## MANGO HILL INFRASTRUCTURE DEVELOPMENT CONTROL PLAN

## Precinct Plan No. 018

## for

# Town Centre Frame "B" Precinct Town Common

## **North Lakes Development**

## **26 September 2005**

(Approved by Council on 20 September 2004, amended on 26 September 2005 and further amendments approved 30 January 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 Precinct within any part of the DCP area chosen by the Principal Developer.
- **1.2** The Principal Developer may then prepare and lodge with Council a Precinct Plan for approval in accordance with the relevant provisions of the DCP.
- 1.3 This document constitutes the Precinct Plan for the **Town Centre Frame "B" Precinct Town Common** (Precinct Plan).
- 1.4 The area and boundaries of this Precinct are notional only. The general location of the Precinct within the DCP Structure Plan is shown on *Figure 1 Planning Context*. The Precinct is bound by:
  - (i) Endeavour Boulevard to the north;
  - (ii) Memorial Drive to the east;
  - (iii) North Lakes Drive to the south; and
  - (iv) Town Centre Frame "A" Precinct (Precinct Plan 008) to the west.
- 1.5 This Precinct Plan must be read together with and in the context of the DCP.

### 2.0 DCP Interpretation

#### 2.1 STRUCTURE PLAN

The Precinct is located within the Town Centre Frame area of the DCP as depicted on *Figure 2 – Structure Plan Context*.

Figure 3 – Precinct Plan Map and the associated text, provide in more detail the interpretation of the Structure Plan by providing information about the indicative location of structural elements such as land uses, major roads and open space for the Precinct. The Precinct Plan illustrates the generalised design and development form of the Precinct in accordance with the planning framework set out in the DCP.

#### 2.2 DESIRED ENVIRONMENTAL OUTCOMES (DEOS)

The DEOs most relevant to the Precinct are outlined in the following sections of the DCP:

- Section 5.1 (Town Centre Frame) section 5.1.1 (a) and (b) and section 5.1.2 (a),
  (b), (d) and (f);
- Section 9.1 (Open Space) section 9.1.2 (c), (d), and (e);
- Section 10.1 (Transport and Circulation) section 10.1.2 (b) and (d); and
- Section 11.1 (Environmental Protection) section 11.1.2 (a), (c), (d) and (e).

This Precinct satisfies the relevant DEOs by providing-

- (i) a range of complimentary employment opportunities, facilities and services that are not provided for in the Town Centre Core, as well as a gradual transition in land use and intensity from the Town Centre Core to Lake Eden, to reinforce the role of the Core;
- (ii) a high standard of urban amenity through quality siting, design and finish of buildings and structures, suitable advertising signage and landscaping;
- (iii) a high level of flexibility in planning for future development within the Precinct via development which is designed to be easily adapted for a range of alternative uses as circumstances change over time;
- (iv) medium and high density residential development which may be undertaken as mixed use or stand alone development;
- (v) a proposed Town Common which allows for passive and active recreational pursuits whilst maximising public safety and providing visual relief and aesthetic amenity in the surrounding built form;
- (vi) a shared central access road which links North Lakes Drive to Endeavour Boulevard and maximises vehicular, bicycle and pedestrian safety, convenience and efficiency; and
- (vii) sustainable development initiatives for the management of environmental risks within the Precinct.

#### 2.3 PLANNING INTENT

The Planning Intent for the Town Centre Frame is set out in Section 5.2 of the DCP. This Precinct is intended to provide relatively higher levels of activity than in the surrounding areas to the north but lower levels of activity than the Town Centre Core.

It is envisaged the predominant land uses within the Precinct may be administrative, commercial, medical, retail, educational, professional services and mixed-use development. The full range of Town Centre Frame land uses may also be considered if such land uses are compatible with the proposed built form. Consideration will also be given to the transitional role of the Precinct between development areas in order to maintain amenity and avoid conflict between uses. Land uses are generally to have a connection with the Town Centre Core and must be integrated in functional and urban design terms with the adjoining Precinct to the west (Town Centre Frame A – Precinct 008).

### 3.0 Development, Planning and Design Principles

#### 3.1 GENERAL FORM OF DEVELOPMENT

The Precinct is located in a functionally and visually prominent part of the town centre. It is an important link between the Town Centre Core, the balance of the Town Centre Frame and Lake Eden in terms of community functions, streetscape and visual connections.

