over 1000m ² GFA	3
Passenger Terminal	1 space per 750m ² GFA public area	1 or 2	1 space per 750m ² GFA	3
Place of worship (where the use is included within an existing building)	1 space per 750m ² GFA public area	1 or 2	1 space per 750m ² GFA	3

Land use	Employee Bicycle Parking spaces	Class	Visitor/Shopper Bicycle Parking spaces	Class
Restaurant	1 space per 100m ² GFA public area	1 or 2	2 space per 750m ² GFA	3
Retail Nursery (where the use is included within an existing building)	1 space per 300m ² GFA	1 or 2	1 space per 200m ² GFA	3
Shop < 300m ² GFA	1 space per 300m ² GFA	1 or 2	1 space per 200m ² GFA	3
Shopping Centre (1500m ² GFA)	1 space per 300m ² GFA	1 or 2	1 space per 200m ² GFA	3
Special Use	1 space per 750m ² GFA	2	1 space per 750m ² GFA	3
Technology industry	1 space per 300m ² GFA	1 or 2	1 space per 200m ² GFA	3
Tourist facility	1 space per 300m ² GFA	1 or 2	1 space per 200m ² GFA	3
Vehicle Hire Depot (where the use is included within an existing building)	1 space per 750m ² GFA (excluding outdoor vehicle display area)	2	1 space per 200m ² GFA	3
Veterinary clinic	1 space per 200m ² GFA	1 or 2	1 space per 750m ² GFA over 1000m ² 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/m².

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

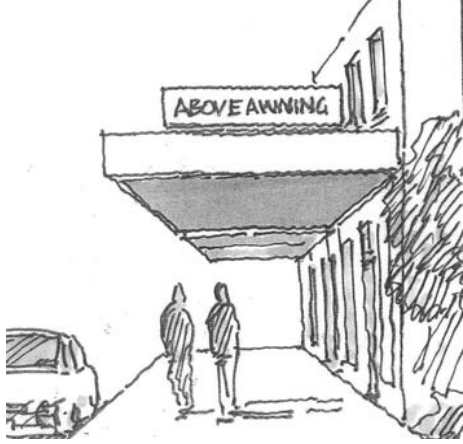

Signs shall:

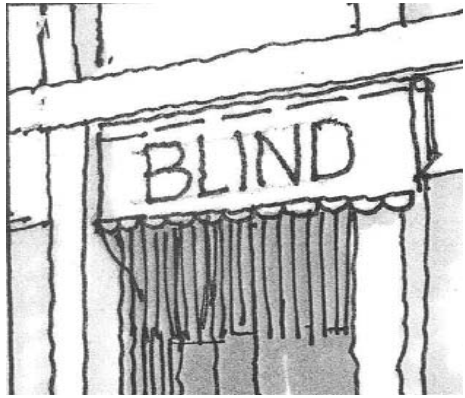
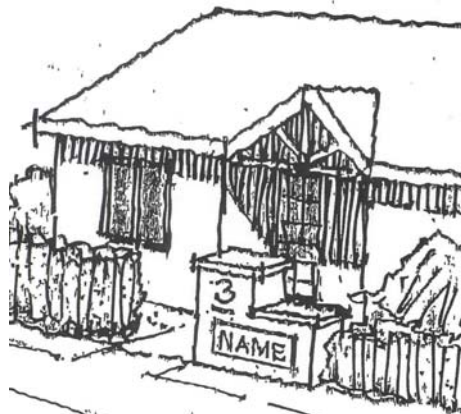
- (i) not create a hazard to traffic or pedestrians**
- (ii) be of character and design standard consistent with the objectives and controls for this sector plan**
- (iii) complement the streetscape and amenity of the locality by virtue of their size, location, illumination, utilisation of complementary 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.**

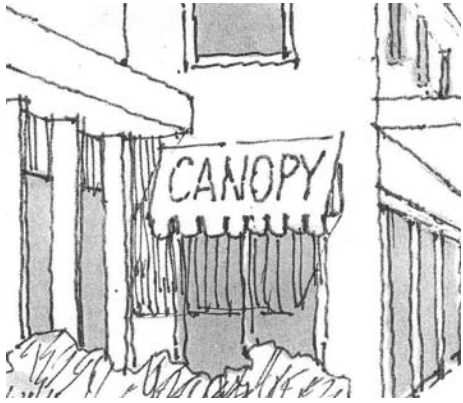

4.0 TYPES OF SIGNS


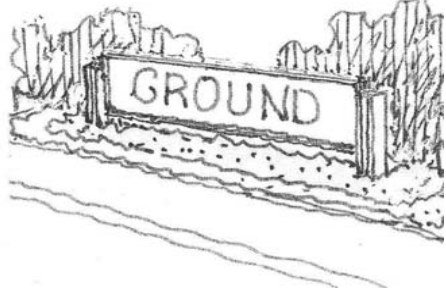
The following schedule sets out maximum criteria for various types of signs. Such signs may be permitted subject to the overall performance standards being met.