The character of development in this area is to be commercially focused and of generally higher intensity and diversity than other parts of North Lakes. The nature of development is to contribute to high levels of activity for extended hours of the day and night. Street furnishings, planting, paving materials and lighting are intended to enhance the environment.

The visual focus point of the Precinct is to be at the corner of Memorial Drive and North Lakes Drive which will be emphasised through design, height and placement of a landmark feature, whether a building or other element. The landmark is intended to assist legibility and strengthen the urban form of the Precinct, as understood from a town planning and urban design perspective.

Buildings in the Precinct are to address and generally be built to the street frontages while presenting attractive facades to the car parking areas and the boundaries of adjoining Precincts. Pedestrian access is to be readily accessible from the street to encourage the use of the facilities. The street system is to be the primary focus for pedestrian movement in the Precinct, rather than less formal movements between developments within the Precinct and adjoining Precincts.

The interface between the street/pedestrian environment and private space, is to be defined by built-to-boundary buildings, which allows merging and interaction of these separate spaces through use of active frontages. Active frontages may be achieved in a number of ways, including window displays and buildings directly addressing the street rather than having an internal focus.

Building designs are to integrate with surrounding and adjoining development in terms of architecture, height and bulk in order to create a unified streetscape. The architecture of any development within the Precinct is intended to be contemporary and of a light and open building form with integration of indoor and outdoor spaces. Buildings are generally to be orientated and designed to maximise energy efficiency and outdoor areas are to be located to receive adequate exposure to sunlight. Where possible, buildings are to incorporate sustainable development initiatives.

There is no maximum building height limit for buildings within the Precinct due to the intended high intensity nature of the Town Centre Frame. However, development along North Lakes Drive must be a minimum of 8.0m high to achieve the "main street" environment described in section 3.2 below. High-rise buildings may be required to be stepped back on upper levels from the frontage creating a podium to reduce shadowing and scale impacts upon the pedestrian streetscape. Balconies may be provided at or above the podium level to encourage surveillance of the street.

Buildings are to be designed to accommodate a variety of different uses through such techniques as innovative floorplate design to allow flexible separation of spaces and compatible ceiling heights.

Consistency of overall design character within the Precinct and adjoining Precincts will be attained through integration of building design and urban spaces, and use of similar materials, finishes, colours and details which will combine to promote a modern town centre with a strong sense of place.

Carparking is to be unobtrusive and is intended to create minimal interruption to the streetscape and pedestrian routes, through siting, landscaping and/or screening. Where possible, car parking areas should be located in areas where shading is maximised, such as behind or under buildings. Where surface car parks are located adjacent to the street, the areas are to be screened where possible with dense vegetation including canopy shade trees.

#### 3.2 GENERAL FORM OF DEVELOPMENT ALONG NORTH LAKES DRIVE

The Precinct is located close to the key entry to North Lakes, namely the Anzac Avenue/North Lakes Drive intersection. The section of North Lakes Drive off Anzac Avenue and up to Memorial Drive is described as a "green gateway" in Precinct Plan 002 (Town Centre Core Precinct) and includes dense evergreen landscaping. A transition in North Lakes Drive from this "green gateway" to a "main street" environment is to occur along the southern boundary of this Precinct.

Development along the North Lakes Drive frontage is to address the street in order to form an urban main street character. Pedestrian safety and priority is to be paramount with use of paving treatments to define, as well as, encourage use of pedestrian movement areas. The North Lakes Drive main street environment may also be achieved through a high level of architectural design. Landscaping and built form are to define street edges and consolidate vistas to and from key nodes such as the Westfield Shopping Centre. Urban art including paving patterns, water features and sculptures will be encouraged both in public areas and within development along North Lakes Drive.

## 3.3 GENERAL FORM OF DEVELOPMENT ALONG MEMORIAL DRIVE, ENDEAVOUR BOULEVARD AND CENTRAL ACCESS ROAD

Memorial Drive serves as a key entry route to North Lakes and to Lake Eden. It has a secondary commercial role compared to North Lakes Drive and The Corso, given its primary role as a through-route to residential Precincts to the north.

To reduce the visual impact of vehicles on the streetscape and to minimise traffic conflict on Memorial Drive, a central shared access road is proposed through the Precinct, connecting North Lakes Drive to Endeavour Boulevard. It is intended this internal road will also assist in establishing a minimal setback along Memorial Drive with vehicular access to development fronting Memorial Drive to be primarily available from this internal road. Vehicular access along Memorial Drive is to be restricted to areas which minimise interruptions to the flow of traffic and maximise vehicular, bicycle and pedestrian safety.

Built form in a landscaped setting is to form an edge to the streetscape of Memorial Drive with access and car parking located towards the centre of the Precinct. Built form should also frame the proposed Town Common, which is intended to be a green oasis in the Town Centre. The use of active frontages is encouraged, along with a light and open building form with lightweight colonnades and awnings used as a means to extend indoor activities outdoor.

#### 3.4 TRAFFIC CIRCULATION AND CAR PARKING

A reciprocal access road is proposed along the eastern boundary of the Town Common which is intended to be shared with the adjoining Precinct to the west (Town Centre Frame A-008 Precinct). On-street car parking is to be provided along this access road, which is to primarily service the Town Common and nearby community facilities.

#### 4.0 Landscape Concept

#### 4.1 LANDSCAPE CONCEPT PLAN MAP

*Figure 4 – Landscape Concept Plan* provides a diagrammatic framework for the creation of a distinctive urban setting and character for the Precinct.

#### 4.2 CONCEPT OVERVIEW

#### **4.2.1** Frontage to Memorial Drive

The location of street tree planting along the Memorial Drive frontage of the Precinct is shown indicatively on the Landscape Concept Plan (Figure 4). The road frontage area is to be turfed and planted so as to create a high standard of presentation and a permeable landscape setting, which blends with the streetscape planting along surrounding streetscapes. The landscaping of this area is intended to soften, enhance and provide scale to the built form without obscuring it from the road.

The location of trees and landscaping along Memorial Drive are to form a transition between the high-level traffic environment of Anzac Avenue and the lower level traffic within the Town Centre pedestrian environment of North Lakes Drive and residential development to the north of the Precinct. Planting is to be restricted to species that are capable of good growth and endurance in the commercial environment of the Precinct.

#### 4.2.2 Frontage to North Lakes Drive

The verges of North Lakes Drive are to be consistently framed with appropriate landscape and canopy planting to provide a species-themed landscaped entry to the Town Centre Core. Streetscape treatment will include generous footpaths, street trees, street furniture and street lighting.

Any planting adjacent to the vehicular and pedestrian access points along North Lakes Drive is to emphasise and respect the transitional nature of this route from Anzac Avenue and ensure vehicle drivers' sightlines are maintained, particularly from the proposed central access road along the western boundary of the Precinct.

#### **4.2.3** Frontage to Endeavour Boulevard

Any planting adjacent to vehicular and pedestrian access points must address the transitional nature of Endeavour Boulevard, between the highly pedestrian Town Centre (including The Corso and North Lakes Drive) and the through-route nature of Memorial Drive. Landscaping adjacent to the intersection of Endeavour Boulevard and the proposed central access road must ensure vehicle drivers' sightlines are maintained.

#### 4.2.4 Central Access Road

Along the proposed central access road, landscaping is to emphasise the shared pedestrian and vehicular environment to promote safety and low speeds, but with due concern for maintaining sightlines.

#### 4.2.5 Pedestrian Linkages and Plazas

The majority of pedestrian connectivity within the Precinct is to be provided within the street network, including the proposed central access road. However, there may be opportunity to provide further links through the built form between public and private spaces, particularly along North Lakes Drive, where public transport stops may be provided.

Where pedestrian links are identified as serving an overall purpose to assist pedestrian connectivity, provision is to be made to create an interconnected landscaped, open space and pedestrian system.

Subsequent Sector Plan(s) and applications for Material Change of Use will specify how this integration might occur, but it may be for example, by common pedestrian pavement surfaces, special treatment of roadway surfaces, or a particular integrated style of landscaping for pedestrian legibility.

#### 4.2.6 Landscaped Car Park Areas

External areas such as surface carparking must be planted with canopy shade trees integrated with the planned network of landscaped pedestrian and road frontage treatments.

Shade trees and screening through carparking areas must provide visual and physical relief from heat and glare, as well as contribute to the creation of an attractive urban landscape setting for all roads surrounding the Precinct and the proposed Town Common oval. Car park areas may include appropriate shade structures integrated within the overall development.

#### 4.2.7 Landscape Buffer Planting

Unsightly functional elements, including loading docks, waste storage, collection areas and plant and building services areas require appropriate screening measures and are incorporated into overall building design. Car parking areas should be designed as an attractive setting, integrating paving, landscaping, shading and car parks.