- (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


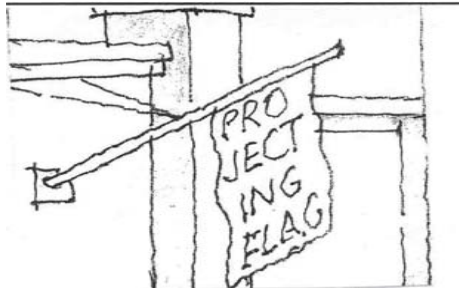
TYPE OF SIGN	EXAMPLE OF TYPE OF SIGN	ACCEPTABLE STANDARD FOR SPECIFIC SIGN STYLE	
<p>ABOVE AWNING SIGN An Above Awning Sign is an advertisement above an awning, verandah roof or the like.</p>		<p>Maximum size</p> <p>Maximum height above awning</p> <p>Extent</p> <p>Other requirements</p>	<p>Length - 2.7 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>AWNING/FASCIA SIGN 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>

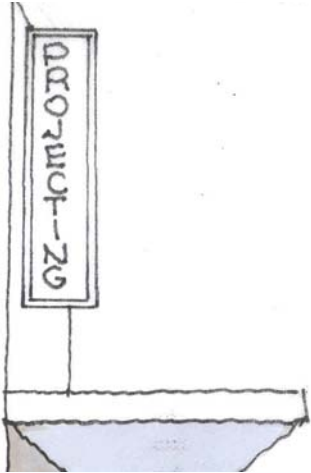

TYPE OF SIGN	EXAMPLE OF TYPE OF SIGN	ACCEPTABLE STANDARD FOR SPECIFIC SIGN STYLE	
<p>BLIND SIGN A Blind Sign is an advertisement painted on or otherwise affixed to solid or flexible material suspended from the edge of an awning, verandah or wall.</p>		<p>Minimum clearance between the lower most point of the sign and the footway Maximum number</p>	<p>2.4 metres 1 per tenancy frontage</p>
<p>BUSINESS PLATE 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>


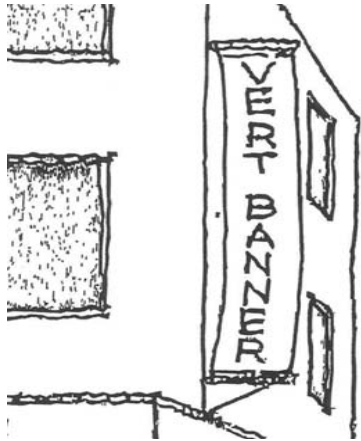
TYPE OF SIGN	EXAMPLE OF TYPE OF SIGN	ACCEPTABLE STANDARD FOR SPECIFIC SIGN STYLE	
<p>CANOPY SIGN A Canopy Sign is an advertisement, painted or otherwise affixed, to a canopy, whether the canopy is constructed from flexible or solid material.</p>		<p>Minimum clearance between the lower most part of the sign and the footway Maximum number</p>	<p>2.4 metres 1 per tenancy frontage</p>
<p>CREATED AWNING LINE SIGN 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>

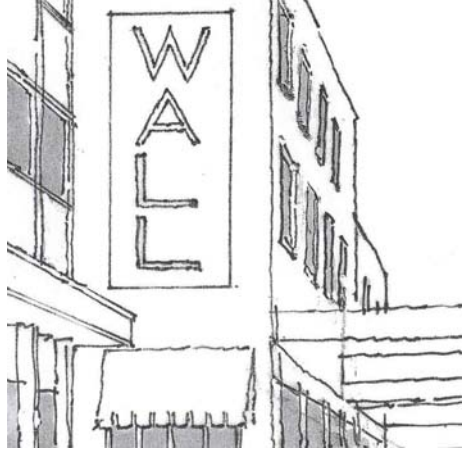

TYPE OF SIGN	EXAMPLE OF TYPE OF SIGN	ACCEPTABLE STANDARD FOR SPECIFIC SIGN STYLE	
<p>FOOTWAY SIGN A Footway Sign is a portable, freestanding advertisement, normally supported by an 'A' or inverted 'T' frame, and typically displayed on a footway.</p>		<p>Maximum size</p> <p>Maximum number Location</p> <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>GROUND SIGN 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>HAMPER SIGN 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>HIGH RISE BUILDING SIGN 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>LANTERN SIGN 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>PROJECTING FLAG SIGN 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>PROJECTING SIGN 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>STALLBOARD SIGN 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>UNDER AWNING SIGN 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>VERTICAL BANNER BUILDING SIGN 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>WALL SIGN 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 m², whichever is the lesser Ground floor level and first floor level and not to project beyond the edge of the wall.</p>
<p>WINDOW SIGN 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 TWO

FROM THE POINT OF COMMENCEMENT BEING ON AMG COORDINATES
 EASTING – 501778.986 METRES, NORTHING – 6986766.949 METRES, THENCE
 IN A SOUTHERLY DIRECTION AT A BEARING OF 199°55'30"
 FOR A DISTANCE OF 68.5 METRES (MORE OR LESS), THENCE
 IN A WESTERLY DIRECTION AT A BEARING OF 289°55'30"
 FOR A DISTANCE OF 40 METRES (MORE OR LESS), THENCE
 IN A NORTHERLY DIRECTION AT A BEARING OF 19°55'30"
 FOR A DISTANCE OF 68.5 METRES (MORE OR LESS), THENCE
 IN AN EASTERLY DIRECTION AT A BEARING OF 109°55'30"
 FOR A DISTANCE OF 40 METRES (MORE OR LESS),
 TO THE POINT OF COMMENCEMENT AND CONTAINING AN AREA OF
 2740 m² (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 TWO (SECTOR PLAN 018-2000)**



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

Directional signage can include business logo.

Unacceptable

Signage should be integrated with landscaping frontage treatment.



Image 6 - Acceptable

Varied roofline and integration of signage into built form.

Unacceptable

Ill-defined access and lack of landscaping.

**NORTH LAKES DEVELOPMENT
STREETScape / CHARACTER IMAGES
TOWN CENTRE FRAME "B" SECTOR TWO (SECTOR PLAN 018-2000)**



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.