## 5.0 Open Space Strategies

A large circular Town Common is to be provided in the Precinct, to provide both passive and active recreational space and a green open space core as a focus or centrepiece for surrounding development and built form.

It is anticipated the built form of development will frame the proposed Town Common in order to provide casual surveillance to maximise public safety and to soften the boundary between built form and the Town Common, thus providing a suitable transition between these uses. Landscaping is also intended to provide visual relief to the urban environment, maximise aesthetic amenity, recognise both passive and active recreational spaces, public safety and pedestrian connectivity.

## **6.0** Environmental Management

The following objectives and performance criteria provide a summary of the environmental issues that amongst other things will need to be considered as part of the detailed planning and design for development within the Precinct, particularly at the Sector Plan stage.

#### 6.1 ENVIRONMENTAL MANAGEMENT OBJECTIVES

#### 6.1.1 Objectives

- (i) To encourage energy efficiency in order to minimise greenhouse gas generation;
- (ii) To encourage development which incorporates environmentally sustainable initiatives; and
- (iii) To manage and mitigate environmental risk.

#### **6.1.2** Performance Indicators

For all development within this Precinct, environmental management during the design phase, construction and post-construction phases, should:

- (i) implement energy efficient design elements in buildings, including overall building design, building orientation to maximise use of positive climatic conditions such as access to sunlight and prevailing breezes, shading including overhangs, skylights and non-reflective materials, building materials and mechanical and electrical plants to improve energy efficiency;
- (ii) implement building energy management systems which contribute to overall building energy efficiency;
- (iii) 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;
- (iv) ensure construction activities comply with Council's Policy LP32;
- (v) implement effective noise mitigation measures to comply with the *Environmental Protection Act, Environmental Protection Policy (Noise)* and other relevant legislation where necessary.;
- (vi) ensure high levels of environmental quality are achieved through water management for example in the maintenance of landscaped areas;
- (vii) ensure noise generated from development is reasonable for the type of use;
- (viii) ensure buildings used for purposes that require low noise intrusion, including residential uses, are designed to adequately ameliorate noise from external sources within and external to the Precinct;
- (ix) implement suitable waste storage and disposal measures in accordance with Council regulations;
- (x) implement design elements and buffer treatments to control the obtrusive effects of outdoor lighting where it is likely to adversely affect residential amenity and traffic safety;

- (xi) implement management and maintenance actions in accordance with Best Management Practice to minimise site-generated dirt/mud on public roads, particularly after rain periods;
- (xii) ensure environmental management structures or control devices, such as gross pollutant traps, waste disposal bins, flues and the like, do not to detract from the overall visual character of the Town Centre Frame or the immediate locality.

#### **6.2 STORMWATER MANAGEMENT OBJECTIVES**

#### 6.2.1 Objective

To manage the quality and quantity of stormwater within and from the Precinct so as not to cause a nuisance or annoyance to any person, prevent erosion and flooding, maximise soil infiltration and minimise overland flow.

#### **6.2.2** Performance Indicators

Implement management systems which seek to control the quality and quantity of surface water in compliance with the:

- (i) Environmental Protection Act 1994 and the Environmental Protection Policy (Water) and other relevant legislation;
- (ii) Planning Scheme, Local Laws, the Design Manual and policies except where Clause 2.6 of the Mango Hill Infrastructure Agreement applies;
- (iii) Mango Hill Infrastructure Agreement;
- (iv) Performance objectives of the Saltwater Creek Catchment Management Plan;
- (v) Stormwater Management Plan for Tributary C;

#### **6.3 EARTHWORKS MANAGEMENT OBJECTIVES**

#### 6.3.1 Objective

To adopt appropriate environmental management practices to avoid, or mitigate and manage, the potential adverse effects of earthworks and related land development activities.

#### **6.3.2** Performance Indicators

For all development within this Precinct, earthworks management during construction and post-construction should:

- (i) identify the extent of acceptable earthworks activities consistent with the protection of overall environmental values and prepare designs complying with these limitations:
- (ii) implement appropriate soil erosion and sediment control protection measures and monitor and maintain these;
- (iii) manage the excavation and reshaping (bulk earthworks) to establish a finished surface profile that seeks to minimise the environmental impact of the earthworks on the surrounding environment; and
- (iv) comply with the *Environmental Protection Act 1994*, Environmental Protection Policies and other relevant legislation, as necessary.

### 7.0 Generic Land Uses

As required by Section 2.3.2 (f) of the DCP, the intended desirable and undesirable generic land uses for the Precinct are:

### 7.1 DESIRABLE LAND USES

- (i) open space (Town Common);
- (ii) administrative;
- (iii) commercial;
- (iv) medical;
- (v) retail;
- (vi) educational;
- (vii) professional services; and
- (viii) mixed-use development.

### 7.2 UNDESIRABLE LAND USES

- (i) Hardware/homemaker/warehouse style activities; and
- (ii) Car yard and service station uses.

#### 8.0 Infrastructure

#### **8.1 INFRASTRUCTURE TO BE PROVIDED**

The following infrastructure is to be provided in the Precinct in accordance with the Mango Hill Infrastructure Agreement (MHIA), the Mango Hill Infrastructure Agreement – Main Roads (MHIA-MR), the Mango Hill Infrastructure Agreement (Queensland Transport) and the rezoning conditions.

#### **8.1.1** Roads

- (i) All internal roads; and
- (ii) Pathways and bikeways.

(refer to *Figure 5 – Road Layout*)

#### 8.1.2 Water Supply

- (i) Reticulation systems along all internal roads to service all properties in the Precinct;
- (ii) Those sections of the mains shown on *Figure 6 Water Supply Headworks*, necessary to service the anticipated demand in the Precinct; and
- (iii) Water headworks contributions.

#### 8.1.3 Sewerage

- (i) Trunk gravity main from the existing Council sewerage infrastructure to connect with each lot in the Precinct as shown on *Figure 7 Sewerage Headworks*; and
- (ii) Sewerage headworks contributions.

#### 8.1.4 Stormwater

- (i) Stormwater management works progressively in accordance with the Stormwater Management Plan for Tributary C as approved by Council; and
- (ii) Stormwater drainage systems to roads and lots.

#### 8.1.5 Park

Provide a park in the form of a Town Common.

#### **8.1.6** Electricity Supply and Communications

- (i) Allow for underground electricity distribution to all properties within the Precinct, by Energex or another appropriate supplier of electricity;
- (ii) Arrange for the provision of underground conduits along all road verges within the Precinct and adjacent roads to meet the anticipated demands of the DCP area.

## 8.2 INFRASTRUCTURE AFFECTED OR REQUIRED BY PRECINCT DEVELOPMENT

- (i) The development of the Precinct may place demands on the following infrastructure:
  - Roads external to the DCP area and the Precinct;
  - Water supply infrastructure;
  - Sewerage infrastructure:
  - Stormwater infrastructure;
  - Parks;
  - Community facilities;
  - Electricity and gas supply;
  - Communications systems; and
  - State Government Infrastructure.
- (ii) The infrastructure described in clause 8.1 above, together with the obligations of the Principal Developer under infrastructure agreements will mitigate the adverse affects on the above infrastructure.

## 8.3 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 8.1 of this document are the Principal Developer's obligations under the rezoning conditions and the infrastructure agreements.

#### 9.0 Preliminary Infrastructure Program

#### 9.1 PRELIMINARY PROGRAM FOR INFRASTRUCTURE PROVISION

- (i) The Principal Developer will provide all the infrastructure referred to in clause 8.1 of this document at times to satisfy the requirements of the MHIA. Initial infrastructure works are estimated to be constructed by August 2004; and
- (ii) The local bus service will be provided in accordance with clause 9.2 (i) of this document.

#### 9.2 INFRASTRUCTURE TO BE PROVIDED AND THE INTENDED PROVIDER

The following items of State Government infrastructure are to be provided by the Principal Developer in conjunction with the development of the subject Precinct in accordance with Infrastructure Agreements with the State Government. These include the provision of works to State-Controlled Roads.

- (i) A local bus service will service the Precinct 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.

#### 9.3 OTHER WORKS DEPENDENT ON INFRASTRUCTURE PROVISION

There are no other works necessary to ensure the infrastructure required to service the development of this Precinct is provided.

## 9.4 ESTIMATES OF WHEN OTHER WORKS DEPENDENT ON INFRASTRUCTURE PROVISION WILL NEED TO BE PROVIDED

Not applicable – refer to Section 9.3 above.

#### 9.5 OTHER RELEVANT INFORMATION

#### 9.5.1 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 Precinct is 70 ET; and
- (iii) For the purpose of assessing sewerage capacity, the estimated number of Equivalent Persons for this Precinct is 140 EP.